

Developments in Marketing Science:
Proceedings of the Academy of Marketing Science

Vinay Kothari *Editor*
Danny R. Arnold · Tamer Cavusgil
Jay D. Lindquist · Jay Nathan
Stan Reid *Co-Editors*

Proceedings of the 1982 Academy of Marketing Science (AMS) Annual Conference



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FOREWORD

It has been our pleasure and privilege to edit DEVELOPMENTS IN MARKETING SCIENCE Volume V, the PROCEEDINGS of the 1982 Annual Conference of the Academy of Marketing Science in Las Vegas.

This volume contains over 200 papers on contemporary marketing topics. The number and quality of papers included in the 1982 PROCEEDINGS make it unique in the history of the Academy of Marketing Science. Papers received by the Program Chairman and the various Track Chairmen were reviewed in the usual double-blind refereeing process by two or more individuals qualified in the given area. Based on the evaluation and recommendation of the reviewers, papers accepted for presentation at the conference have been grouped into relevant marketing areas.

Publishing of these PROCEEDINGS depended directly or indirectly on the help and cooperation of many individuals. The program chairman, the track chairmen, the reviewers, the authors, the typists, and others were faced with serious time/resource constraints and numerous guidelines. They were most cooperative in following the guidelines.

Several people in Nacogdoches, Texas were helpful. Kelli Clester did typing, kept good records, processed all published papers, and had to do many other things concerning this volume. Meg Gloger and Connie Kothari had to answer numerous telephone calls from different authors. Dr. Mildred Golden Pryor, Chairman of the Department of Management and Marketing, and Dr. Janelle C. Ashley, Dean of the School of Business, at Stephen F. Austin State University provided encouragement and a lot of necessary administrative support.

The Academy sincerely appreciates the support provided by the Niagara University to Dr. V. V. Bellur, Program Chairman, and thanks Dr. John B. Stranges, Academic Vice President; Professor Robert G. Allyn, Dean, College of Business Administration; and Professor George J. Neimanis, Chairman, Department of Economics and Commerce.

Administrators at other institutions also extended their support. Among them were: Dr. Joseph S. Domitrz, Dean of the College of Business and Economics, University of Wisconsin at Whitewater; Dr. Arthur L. Dudycha, Chairman of the Division of Business and Administrative Services, University of Wisconsin at Parkside; Dr. Laurel Grotzinger, Dean of the Graduate School, Western Michigan University; Dr. Darell G. Jones, Dean of the College of Business, Western Michigan University; Dr. Arno Kleimenhagen, Chairman of the Department of Marketing, University of Wisconsin at Whitewater; Dr. Henry W. Nash, Chairman of the Department of Marketing, Mississippi State University; Dr. Clint B. Tankersley, Chairman of the Department of Marketing, Syracuse University; and Dr. Robert B. Trader, Chairman of the Department of Marketing, Western Michigan University.

Ball State University, California State University at Fullerton, Concordia University, C. W. Post Center at Long Island University, DePaul University, Eastern Michigan University, Iona College, New Mexico State University, Niagara University, State University College at Buffalo, University of Miami, University of North Dakota, and Utah State University also furnished support as conference cosponsors.

On behalf of the officers and fellows of the Academy of Marketing Science we wish to thank all these organizations and individuals for their generous support and contributions. Without their efforts and assistance, this PROCEEDINGS would not have been possible.

In preparing this publication, we have exercised a great deal of care to minimize errors and omissions. Our sincere apologies to those who are affected by our mistakes!

We have enjoyed working with our colleagues in the Academy, and we hope that we have met your expectations.

Vinay Kothari, Stephen F. Austin State University
Danny A. Arnold, Mississippi State University
Tamer Cavusgil, University of Wisconsin at Whitewater
Jay D. Lindquist, Western Michigan University
Jay Nathan, University of Wisconsin at Parkside
Stan Reid, Syracuse University

May 5, 1982
Las Vegas, Nevada

PREFACE

The Academy of Marketing Science is a consortium of University academicians and business executive whose purpose is to:

1. Further the science of marketing throughout the world by promoting research and the dissemination of findings.
2. Provide a forum for studying and understanding of marketing as an economic, ethical, and and social force.
3. Furnish, as appropriate and available, material and other resources for the solution of marketing problems which confront particular firms and industries, on the one hand, and society at large on the other.
4. Provide for the Fellows of the Academy reviewer assistance on scholarly articles and opportunities for publication.
5. Sponsor one or more annual conferences to enable the Fellows of the Academy to present research results; to learn by listening to other presentations and through interaction with other Fellows and guests; to avail themselves of the placement process; to conduct discussions with book editors, and to exchange other relevant information.
6. Assist fellows in the better utilization of their professional marketing talents through re-direction, reassignment, and relocation.
7. Provide educator Fellows with insights and such resources as may be available to aid them in the development of improved teaching methods, materials, devices, and directions.
8. Seek means for establishing undergraduate scholarships and professional university chairs in the field of marketing.
9. Offer fellows of the academy status to business and institutional executives and organizations.
10. Establish Chapters of the Academy worldwide.

Devoted to implementing these goals, the Academy continues to move forward. *The Journal of the Academy of Marketing Science*, the Academy Monograph Series, and the Academy's Annual Conferences promote research, act as a vehicle for its dissemination, and provide a forum for stimulating communication and interaction. The number of our Fellows and of institutional subscribers steadily increases, and the *Journal's* national and international recognition spreads dramatically. It is now subscribed to in all the United States, including, of course, Alaska, Hawaii, and Puerto Rico. Internationally, its reach has grown rapidly; foreign subscribers exceed 150. In Canada they are extensive both in numbers and in geographic reach. Over 100 are sent overseas. In Europe the *Journal* goes to Belgium, Denmark, England, Finland, the Netherlands, Spain, Sweden, Switzerland; but the *Journal* is also subscribed to in Australia, British Columbia, China, Egypt, Guam, India, Israel, Japan, Korea, Mexico, Nigeria, Manila, Nicaragua, Trinidad, and Turkey. Library and business requests for information and samples arrive constantly from new regions.

A vote of gratitude is due to our Academy President, Robin T. Peterson, under whose leadership the Academy has markedly advanced toward its goals.

Congratulations to Mr. Harry Wald, our "Marketer of the Year." Thanks to Venkatakrisna V. Bellur, our 1982 Conference Programs Chairman for an excellent job of Conference planning. We appreciate the hard work done by Vinay Kothari in editing these proceedings, and Mrs. Kirsten Bellur in seeing to the production. Congratulations and thanks to authors whose work is published here, and to our Research-in-Progress Authors we offer support and encouragement for successful completion of their projects. To the reviewers of papers submitted for the Conference, track chairmen, session chairpersons, speakers and discussants, we express our thanks for their important contributions. We are indebted to University of Nevada at Las Vegas and to our local arrangements committee headed by J. Kent Pinney for the arrangements in Las Vegas. The participation of our business colleagues is a strong and rewarding part of Academy Operations. Finally, thanks to our Conference Cosponsors for their financial and moral support. On behalf of the Officers of the Academy, please accept our best wishes for a pleasurable and profitable Conference.

May 5, 1982
Las Vegas, Nevada

Harold W. Berkman
Jane K. Fenyo

T·A·B·L·E·O·F·C·O·N·T·E·N·T·S

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Robert N. Carter, Southwest Texas State University
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SPECIAL SESSIONS/EVENTS

"Marketing Opportunities in a Casino Resort"

Lawrence Dandurand, University of Nevada,
Las Vegas (Chairman)
Roy Judge, Hilton Hotels
Burton Cohen, Desert Inn
Larry Andenhovel, Caesars Palace
Bill Freidman, Castaways Hotel and Casino
Rossi Ralenkotter, Las Vegas Convention-
Visitors Authority

Doctoral Dissertation Contest Presentation

Student Paper Contest Presentation

Annual Business Meeting

Annual Banquet

PERCEPTIONS OF DOWNTOWN ATTRACTION FACTORS IN THE SMALL CITY: A CASE STUDY IN OHIO

Peter S. Carusone, Wright State University
Yitshak Dayan, Wright State University

Abstract

The perceptions of small-city business and community leaders regarding the drawing power of various downtown attraction factors are analyzed and related to perceived downtown shopping atmosphere.

Background

This is a study of consumer attraction factors in the central business districts of nine nonmetropolitan cities in Ohio. The objective is to identify the most effective factors which draw consumers downtown in today's highly decentralized retail environment.

Previous research confirmed a substantial shift in retail stores and sales from the small-city downtown to suburban locations (Carusone, 1970). These studies focused on "shopping goods stores," the composite results of which indicated a decline in downtown share-of-market from 88 percent in 1958, to 32 percent in 1975 (Carusone, 1978). Further, it was found that the smaller small-cities (populations of 10,000 to 25,000) have experienced less new suburban competition and, thus, have retained a higher share-of-market downtown than the larger small-cities (populations of 25,000 to 50,000). The smaller-city downtowns today have an estimated 50 percent share-of-market compared to about 20 percent in the larger-city downtowns. Still, decentralization of the retail trade structure in all the nonmetropolitan cities studied is continuing, and survival of the small-city downtown is a problem yet to be resolved.

Search for "Something Special"

Since the largest assortments of goods and services in the small city are no longer concentrated in the downtown, the availability of standardized products is not likely to be the consumer's primary reason today for coming downtown. The reason, we hypothesized, is more likely to be "something special." (H1)

Furthermore, since the decentralization of mass merchandise has occurred to the greatest extent in the larger cities, we hypothesized that the relative importance of "something special" to draw consumers downtown would be stronger in the larger than in the smaller cities. (H2)

Finally, the degree to which people are being drawn downtown (activity level) would seem to be a function of the shopping "atmosphere." We hypothesized, therefore, that perceptions of shopping atmosphere would differ according to the perceived strength of the various downtowns studied. (H3)

Operational Definitions

The identification of "something special" was accomplished by questions pertaining to (1) the existence of some "special attraction" that causes people to come downtown; (2) the presence of downtown stores and/or nonretail attractions which draw large numbers

of people from outside the county; (3) the incidence of people shopping downtown for "something special," such as jewelry, cameras, and unusual gift items; and (4) the occurrence of shopping for fashion merchandise or furniture and large appliances. The two latter measurements were in contrast to the incidence of people shopping downtown for staple merchandise, groceries, and other categories of standardized goods and services.

The measurement of shopping "atmosphere" was presented on a five-point scale ranging from extremely favorable to extremely unfavorable polar adjectives (friendly, expensive, lively, etc.).

A perceptual measurement of the relative strength of the downtowns studied was obtained by (1) a scale question, from "very strong" to "very weak"; (2) a trend question regarding increasing or decreasing numbers of people coming downtown in past 3-5 years; and (3) an activity-level question pertaining to where most people usually go to accomplish various shopping and non-shopping activities.

The Research

Data was collected during the fall of 1980 for nine small cities in Ohio. The survey forms were administered through the assistance of local chambers of commerce officials to a total of 245 respondents. Six categories of respondents were included; large and small downtown retailers; retailers located outside downtown; nonretailing industry executives; bankers and other financiers; CPA's, attorneys and insurance executives; and, city and chamber of commerce officials. The 245 responses constitute a response rate of nearly 70 percent.

It should be noted that the survey elicited judgments and perceptions of local business and community leaders. Rather than ask consumers directly where they go to shop for various kinds of merchandise, or for other activities, we asked the business and community leaders "to the best of your knowledge, where do most people usually go for . . .?"

By the same token, questions relating to the strength of the downtown and to the shopping atmosphere of the downtown reflect on the perceptions of the local leadership rather than those of consumers directly. To the extent that these two views would differ, of course, the study results exhibit an inherent bias. But since this element is consistent throughout the study, we believe that comparative interpretations among the cities is feasible and consonant with study objectives.

Methodology

The analysis is divided into micro and macro levels. In the micro level each city is treated separately, while in the macro level an aggregation of observations is performed to create separate groups. In each level we study the differences among cities (micro) or groups (macro) from the following points of view: the number of activities that are taking place in the

downtown, the overall strength as perceived by respondents, and the trend of the number of people who have visited the downtown during the past 3-5 years.

To test the differences between the cities and the created groups, three different statistical measures are employed: the Chi-square test for independency, the Gamma measure of association which takes into account ordinal scale used for this study; and ANOVA (Analysis of Variance). A MANOVA (Multiple Analysis of Variance) is employed in the first step to test the overall significance.

Discussion of Results

Tables 1 through 4 summarize the results obtained at the micro level of analysis. The first column in Table 1 presents the percentage of all respondents who believe that an activity is taking place in the downtowns of their cities. Other columns specify the percentage of responses for each individual city separately, and as opposed to all other cities (in parentheses).

Bank and payments transactions, and religious services seem to be the most popular activities overall in the downtown districts of the nine cities combined. The percentages are 89, 82 and 75, respectively. A very low percentage (13 percent) is indicated for shopping in grocery stores. Other activities that have a positive response rate around the 50 percent mark include shopping for something special, furniture and appliances, haircut, and meetings.

In looking at the activities among different cities, a large dispersion occurs in the activity: shopping for "staple merchandise," ranging from 100% in Wooster to about only 10% in Chillicothe, Lancaster, Marion and Newark. Looking at the uniqueness of each city, it is apparent that Wooster has a significantly higher percentage in more activities. In Coshocton most of the bank transactions are made in the downtown. The last row in Table 1 (TDT) shows the average number of activities cited by respondents in each city. From this information one can deduce that Coshocton, Mount Vernon and Wooster are high above the average, while Marion and Newark are significantly (α level of .01) below the average in downtown activity level.

Table 2 indicates an overall rating of "moderately strong" for the downtowns of the nine cities combined (2.4 on a five-point scale--1 is favorable, 5 is unfavorable). Wooster and Mount Vernon show significantly greater strength, as perceived by the respondents, with 1.3 and 1.9, respectively. These are two of the three high-activity-level cities identified in Table 1.

Also noteworthy from Table 2 is the fact that only 32 percent of respondents overall claimed any special attractions for their downtowns. Only Mount Vernon comes out significantly above the average (54%) with respondents citing specific attractions such as Dixie Days Festival, fine restaurants, a new twin cinema, and a downtown renovation project. Lancaster, Washington Court House and Wooster come out very favorable in stores which draw people from outside the county; while Lancaster also ranks high in nonretail attractions with a draw from outside the county.

TABLE 1

ACTIVITIES IN DOWNTOWNS

	All	Belle- fontaine	Chilli- cothe	Coshoc- ton	Lancas- ter	Marion	Mount Vernon	Newark	Washington Court House	Wooster
Shop for "Staple Merchandise"	43	70(40)*	10(48)*	77(38)*	10(48)*	10(48)*	70(40)*	9(49)*		100(37)*
Shop for fashion Merchandise	45		21(48)*						90(42)*	72(42)*
Shop for "Something Special"	56				73(54)**		78(53)*			
Shop for furniture and large appliances	55	82(52)*		80(52)*	20(60)*	33(58)*		38(58)**		
Shop for groceries	13				0(14)*	0(14)**	4(14)**	0(15)*		40(9)*
Shop for hardware and house improvement products	44	21(47)*	14(48)*			27(46)**	74(40)*			84(40)*
Have small appliances repaired	46				23(49)*	67(43)*	26(49)**	23(50)*		
Transact bank business	89		76(91)**	100(87)**	96(88)**					
Pay bills	82			93(80)*			96(80)*			
Medical and dental office visits	39			67(34)*				3(45)*		
Work	44							17(58)*	9(46)*	
Haircut or hair styling	53	82(49)*		74(49)*	23(57)*			8(36)*	91(51)*	
Entertainment	32	8(33)*					74(27)*	29(55)*	0(33)*	
Community or social club meeting	52			81(48)*		30(55)*	81(48)*		18(53)*	
Religious services	75									
TDT	7.6			9.5(7.4)*		6.6(7.8)*	9.5(7.4)*	4.8(8.1)*		9.5(7.4)*

* $\leq .01$
** $> .01$ and $\leq .05$

TABLE 2

SELECTED MEASURES OF STRENGTH

	All	Belle- fontaine	Chilli- cothe	Coshoc- ton	Lancas- ter	Marion	Mount Vernon	Newark	Washington Court House	Wooster
Strength	2.4		3.2(2.3)*			2.8(2.4)*	1.9(2.5)*			1.3(2.5)*
Trend	2.3		2.7(2.2)*			2.6(2.2)*	2.0(2.3)**	2.1(2.3)**		1.9(2.3)*
Special Attractions	32	3(35)*					54(29)*			
Stores that draw outside county	38			13(42)*	64(35)*			8(43)*	73(37)*	96(31)*
Non-retail Attractions that draw outside county	39	21(42)**			63(36)*					

* < .01

** > .01 and ≤ .05

TABLE 3

SHOPPING ATMOSPHERE

	All	Belle- fontaine	Chilli- cothe	Coshoc- ton	Lancas- ter	Marion	Mount Vernon	Newark	Washington Court House	Wooster
Friendly/Unfriendly	2.2					1.9(2.4)**		2.3(1.9)**		1.4(2.3)*
Expensive/Inexpensive	3.0				2.8(3.1)**	2.8(2.1)**				
Easy Access/Congested	2.9					3.5(2.9)*	2.4(3.0)*			2.1(3.0)*
Lively/Dull	3.2				3.7(3.1)*		2.5(3.3)*			2.7(3.3)*
Inconvenient/ Convenient	2.9			2.5(2.9)*						2.0(3.0)*
Refreshing/Tiring	3.1		3.4(3.1)**		3.5(3.0)*		2.5(3.2)*			2.5(3.2)*
Confusing/Organized	2.8									2.3(2.9)*
Interesting/Boring	3.1	2.7(3.2)*	3.3(2.9)**		3.5(3.0)*		2.3(3.2)*			2.5(3.1)*
Time Consuming/Time- Saving	2.9							3.3(2.9)*		2.6(3.0)*
Personalized Service/ Impersonal Service	2.4		2.5(2.1)**				2.0(2.4)**		1.5(2.4)*	1.5(2.5)*
Large Assortment/ Small Assortment	3.1								2.4(3.2)*	
Inferior Merchandise/ Quality Merchandise	2.5								2.0(2.6)**	1.7(2.4)*

* < .01

** > .01 and ≤ .05

NOTE: Scales are from extremely favorable to extremely unfavorable, with 1.0 as extremely favorable and 5.0 as extremely unfavorable, in every case. The alternating order of favorable/unfavorable terms listed here reflects the sequence as presented in the survey questionnaire.

Another aspect we look at to differentiate among the cities is the downtown atmosphere as perceived by the respondents. Table 3 summarizes the means for all observations (column 1), and for each city. In parentheses the means are calculated for the remaining observations not included in the data for each specific city. An F test on the variables in Table 3 for the entire data set will conclude significant differences (for .01 level of significance) among variables. The variable "friendly" has the lowest mean value of all the attributes which indicates that "friendly" is perceived as the most prevalent attitude. Variables related to "lively", "refreshing", "interesting", and "large assortments" have the highest mean values, indicating that the downtowns may be considered relatively dull, tiring, boring, and offering small assortments.

The basis for Wooster and Mt. Vernon's strength is also

evident in Table 3. In fact, of the 22 cells which show significant variation on the favorable side, 15 of these are due to responses for these two high-activity-level cities.

Table 4 looks at the same data as presented in Tables 2 and 3, but for two groups of cities combined according to the size-of-city criteria discussed earlier. It is significant that the five smaller cities show greater strength, a more favorable trend, and a higher percentage of downtown stores that draw people from outside the county. There were no significant differences in special attractions or in nonretail attractions drawing from outside the county, between the two groups of cities.

The smaller cities also rated significantly more favorable than the larger cities on every aspect of shopping atmosphere except price. Respondents believe

TABLE 4

SMALLER VS LARGER CITIES

	χ^2	Gamma	T	Means (Smaller, Larger)	
Strength	44.4*	.6*	48.2*	2.1	2.7
Trend	8.8*	.3*	6.8*	2.2	2.4
Special Attractions	.4	1.3*	.4	32	
Stores that draw outside county	7.9*	.00	8.1*	47	29
Non-retail Attractions that draw outside county	3.4	.89	3.5	39	
Friendly/Unfriendly	25.5*	-.09	4.2**	1.8	2.0
Expensive/Inexpensive	3.7	-.04	.1	3.0	
Easy Access/Congested	11.1*	.3*	23.8*	2.5	3.2
Lively/Dull	28.1*	.44*	25.4*	2.9	3.5
Inconvenient/Convenient	7.1	.21*	15.9*	2.4	3.0
Refreshing/Tiring	18.6*	.34*	20.3*	2.7	3.3
Confusing/Organized	5.7	.22*	5.1**	2.7	3.0
Interesting/Boring	9.5**	.21*	17.0*	2.7	3.2
Time Consuming/Time-Saving	12.6*	.31*	11.0*	2.8	3.1
Personalized Service/Impersonal Service	14.1*	.03	6.3**	2.1	2.3
Large Assortment/Small Assortment	18.1*	.36*	7.4*	3.0	3.4
Inferior Merchandise/Quality Merchandise	12.3*	.16**	8.8*	2.1	2.5

* $\leq .01$ ** $> .01$ and $\leq .05$

NOTE: The smaller small-cities are Bellefontaine, Coshocton, Mount Vernon, Washington Court House and Wooster. The larger small-cities include Chillicothe, Lancaster, Marion and Newark.

that the smaller-city downtowns are friendlier, livelier, more refreshing, etc., etc. There is no difference between smaller and larger cities as to the attribute of price (expensive/inexpensive).

It should be noted that all three high-activity-level cities (Coshocton, Mount Vernon and Wooster) fall within the smaller size-of-city group.

Table 5 presents the macro level results for two groups of respondents. Based on the total number of activities each respondent cited, the set of observations was divided into two categories using the benchmark of 7 (the approximate mean in Table 1). Observations which indicate the number of activities to be equal to or greater than 7 were categorized as heavy-downtown oriented; otherwise, the observations are categorized as light downtown oriented.

Table 5 indicates that the results for variables representing Strength, Trend, Stores and Non-retail attractions are all significant, and the Gamma values indicate that the stronger the strength and increasing of trend is typical to the heavy category. Also, the existence of downtown stores which attract customers from outside the county and non-retail attractions which do the same are contributing significantly to the heavy use category. There are no differences as to special attractions, price or organization, but all other favorable shopping atmosphere attributes correlate positively with the heavy-downtown oriented category.

Conclusions

There is little support for the contention that the primary reason people are coming downtown today is to shop for "something special." It is true that shopping for something special (56%), shopping for fashion merchandise (45%), and shopping for furniture and major appliances (55%), compare well with the incidence of shopping for staple merchandise (43%). But, there are other more important attractions which seem to be drawing people downtown, including bank business (89%), paying bills (82%), religious services (75%), haircut or hair styling (53%) and meetings (52%). And, it is not clear that any of the latter activities have positive carry-over effects on the retail business of downtown stores.

Furthermore, the activity patterns of the three high-activity-level cities indicate that shopping for staple merchandise is a key factor in drawing people downtown. Of course, the smaller small-cities have less suburban shopping center competition than their larger city counterparts.

Finally, when asked whether there is some special attraction that causes people to come downtown, only one in three respondents said "yes." It would appear that Hypothesis 1 must be rejected at this time.

What about Hypothesis 2 which seeks to measure the appeal of "something special" by size-of-city?

TABLE 5

HEAVY VS LIGHT USERS

	χ^2	Gamma	T	Means (Heavy, Light)	
Strength	33.7*	-.57*	40.5*	2.1	2.7
Trend	37.3*	-.57*	26.4	2.1	2.5
Special Attractions	1.0	.19	.6		32
Stores that draw outside county	9.3*	.45*	6.6*	46	30
Non-retail Attractions that draw outside county	5.2**	.42*	4.4**	46	32
Friendly/Unfriendly	1.9	-.17	6.7*	1.8	2.1
Expensive/Inexpensive	1.6	-.02	1.6		3.0
Easy Access/Congested	5.6**	-.24*	17.9*	2.5	3.2
Lively/Dull	18.2*	-.4*	47.9*	2.9	3.5
Inconvenient/Convenient	2.6	-.16**	7.9*	2.5	2.9
Refreshing/Tiring	13.9*	-.39*	27.0	2.9	3.3
Confusing/Organized	3.1	-.02	.2		2.8
Interesting/Boring	13.4*	-.34*	28.2*	2.9	3.3
Time Consuming/Time-Saving	3.9	-.21*	4.5**	2.8	3.1
Personalized Service/Impersonal Service	11.6*	-.27*	9.9*	2.0	2.6
Large Assortment/Small Assortment	14.8*	-.39*	24.6*	2.9	3.6
Inferior Merchandise/Quality Merchandise	24.1*	-.35*	25.6*	2.1	2.6

* $\leq .01$ ** $> .01$ and $\leq .05$

If the larger cities are in greater need of "something special" to compensate for their comparative disadvantage in standardized mass merchandise, apparently they have not yet found it. None of the larger cities emerged as having any strength of downtown pulling power, as measured by perceived strength, trend or activity level. And all the measures of "something special" resulted in either no difference among city types or in favor of the smaller cities.

The extent to which people are being drawn downtown shows a positive correlation with the favorable attributes of downtown shopping atmosphere. Price, and perhaps organization, is the only exception, and that is a useful finding, too. It would seem to indicate that consumers may be willing to pay a higher price if offered quality merchandise together with personalized, friendly service. Other aspects of atmosphere which could stand to be improved upon are the assortments of goods and services available, the intangibles which one associates with lively, refreshing and interesting experience, and a host of factors which impact upon ease-of-access, convenience and time-consumption.

In conclusion, there would seem to be strong support for Hypothesis 3.

Further research with both merchant groups and consumers is planned to test the validity of the conclusions reported here.

References

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CHARACTERISTICS OF AUTOMATIC TELLER MACHINE USERS BY MULTIVARIATE ANALYSIS

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Abstract

This study attempts to pursue an adequate analytical determination of target market automatic teller machine user characteristics which can be used as strategic input to the marketing planning process. To this end, the Wright State University consumer panel was utilized to probe in detail both frequency and type of ATM use and specific user profiles using both Multiple Discriminate Analyses and Automatic Interaction Deduction. Further analysis was then used to develop user/non-user profiles and respondent discrimination in regard to preferences for potential ATM locations.

Research Based Perspective

ATMs¹ have been at the forefront of technological change in the financial industry for almost a decade.² To date, however, very few definitive and truly representative surveys have been made of user/non-user characteristics and consumption preferences. This study, then, attempts to pursue an adequate analytical determination of target market ATM user characteristics which can be used as strategic input to the marketing planning process.

Dayton, Ohio, with its diverse socio-economic population base, has long been considered an excellent test market that is generally representative of at least mid-American reaction to and acceptance of new products, ideas and concepts. This is no less true when it comes to financial products as the markets total mixture of banks, savings and loan organizations, credit unions and other financial institutions is a worthy cross-section of most of the top 100 SMSA's nation-wide.³ Couple this with an aggressive posturing toward ATMs³ and heavy installation and promotional bolstering and you have a situation fraught with potential for the attitudinal examination of both the use and acceptance of automatic teller machines.

Adding to this positive evaluative atmosphere is the presence of Wright State University (a burgeoning institution of some 15,000 students), the Institute for Community and Organizational Development of which contains a Center for Consumer Studies which, in turn, harbors a 1,000 member Consumer Panel which is stratified to closely represent the composite population of the region. As such, it is a valid measure of consumer opinion in an area which itself is a portrayal of

¹ ATM = Acronym used throughout this paper for Automatic Teller Machine.

² For the development of ATMs in the nation, look, for example, at Streeter, B. (1979), "Winning the West with a Shared ATM Network," *ABA Banking Journal*, September, pp. 86-93, and special report (1979), "Automated Tellers Make a Hit for County Seat Bank," May, *ABA Banking Journal*, pp. 49-50.

³ At the time of the survey, September 1, 1980, banks, S&L's and Credit Unions were offering a total of 75 separate ATM locations to a market base of approximately 300,000 households.

average citizen response. In the fall of 1980, therefore, a proportional sample of one-half of this panel was interrogated via a direct mail questionnaire in order to probe in some detail the following key areas:

- Actual ATM use
- Specific institutional ATM use
- Frequency of ATM use
- Type of ATM use
- Best/least liked use factors
- Specific reasons for non-use and--
- Preference for certain types of proposed ATM locations.

Totally, some 343 valid responses were received and initially analyzed using the SPSS program and subsequently the SAS and OSIRIS packages. Subsequent data manipulation concentrated on the classification of users vs. non-users by the application of Multiple Discriminant Analysis (MDA)⁴ and Automatic Interaction (AID)⁵ which are complementary in their basic interaction. The following analysis is useful, then, in that it graphically profiles users vs. non-users, clearly defines reasons for non-use and delineates among a series of potential general locations for future ATM installation. Aside from the obvious importance of determining key ATM user profiles, the data should be extremely useful in evaluating future ATM site locations. Thus positioned, it is a unique aggregation of data that is heavily laden with strategic management potential.

Obviously, the total study generated copious quantities of useful data, but decidedly too much to be completely incorporated here. The intent of this discussion, then, will be to concentrate on two specific question areas; namely, they are (1) user/non-user profiles and (2) discrimination among individual respondents in regard to their preference for potential ATMs locations.

ATM User Profile

Overall, some 28.6% of all respondents had used an ATMs. Considering that these machines were first introduced into the Dayton market some five years ago, the user rate is quite good.⁶ Interestingly enough, the rate of use of specific financial institutions ATMs was relatively consistent within a range of 27.1% to 31.8% and showed only slight relevancy to total promotional funds expended. The rate and type of use is shown in **Table 1**.

⁴ For further interpretation see Morrison, D. G. (1969), "On the Interpretation of Discriminant Analysis," *JMR*, Vol. VI, pp. 156-163.

⁵ Green, P. E. (1978), *Analyzing Multivariate Data*. Dryden Press.

⁶ Many studies have discussed the increased and future use of ATMs, O. S. Pugh and Ingram, F. J., (1978), "FFT and the Public," *The Bankers Magazine* V161N2, pp. 42-51, and Eisenbeis, R.A. and Wolkowitz, B. (1979), "Sharing and Access Issue," *The Bankers Magazine* V162N2.

TABLE 1

ATM USE

RATE (PER MONTH)	% USING ATMs	TRANSACTION TYPE	% USING ATMs
0-1	42.3	Deposits	47.9
2-5	39.1	Withdrawals	80.6
6-10	16.5	Check balance	14.3
11-15	2.1	Pay bills	20.4
		Transfer Funds	15.3

It is apparent that the average user frequents an ATM five or less times per month for the primary purpose of either making a deposit or a withdrawal.

But what is the nature of the individual ATM user? An initial cursory examination would tend to profile the likely consumer as having the following characteristics:

- (1) SEX - MALE
- (2) AGE - 25-44 YEARS
- (3) INCOME - \$15,000 - \$35,000
- (4) EDUCATION - SOME COLLEGE
- (5) EMPLOYMENT - FULL-TIME AS A MANAGER, SELF-EMPLOYED, SKILLED CRAFTSMAN OR TECHNICIAN
- (6) MARITAL STATUS - MARRIED WITH 1 OR 2 CHILDREN
- (7) RESIDENCE - HOMEOWNER OF A SINGLE FAMILY DWELLING IN THE \$30,000 - \$75,000 RANGE
- (8) RACE - WHITE

Use Factors

This is not to say that other profiles do not have ATM potential,⁷ but, rather, that initial data differentiation point one's target marketing efforts in this direction. Reasons for non-use (Table II) and the best/least liked user factors (Table III) are shown below.

TABLE II

REASON FOR NON-USE	%
(1) Never had the need	53.0
(2) My bank doesn't offer ATMs	15.2
(3) Don't trust machines	8.9
(4) Prefer personal contact	7.4
(5) Security concerns	4.7
(6) Never got around to acquiring a card	2.7
(7) Too easy to obtain money	1.9
(8) Don't need another card	1.2
(9) Misc.	5.0

User Trait Discrimination

In an attempt to more precisely define user/non-user traits, the data was submitted to both Multiple Discriminant Analysis (MDA) and Automatic Interaction Deduction (AID). These dual techniques complement each other because MDA analyzes the data from the independent variables point of view while AID uses the dependent variables for grouping purposes. Another reason for

⁷Demographics of ATMs on a more limited scale were also investigated by other researchers like: Hood, J. M., (1979), "Demographics of ATMs," The Bankers Magazine, V162N6, pp. 68-71.

combining the two techniques is that while MDA can provide some misleading results in regard to the presence of multicollinearity among variables, AID is somewhat less sensitive to this phenomenon.

Remembering that a large portion of the surveyed population (71.4%) has not used any ATMs, in order to identify the most discriminatory variables between the two groups (Users/Non-users), a discriminant analysis technique was performed. The analysis revealed one significant discriminatory function with an ability of 59% prediction. (Compare to $C_{pro} = .19$ and $C_{max} = .71$). Table IV summarizes the results of the discriminant analysis.⁸ From the results one can deduce that the following variables are the most discriminatory: employment status, sex, income, and education. From the size of the coefficients it is clear that only "education" has negative correlation and thus the higher the education the more likely the person will be to an ATM. The other variables with the positive signs will lead to the conclusions that those who are not employed full-time, female, or high-income are less likely ATM candidates.

TABLE III

<u>BEST/LEAST LIKED FEATURES</u>	
<u>Best Liked</u>	<u>%</u>
(1) Convenience	95.0
· No waiting in lines	
· 24 hr. availability	
(2) Misc.	5.0
<u>Least Liked</u>	
(1) Break down too often	27.0
(2) Security concerns	10.0
(3) Machine card rejections	8.0
(4) Forget PIN number	7.0
(5) Too impersonal	7.0
(6) Not enough locations	6.0
(7) Misc.	35.0

TABLE IV

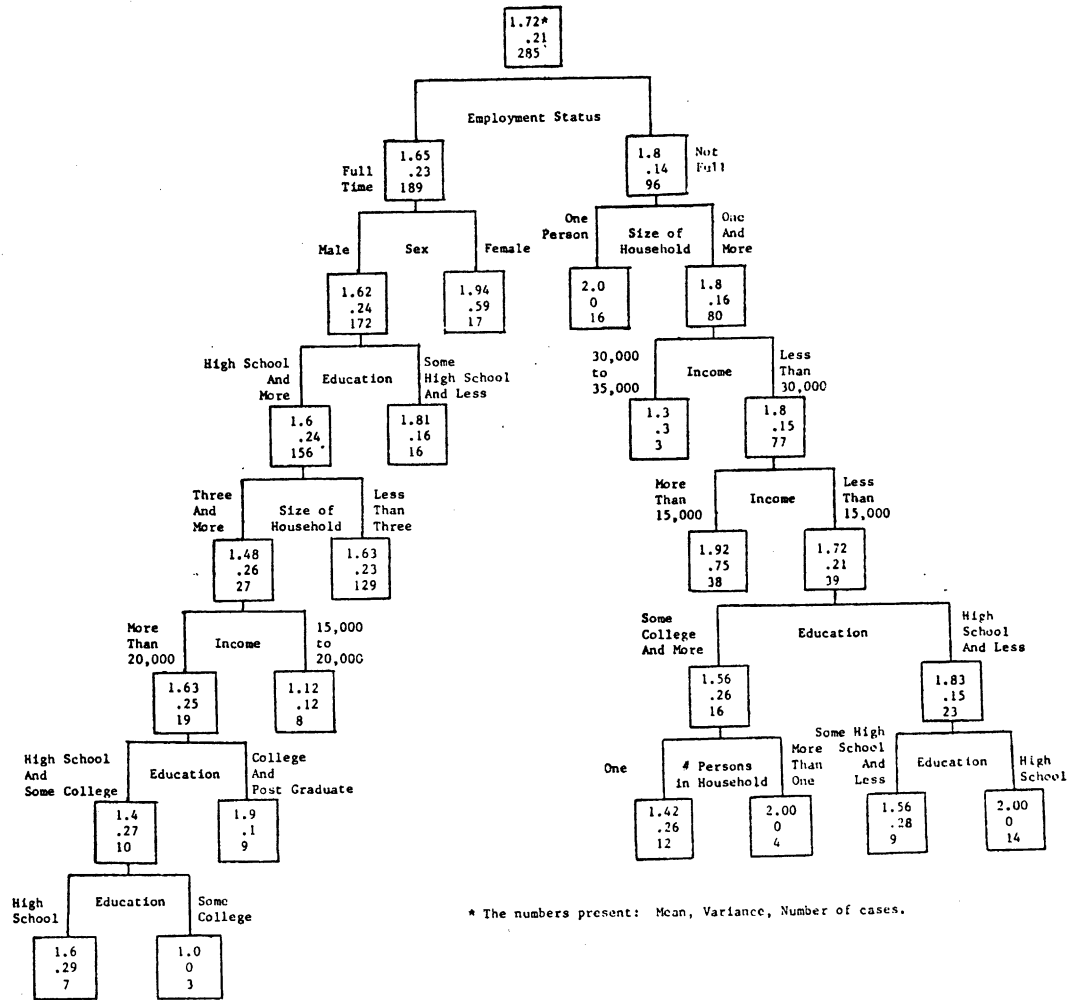
<u>USERS/NON-USERS ATTITUDES</u>			
	<u>Canonical Correlation</u>	<u>Level of Significance</u>	<u>% of Classification</u>
	.06	.24	.00
Discriminant Function	$Y = .75H6 + .7H1 + .48Q4 - .4H4$ ⁷		

These conclusions are supported by the AID tree in Figure 1. Employment status, sex, income, and education separate among groups, but, in addition, the variable, "number of persons in a given household," has a major effect - especially in the group of not full-time employed. The more persons in a household, therefore, the more likely that household is to use an ATM. The income effect is not as clear, for among the full-time employees high income will lead to less likely ATM use, but among the not full-time employees, the higher the income the more likely the use will be.

⁸The variables' codes and explanations are in the Appendix.

FIGURE 1

USERS/NON-USERS OF ATMs



The total effect can be seen from the discriminate functions. While some twenty individual variables were analyzed, only those validly reflecting target market discriminates are not included here.

Location Preference

The only major component of this study requested all to indicate the relative likelihood of their using an automatic teller machine if it were to be located at five specific types of locations. They were also permitted to set down their own personal location preferences. Although 28.6% had actual ATM experience, the range of likelihood of use (very likely + likely) ran from a low of 4.2% to a high of 36.0%. Actual locations preferred by category are shown in **Table V**.

User Location Preference Traits

The basic data, then, would seem to point to the locations of ATMs in large employment centers and grocery supermarkets as being the most potentially success laden alternatives. Unaided location preferences response trended along similar lines where supermarkets (28.2%), bank lobbies (27.7%) and shopping malls (17.6%) received the highest adjusted frequency response.

TABLE V

PREFERRED ATM LOCATIONS

Locations	Very Likely	Likely	Unlikely	Very Likely	Not Sure
Your place of employment	20.1	15.9	16.9	34.4	12.7
Grocery supermarket	12.0	15.3	26.1	30.6	15.9
Convenience store	2.4	2.7	27.5	61.3	6.0
Fast food restaurant	1.5	2.7	28.3	60.5	6.9
Inside a financial institution with an ATMs outside as well	3.0	7.6	24.6	48.0	16.7

As before, both MDA and AID were next used to analyze the first three hypothetical locations. Fast food restaurants and interior financial institution sites were purposely reserved for further separate study.

The first possible location to be analyzed was the place of employment. Only one significant discriminatory variable was revealed as is summarized in **Table VI**. The variable Employment Status is the most discriminatory variable with a negative coefficient,

which is a contradiction to the results shown in the AID, Figure 2. The reason for this is the strong correlation that exists between the variables Employment Status and Size of House (-.37). Separated females and larger size of household seemed to most dislike the idea of location at place of employment. Part of these results can be confirmed very precisely from Figure 2 in which we can see a pattern in Size of Household and Employee Status, but the other variables have no clear pattern. The AID results picked up the variables Size of Household and Employment Status, but chose in addition two more different variables, race and income. While the group of full-time employees were very homogeneity in their answers (181 people, with a mean value of 2.86), it appears to be a great deal of heterogeneity in the not full-time employees. In this group, whites are more likely to accept the idea of location in place of employment than non-whites, and lower income are more likely to accept the idea of locating the ATM in place of employment than higher income (although the differences are very low).

TABLE VI

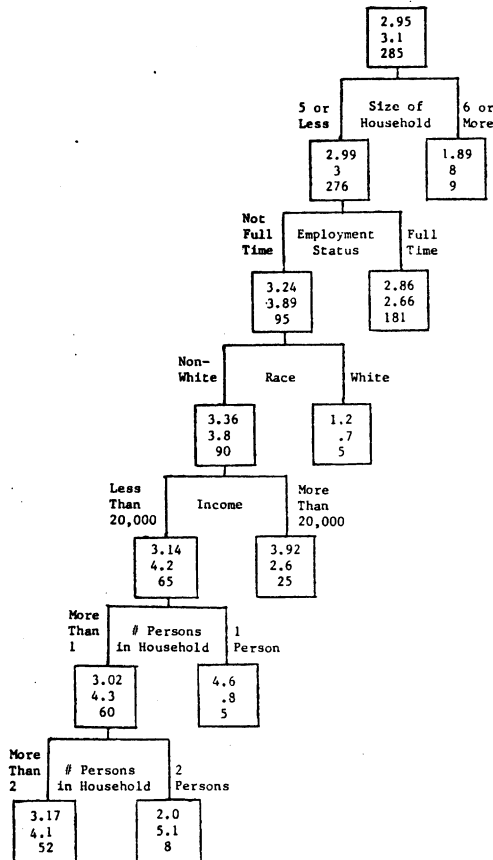
ATTITUDES TOWARD PLACE OF EMPLOYMENT

λ	Canonical Correlation	Level of Significance	% of Classification
.14	.36	.00	31

Discriminant Function $Y = -.8H6 + .47H3 + .45Q3B = .11H1$

FIGURE 2

LOCATED IN A PLACE OF EMPLOYMENT



The answers pattern to the question related to the possible location in grocery stores revealed almost the same results as for place of employment, the MDA and AID results are summarized in Table VII and Figure 3. The discriminatory variables and their effects are almost the same except that education variable replaced the sex variable. The higher the education level, then, the more the person disliked the location in a supermarket. Education is an important discriminatory variable, but entered into the splitting process only at the end with few cases. Although from the discriminant function we can deduce that the higher the education level, the more dislike there will be for this location, from the AID (based only on 7 cases), there is definitely infavorite in low educated versus favorness from the highly educated persons. Income and race are significant in the AID process where white and low income are most favorably.

TABLE VII

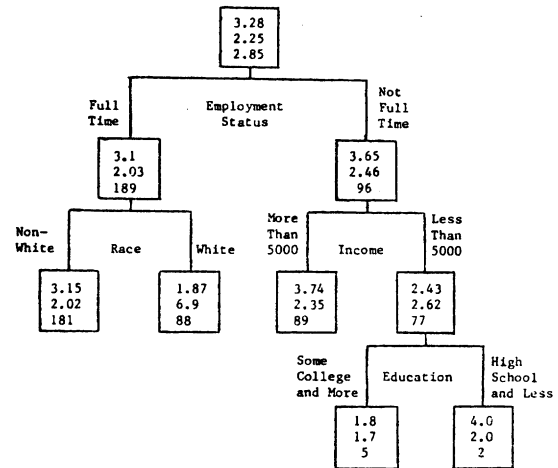
ATTITUDES TOWARD PLACE OF GROCERY

λ	Canonical Correlation	Level of Significance	% of Classification
.07	.26	.01	29

Discriminant Function $Y = -.66H6 + .49H3 + .41Q3B + .32H4$

FIGURE 3

LOCATED IN A GROCERY SUPERMARKET



The analysis of the responses to the desirability to locate the ATMs in convenience stores revealed the same variables and the results that were found in the MDA and AID were consistent. The main variables in both techniques were income, race and education. The variable employment status appeared in the MDA and the size of household appeared in AID. Again, we found that the higher educated, full-time employed, white and low income larger households are more favorably disposed.

Conclusion

This study, then, clearly differentiates and clarifies the user/non-user ATM profile and in so doing indicates key target market characteristics which can be incorporated in both promotional and pricing strategy determinations. Moreover, the perceived use potential of

ATMs likely site locations has been measured and similarly profiled. In both instances, MDA and AID have more precisely defined those variables which are most discriminating.

Because this data is a unique analysis of a representative market condition, it is hoped that it will serve as a strategic guideline for those who seek to optimize the implementation and acceptance of this particular type of electronic delivery systems.

Appendix

H1 = Sex of household 0 - Male 1 = Female
H2 = Age of household head
H3 = Marital status of household head
 0 = Married 1 = Otherwise
H4 = Highest level of education of household head
H5 = Race of household head
 1 = White 2 = Non-White
H6 = Current employment status
 1 = Full-time 2 = Otherwise
Q3B = # of persons in household
Q4 = Total household income

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Abstract

High interest rates and inflation, combined with deregulation of the transportation industry, have significantly affected the environment within which channel decisions are conceived and implemented. In this article, freight consolidation is presented as a strategic response to these environmental disturbances.

Introduction

Effective management of distribution channels requires that the firm adjust over time to changes in its environment. Such changes include variations in consumer attitudes, new government regulations and laws, federal fiscal policy decisions, or increased competitive pressures, among others. Adjustments will usually take the form of lengthening or shortening the present channels, shifting functions among channel members, or seeking out new and innovative channels and channel members. Examples of such changes abound in the marketing literature (Kotler, 1980, pp. 421-452).

At the present time, two important changes in the environment can be expected to bring about far-reaching modifications in channel strategy. The first phenomenon is economic, the combination of high interest rates and inflation. The second, deregulation of the transportation industry, is a change in the legal environment of the firm. This article will explore the significant ramifications of inflation and high interest rates and transportation deregulation for channel management, with emphasis on the retailer's position, and will then present a series of freight consolidation strategies to cope with the effects of these environmental changes.

The Effects of High Interest Rates and Inflation on the Channel

High interest rates and inflation impact upon the channel of distribution in two important ways. First, the costs of channel investments, such as warehouses and inventories, have increased greatly. For example, warehouse costs rose an estimated 80% between mid-1975 and mid-1979 (Ackerman and LaLonde, 1980, pp. 88-96). Second, inventory carrying costs climb coincidentally with interest rates and inflation because of the increased cost of capital invested in inventory.

Reactions of channel members to rising facilities and inventory costs have predictably been to reduce inventories, to scale back plans for new facilities, and to institute programs designed to intensify the utilization of existing facilities (Nellemann, 1975, pp. 440-445). Efforts to reduce inventories and facility investments often result in the centralization of inventory out of field warehouses, either those of the manufacturer or an intermediary, thus decreasing the need for such facilities and for extra safety stock. Such moves reduce investments but may increase transportation costs. Some channel members have also sought to lessen inventories by lowering their customer service standards, e.g., decreased item availability and longer order cycle times. Lower customer service stan-

dards can, of course, reduce the effectiveness of the channel, leading to customer dissatisfaction.

Retailers have been diminishing their inventories by forcing product storage back onto wholesalers and manufacturers (Ballou, 1978). In this way retailers can reduce their inventory investments and devote more store space to selling. When retailers carry smaller inventories, they usually require smaller, more frequent shipments from suppliers. These order characteristics require vendors to hold inventories nearer to retailers to prevent stockouts, thus hampering the supplier's efforts to centralize inventories. Transportation costs can also be driven up because of the smaller shipments.

Thus, the efforts of individual channel members to reduce inventory and storage facility investments are often in conflict, with no guarantee of a resolution which is optimal for the entire channel and, therefore, for the ultimate customer.

The Effects of Deregulation on the Channel

Deregulation, or reregulation as preferred by some, began with the airline industry in 1977 and culminated in the Motor Carrier Act of 1980 and the Railroad Act of 1980. While these two acts do not totally unregulate the trucking and rail industries, they have allowed for much easier entry into the motor carrier industry by new truckers or those who wish to expand into new markets.

The effects of transportation deregulation on the marketing channel can be discussed best in terms of cost and service. Cost in this instance means the rate or price charged for the transportation service. Prior to deregulation, transportation rates charged for small shipments, particularly those under 1,000 lbs., and to shippers located in relatively remote areas did not entirely cover the cost of providing the service (Schuster et al., 1977). These rate structures were enforced by the Interstate Commerce Commission (ICC) instead of evolving in an openly competitive market. The shortfall resulting from these artificially low rates was recovered on the more efficiently handled larger shipments moving in high volume traffic lanes. In addition, the ICC adhered to a strict definition of the common carrier obligation which required that all shippers, large or small, be treated equally with regard to service levels and prices. In return, transportation companies were protected from excess competition (Woods and Johnson, 1980, pp. 83-112).

Deregulation has changed this scenario in two ways. First, transportation rates will much more precisely reflect the actual costs of providing the service due to greater pricing freedom and because of easier entry into the trucking industry, both of which have intensified the competitive environment (Davis, 1981, p. 90). Competition for volume shipments has driven rates down at the same time rates have risen for small shipments. Thus, small shipments, which have always cost more to ship on a per-unit basis than larger shipments, even when subsidized, will cost even more. Small shipments moving in low volume traffic lanes are expected to bear

the largest increase in rates (Davis, 1981, p. 90). Second, it appears that the common carrier obligation will be modified such that service levels for small shipments and to remote locations will worsen. Therefore, the effects of deregulation will be to increase the costs of small shipments, decrease the costs of large shipments, increase the costs of transportation to remote markets and from remote origins, and decrease the service levels for small shipments in low volume traffic lanes.

Channel members have begun to respond to the changes brought about by deregulation by attempting to build shipping volume and by decreasing the number of and distance traveled by small shipments. Logically, the channel should be restructured so that the number of warehouses, operated either by manufacturers or intermediaries, is increased to allow for larger shipments closer to the market. Thus the investment by the channel in both storage facilities and inventories should be increased.

The Strategic Impact of Freight Consolidation

Unfortunately, the reactions of channel members to inflation and rising interest rates are in direct conflict with the solutions proposed to adjust for the effects of deregulation. A channel strategy which somehow simultaneously reduces inventories, facilities investments, and less-than-volume shipments is required for the 1980's.

One channel strategy which has been receiving increased attention and which also satisfies the above criteria is freight consolidation through a pool distribution system. Freight consolidation is the combination of several small shipments into a large shipment for the purpose of reducing the per-unit transportation cost (Newbourne, 1976).

A more sophisticated pattern involves pool distribution where orders for several customers, located in the same general area, are consolidated for shipment to a centrally located breakbulk point. From the breakbulk point, the pool distributor delivers the small shipments to each customer. The pool distributor is a facilitating intermediary which neither takes title to the goods nor performs any demand generating functions. As with a warehouse system the objective is to minimize the distances traveled by the small volume, high cost shipments. Unlike a warehouse system, there is no inventory held in the market area and therefore no warehouse or inventory investment.

The two previous forms of freight consolidation pertain to physical distribution systems, but freight consolidation can also be used for inbound purchases. Supplies originating from several vendors in the same general geographic area can be consolidated into a volume shipment at a makebulk point by a facilitating intermediary. This form of freight consolidation is particularly appropriate for retailers.

The "many to many" freight consolidation pattern is most often found where a number of firms join together to form a nonprofit shopper's association with the objective of reducing members' transportation costs. Alternatively, a consolidation agent may be available in both the origin and destination cities. For example, a group of retailers in Detroit may form a shipper's association which contracts with a warehousing or trucking company in the New York City area to consolidate purchases originating with many vendors in New York City. The transportation savings would then be shared by the members of the association. Freight

forwarders would provide a similar service.

A final pattern of freight consolidation involves the use of stop-offs for partial loading or unloading at a location intermediate between the origin and final destination (Flood, 1972, pp. 256-279). Stop-offs allow the consolidator to extend geographically the economic benefits of consolidation and to speed up the consolidation process by accumulating a truckload in a shorter period of time. Stop-offs, however, require a higher level of administrative coordination and planning.

There are, therefore, several different patterns of freight consolidation possible, each requiring a different level of management attention. Each is designed to reduce transportation costs and to centralize inventories.

Practical Considerations

All freight consolidation systems are dependent upon the volume of goods to be moved through the system, the geographic distribution of customers and/or vendors, and the length of time products can be held during the accumulation or consolidation period (Jackson, 1981). For example, low volume systems with dispersed customers necessitate a much longer time period to accumulate a truckload quantity than would high volume systems with customers geographically concentrated. Lengthy holding times drive inventory carrying costs to unacceptable levels and irritate customers. Excessive holding times particularly penalize fashion goods retailers where timing is often critical. Furthermore, even in high volume systems, it is unlikely that all remotely-located customers could be brought into the freight consolidation system. Thus, ordering patterns, both in terms of volume and geography, and service level requirements are critical to the design of a successful freight consolidation system.

Freight consolidation compares favorably with both direct (manufacturer-consumer) and indirect (manufacturer-intermediary-consumer) systems in terms of costs (Pollock, 1978). Transportation costs with freight consolidation are lower than for a direct system, and inventories resulting from freight consolidation are less costly than for indirect systems (barring excessive consolidation periods). In terms of service the comparison of freight consolidation with direct and indirect systems is mixed. Compared to a direct system, it has been shown that freight consolidation can actually result in a faster order cycle time because volume transit times are typically faster than less-than-volume transit times (Jackson, 1981). On the other hand, freight consolidation in most cases will provide slower service than an indirect system. The longer distance to be traveled and the consolidation time will add up to a lengthier interval than delivery from a nearby local warehouse. Thus, a firm currently using an indirect channel to provide a high level of customer service may find it difficult to switch to a freight consolidation system.

Channel Strategies Incorporating Freight Consolidation

Incorporation of freight consolidation into the firm's channel strategy necessitates separating the flow of the physical product from the flow of ownership. Separation of the channel flows allows for greater specialization of functions, leading to a higher level of efficiency and effectiveness. Intermediaries can be chosen which are expert at physical handling of the product, and other intermediaries can be utilized which are skilled at demand generation activities. Such is not the case in the traditional indirect channel where

the intermediary is selected on the basis of its demand generating skills and is also assigned the physical handling duties.

Implications of Freight Consolidation Strategies

A channel strategy based on manufacturer-controlled freight consolidation will solve only the problems caused by higher interest rates and inflation and transportation deregulation where order volumes and customers allow. A multichannel strategy which recognizes the volume of demand and location of the market in relation to transportation routes is therefore suggested. Several strategies based on volume and proximity of the origin and destination to major transportation corridors are presented below.

High volume markets, regardless of their proximity to major transportation routes, can effectively utilize freight consolidation. High volume will allow for fast, frequent, and economical shipments to almost any market. The remote market may cost somewhat more to serve, however, because traffic out of it may be difficult for the carrier to find, thus requiring some costly empty movement. But the difference between the volume and less-than-volume costs will remain substantial, and the advantages of a centralized inventory will continue.

Low volume markets located on major corridors offer two possible strategies. The first involves stopping off at the lower volume point along the way to a high volume destination. This tactic effectively ties the lower volume point to the higher volume market and would be appropriate for a chain. The second strategy involves a situation where the volume of business done by an individual retailer may be relatively small, but collectively the retailers in the market account for a substantial volume of business. Here the individual retailer must look outside itself to build sufficient volume. Specialized intermediaries such as non-profit shippers' associations, independent consolidators, motor carriers with assembly and distribution services, and freight forwarders should be sought out or established. These specialized intermediaries acting as agents combine the small shipments of many firms to create transportation economies. They should be attractive to the small retailer lacking volume in general or to the larger firm lacking volume to particular points. This strategy could also be implemented to serve low-volume localities on minor routes.

Low volume markets which are remote in the sense that they are not on major transportation routes are expected to suffer the greatest rise in transportation rates and a lowering of service levels especially for less-than-truckload shipments. Such markets could very possibly become uneconomical to serve. These are also the markets to which it is most difficult to consolidate shipments because of the low volume.

The primary objective of retailers and suppliers alike should be to build volume without unduly increasing order cycle times or inventory levels. Several strategies could be employed by retailers to combat the rising costs of doing business in such markets in addition to using consolidation agents.

One option which is open to chains is to use a concentrated location strategy. That is, units should be concentrated geographically to build volume into an area. This strategy coincides with the promotion economies which also arise from such a strategy. Freight consolidation opportunities may also cause a re-evaluation of suppliers in terms of their geographic

locations. Buying from suppliers located near to one another can greatly facilitate an inbound consolidation system. It may not be necessary to change suppliers but only the location from which the retailer is supplied. This would be particularly important to a retailer which cannot easily switch suppliers because of a strong national brand affiliation.

A re-examination of merchandise assortment policies may be required. For example, it may be helpful to concentrate purchases with fewer suppliers, thus building volume and goodwill while narrowing the assortment of merchandise, but perhaps increasing vulnerability to supply interruptions. Or it may be time to cull out some products which are slow movers and increasingly emphasize other items. Such a policy would be very serious since it could change the nature of the retailer's operation. Suppliers selling on the basis of a uniform delivered price might also be found.

Another strategy involving acquisition is to order larger quantities less frequently. However, great care must be taken not to push inventory costs past acceptable levels. Such a policy may be forced on many retailers by suppliers increasing the minimum accepted order size.

Simply raising prices to cover the added costs may be a viable strategy for those retailers of specialty and shopping goods possessing a strong consumer franchise. For retailers selling convenience and shopping goods for which price is a major consumer decision variable, such a strategy must be implemented with great care. Retailers located in remote, low volume markets who do not hold prices down may lose customers to the larger markets where cost pressures may be lower.

A final strategy is to abandon the market and concentrate on the larger markets. This strategy shifts the distribution function to the consumer and positions the retailer in a more intensely competitive environment.

Summary and Conclusion

This article begins with the premise that the environment is constantly changing and that all marketing channels must adapt over time to these changes if they are to prosper and grow.

Two major changes now taking place which are sure to affect the operations of retailers and manufacturers are the high level of interest rates and inflation and deregulation of the transportation industry. Taken separately, these two phenomena imply opposing strategies. High interest rates and inflation suggest a reduction in inventory related investments, e.g., centralizing inventories and shipping or ordering more frequently in smaller quantities. Transportation deregulation implies that inventories should be decentralized so that larger shipments can be moved closer to the market.

Freight consolidation is presented as a channel strategy which in many cases can be used to reduce both inventory related investments and transportation costs. Several variations of freight consolidation are presented and analyzed in terms of the probable effects of deregulation on the channel, and a multiple-channel strategy is proposed to serve markets with different volume and customer requirements.

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DISTRIBUTION PROCEDURES--AN IMPEDIMENT
TO THE SALE OF SOLAR PRODUCTS

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Even the most dedicated advocate of solar energy will admit that thus far, the general public's verbalized enthusiasm for solar energy has not been matched by its actual purchases of solar equipment.

Solar sales for the first half of 1977 were \$72 million, an increase of 168 percent over the first half of 1976. But sales declined by 10 percent in the second half of 1977 to \$65 million and plummeted to \$32 million in the first half of 1978.¹

One factor that explains the disappointing sales of solar equipment is the high purchase price along with a reputation for some installation and operational problems. Another factor inhibiting sales of solar equipment is the lack of an effective distribution system: "The successful commercialization of a new technology does not depend solely on its technical and economic feasibility. Experience has shown that unless the new technology can be integrated into existing institutional procedures and practices, its commercialization is sure to be retarded and prolonged."²

Absence of Channel Captain

To ensure the proper implementation of the distribution activities, in most industries a single member of the distribution channel generally emerges to dominate these activities. In marketer's jargon this member is usually referred to as the channel captain. In situations involving products of new technology, this role is generally assumed by manufacturers. This has not occurred in the solar industry, however, since no single group has assumed the primary role in the distribution process.

Many manufacturers of solar products use an intensive form of distribution, supplying any middlemen willing to stock and sell the product. In many instances, these middlemen are not capable of performing the necessary distribution activities at an acceptable level. Because of these types of situations, the channel structure for solar equipment is viewed as being relatively disorganized and inefficient.

Although the distribution practices of the solar industry have been criticized, in actuality, only limited information exists on the existing channel configuration. This research project was undertaken to identify distribution procedures being followed by manufacturers of solar equipment.

Research Methodology

A series of interviews were used to construct the channels of distribution for solar products. The first phase of these interviews occurred at the manufacturer's level. The marketing managers of fifteen

¹"The Coming Boom in Solar Energy," Business Week, October 9, 1978, p.99.

²B. Burns, G. Ferris, and B. Mason, "Solar Energy Commercialization and the Labor Market," National Technical Information Service, Springfield, VA, December 11, 1978, p. 1.

solar equipment manufacturers in Colorado were contacted through a series of telephone conversations and personal interviews. Each was asked to furnish information on the proportion of their solar products delivered directly to end users and various types of middlemen. They were also asked to provide the names and addresses of these middlemen.

Middlemen Also Contacted

Each middleman identified by a manufacturer was then contacted and asked the same questions as the manufacturers. If they supplied products to other middlemen, these middlemen were contacted. This process was carried on until no further middlemen were used and the product was delivered to the end user. (Generally, only three or four middlemen were identified by each manufacturer.) The interviews at this second level centered around each channel member's involvement and role in the distribution process, and how they were fulfilling that role.

Estimating Sales of Colorado Solar Manufacturers

The number of employees in each of the 15 firms was used to estimate each firm's production and sales of solar equipment relative to other Colorado solar manufacturers. It was necessary to use employees as a surrogate for sales data since a number of the firms were unwilling to provide sales information. The number of employees for each firm was used to construct a weighted average to provide a rough estimate on the proportion of their total output distributed to each type of middleman and end user. (See Appendix.)

Channels of Distribution for Solar Equipment

The information obtained from the interviews, plus information provided in pertinent secondary sources were combined to depict the general middleman structure used by manufacturers of solar equipment. (See Figure 1.) A description is now provided of each major type of middleman in that channel.

Heating, Venting, Air Conditioning (HVAC) Distributors

These middlemen handle almost 45 percent of the output of HVAC manufacturers.³ Because of the products they handle and the markets they reach, HVAC distributors would seem to be natural outlets for solar products as well. These outlets handle large quantities of products from a variety of HVAC manufacturers and provide their customers with a wide assortment of products. Although they specialize in HVAC equipment, some take on solar equipment as accessory items but do not really become knowledgeable about its installation.

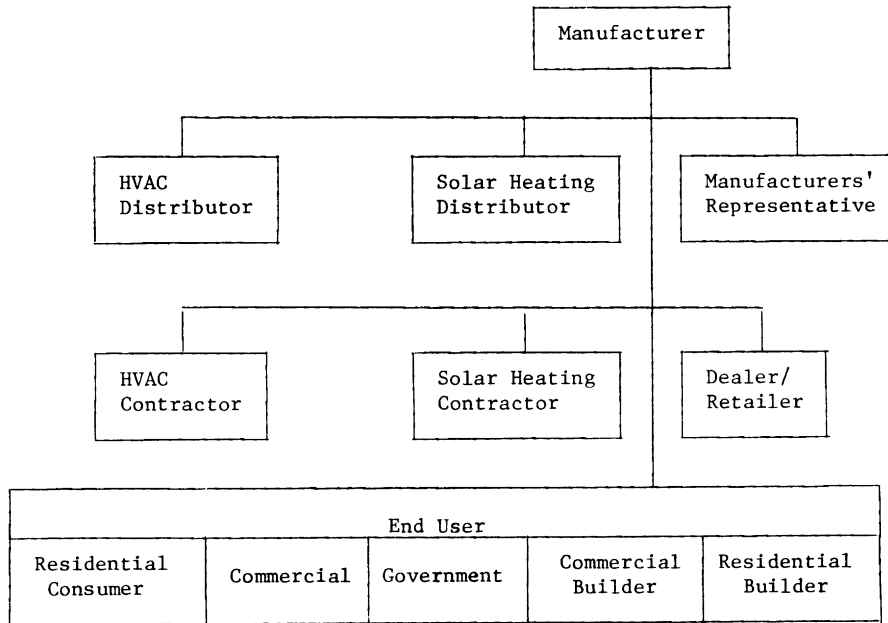
Solar Heating Distributors

Perform the same regrouping activities as HVAC distributors except they limit their product line to solar

³"How the Industry's Products Go to Market," Air Conditioning, Heating, and Refrigeration News, September 20, 1976, p. 72.

FIGURE 1

FLOW OF SOLAR PRODUCTS FROM THE MANUFACTURER
TO VARIOUS MIDDLEMEN AND END USERS



products. Advocates of this channel member claim such specialization is necessary because solar products are much different in operation and installation than conventional heating and cooling equipment. Critics argue that these types of distributors will not be able to survive financially because of their narrow line.

Manufacturers' Representatives

These middlemen do not take physical possession but merely act as a salesforce for the manufacturer. Thus they do not perform storage or regrouping activities. Solar equipment is usually just one of a variety of products they handle.

HVAC Contractors

They not only sell HVAC equipment, they generally install that equipment as well. Because they reach the customers who would also be interested in solar equipment, they would seem to be natural outlets for solar equipment. However, because their customers also expect them to install the equipment, they are somewhat reluctant to take on solar products because of the problems associated with such installations. They prefer to devote their time to more familiar HVAC products.

Solar Heating Contractors

They perform the same activities as HVAC contractors except their offerings are limited to solar products. Once again the argument arises of specialization vs. variety. But, in this case the argument favoring specialization is stronger because of the complexities associated with installing solar products.

Dealer Retailers

This includes small outlets as well as mass merchandisers such as Sears. The small percent of sales made through these outlets, indicate that at present they are of only minor importance to Colorado manufacturers.

End Users - Builders, Consumers, Government

A significant portion of the sales of Colorado manufacturers go direct to end users. The ability of manufacturers to sell direct is due primarily to the fact that a major market for Colorado solar equipment is within Colorado itself. The majority of these direct sales were made by the smaller manufacturers who often designed solar equipment specific to the needs of the end user.

Second Level of Middlemen

Solar products originally sold to HVAC distributors are resold mainly to HVAC contractors. These distributors are following the same channels utilized for distributing conventional heating and cooling products. Occasionally an HVAC distributor will sell to a solar heating contractor. These contractors are usually former HVAC contractors who have dealt with the particular distributor in the past for conventional heating products, but are now specializing in solar equipment.

Unlike HVAC distributors, solar heating distributors sell and deliver to a wider range of middlemen. Although they deal primarily with HVAC contractors, a substantial portion of their sales are also to residential builders, solar heating contractors, retailer/dealers, and end users. In short, they will sell to anyone who will take the product. In that sense, they are just like many of the solar manufacturers. The fact that solar sales are their only means of income necessitates this intensive forms of distribution.

As previously mentioned, HVAC contractors receive most of their solar products from HVAC and solar distributors as well as direct from the manufacturer. They, in turn, distribute the product to the end user. This distribution usually involves both sales and installation. Another function provided by HVAC contractors is the installation of solar heating systems for those end users who may have purchased these systems from either the manufacturer or a solar distributor.

Solar heating contractors are much like HVAC contractors in that they distribute exclusively to residential builders and consumers. They also provide both sales and/or installation.

Dealer/retailers sell their solar products mainly to residential consumers, with some to residential builders. Since dealer/retailers usually do not install the systems, they will often have an arrangement with either an HVAC or solar contractor to do the installation.

Primary Problem Areas

There are eight basic functions that must be performed if a product is to be effectively distributed from manufacturer to end user. These functions are buying, selling (promoting), transporting, storing, financing, standardization, grading and risk taking. In the case of solar equipment, some problems exist in all eight functional areas, but the most critical ones involve the functions of financing, risk taking and promoting.

The Financing Function

A lower priced solar hot water system for residential use costs about \$1,200, but the cost of a typical system ranges between \$2,000-\$2,500. Solar space heating systems are much more expensive ranging from \$7,000 to \$15,000. (Commercial systems are considerably more expensive.)

Because of these high costs, middlemen and end users must usually borrow money to pay for the equipment. Manufacturers generally are unable to provide this type of financing. There have been numerous tax relief provisions for consumers on both the state and federal levels (tax credits and tax deductions) to stimulate the purchase of solar equipment. But this relief comes at the end of a tax year and does not lower the amount of money the buyer needs at the time the equipment is purchased.

With a few exceptions, lending institutions have not enthusiastically pursued the financing of solar equipment. Their reluctance has been due primarily to difficulties in appraising the contribution of solar equipment to the property's value. The dramatic increase in fuel prices has been somewhat offset by increasing interest rates, keeping the breakeven period for solar equipment still at an unattractive length for most consumers.

The solar equipment manufacturers are not financially able to provide buyers with reasonably attractive loan rates, and most middlemen are unwilling to finance potential buyers.

The Risk Function

Risk can take two forms: (1) Product obsolescence where a new product is developed that is far superior to existing equipment. (2) Risk involving the product's performance. Will it perform in the expected manner and for the length of time claimed for it? Will it maintain its value as it sits in inventory? What value will it add to the property on which it is attached?

These are risks that must be accepted or overcome by some member of the trade channel. In the case of product obsolescence, most producers now feel that there will be no major breakthrough in terms of the performance of structure of solar heating and cooling equipment. Thus, this should not be a major inhibitor to sales if potential purchasers can be informed of the

situation.

The other type of risk--product performance and proper installation--are not as easily handled. While some manufacturers are now offering warranties on their products, many of the problems stem from improper installation. There is a large turnover among installers and contractors of solar equipment. Many new or marginal firms have taken on solar products because of their need for business of any kind. The older, more established contractors and installers have shied away from solar because many were already busy and did not wish to take on the headaches associated with these new products.

The responsibility for guaranteeing product performance and proper installation has to be assumed by some member of the trade channel if solar products are to be effectively marketed.

The Promotion Function

In spite of the innate appeal of solar energy, it does not sell itself. All channel members must be actively involved in the promotion of these products. In the past, the federal government, primarily through Department of Energy agencies (SERI) has provided publicity through pamphlets, educational programs, etc. However, such government sponsored activities have now been severely hampered because of the major cuts in Department of Energy funds by the Reagan administration. In addition, no channel member has really devoted the manpower and dollars needed for a major promotion of solar products to potential end users--contractors and the general public.

Manufacturers concentrate on educating middlemen through trade magazines. The middlemen are not willing to spend promotional dollars since thus far they have had only very limited success with solar products. Thus, at present the stimulus for using solar equipment must come from the end users themselves.

Summary and Conclusions

An inhibiting factor to the adoption of solar products has been a general lack of coordination and organization within the channels of distribution utilized by the solar industry. Solar manufacturers and middlemen, for the most part, distribute to anyone willing to take on the product, and many times those they distribute to are not capable of performing the necessary activities to ensure the successful distribution of the product.

Although most firms involved with solar energy equipment admit the distribution process is disorganized, very few really understand the actual composition of the channel. This project was undertaken to explore and define the current channel structure being used by manufacturers of solar equipment.

There is a general tendency on the part of manufacturers to sell their product direct to wide variety of buyers, including heating, ventilating, and air conditioning (HVAC) distributors, solar heating distributors, HVAC contractors, solar heating contractors, dealer/retailers, residential consumers, and builders. The middlemen receiving the largest share of direct shipments from the manufacturer were HVAC distributors. A significant amount of products, however, bypassed the distributor level and went direct to contractors and dealer/retailers. Another substantial portion bypassed both distributors and contractors, going directly to the end users. Sometimes even distributors avoided contractors and dealer/retailers by selling direct to end users.

The increased participation of HVAC contractors is desperately needed since they are the solar industry's main contact with potential solar users. They are capable of promoting, selling, and installing solar devices. Also, being at the local level, they are in the best position to help with financing the purchase and installation of a solar energy system. Finally, being closest to the consumer, they could convey a greater image of reliability, particularly if they are an established firm. This would help minimize the risk (real or imagined) associated with the purchase of a solar energy system.

The increased involvement by HVAC distributors would also increase the participation of HVAC contractors in the distribution structure, since HVAC distributors have historically dealt with HVAC contractors. This relationship will help integrate solar products into established institutional procedures and practices. Only then will the commercialization process really get underway.

A channel structure must emerge in which all participants have a commitment to the successful distribution of solar products. At present, such commitment exists only among the solar manufacturers. Most middlemen view solar products only as auxiliary offerings and thus are not willing to assume functions that require heavy financial involvement. Most manufacturers are not large enough or financially capable of assuming a strong "channel captain" position, and thus at this time to single group exists to provide the leadership needed for the effective distribution of solar equipment.

Appendix

Colorado Solar Manufacturers' Use of Various Middlemen

An attempt was made to quantify the proportion to solar equipment moving through various types of middlemen. As previously stated, each of the fifteen Colorado manufacturers of solar equipment was asked to identify the portion of their solar sales made to various types of middlemen and end users. The information was then related to that firm's number of employees to derive a ratio for apportioning the output of all firms.

For example, assume Firm A had 50 employees. This is approximately 14 percent of the total employees (350) of solar manufacturers in Colorado. Firm A indicated that 40 percent of their solar units were sold directly to HVAC (Heating, Venting and Air Conditioning) distributors. This meant that approximately 5.6% (.141 x .40) of all solar units were sold to HVAC distributors. This procedure was used for all 15 manufacturers. **Table 1** contains the results from these computations.

TABLE I

Proportion of Sales Distributed Through Various Middlemen By 15 Colorado Solar Equipment Manufacturers

	%
Heating, Venting and Air Conditioning (HVAC) Distributors	24
Solar Heating Distributors	11
Manufacturers' Representatives	12
HVAC Contractors	10
Solar Heating Contractors	11
Retailers	7
Residential Builders	13
Commercial Builder	5
Residential Consumer, Government	7
	100

The authors recognize that critics will argue that using "number of employees" is a questionable procedure for estimating sales of firms. However, in situations where sales data cannot be obtained, this method has been used by both government and industry to provide rough estimates of an industry's sales activities.

The authors emphasize the data in **Table I** are at best, rough approximations of the distribution of solar equipment by Colorado manufacturers.

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THE INCIDENCE OF EATING OUT: A REVIEW AND DECISION MODEL
FOR MANAGERS OF FAST FOOD RESTAURANTS

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Abstract

Controversy over whether the fast-food industry is suffering from volatile economic shifts, changing family composition and life styles, or poor management has left an aura in its atmosphere. The apparent slowdown in growth has implied that the industry is saturated. Many of its members are employing actions to counteract saturation and move back in the life cycle. A selection of decision criteria is suggested with implications which underscore the need for managers of fast-food operations to "set the stage" for new growth patterns.

Introduction

With recent cutbacks in consumer spending, the fast-food industry has experienced depressed growth, implying that the industry has become saturated or is at least approaching the saturation stage of its life cycle. Controversy exists as to the causal factors associated with this decline. Some indicate the decline may have been precipitated by volatile shifts in the economy, changing family lifestyles, or the changing composition of the American family. Others claim that poor management, fuel shortages, and mounting inflation are to blame. Whatever the cause, a negative aura exists within its atmosphere.

While the literature is replete with information on the fast-food industry and comparative studies among types of restaurants competing for the fast-food dollar, it appears as though problems facing individual, fast-food units have not been addressed. The purpose of this paper, therefore, is to analyze areas of decision making facing managers of individual fast-food units as subsets of larger units and to suggest decision criteria which may be implemented to recoup the dynamic position once held. The paper is not an empirical study but rather an aid to planning. While it is understood that many of the problems associated with individual fast-food units are also problems of the corporate unit, it is the manager of the individual, local unit who is acutely aware of his or her market and is in the best position to implement changes provided resources are available and managerial discretion is used. First, marketing and the fast-food industry in the American economy will be reviewed. Next, decision-making areas in the form of tactical actions will be studied. Finally, new directions for marketing decision making will be presented. Specifically tactical decision plans for individual fast-food units will be developed which, in turn, will operationalize corporate strategic plans of the larger unit. Thus the interdependency of the system is maintained. A decision model for the unit manager is presented. For purposes of this paper, a fast-food restaurant is defined as one that has limited menus, no waitresses, and minimum waiting time.

Marketing and the Fast-Food Industry

Studies indicate that the incidence of eating out has become a major trend for Americans as greater shares of food dollars are spent for meals away from home (Partch, 1981; McNeal, et. al, 1980; Restaurant Business, 1979). Fast-food restaurants have become a "home-away-from-

home" and are a way of marketing products and services that is heavily steeped in domestic traditionalism. One out of three, or approximately seven meals per week, are consumed away from home by the average American (McNeal, et. al, 1980). Employment demands require that one-third of these individuals eat lunch out (Media Decisions, 1978). However the trend is moving to other meals as well. Changing life styles, precipitated by increasing numbers of women in the work force, dictate changes in nuclear-family responsibilities (Standard & Poor's, 1980). For instance, Maxwell (1978) indicates that forty percent of women presently in the work force are mothers who are likely to take advantage of the time-saving convenience offered by fast-food restaurants in meeting their maternal obligations.

Additionally, a significant trend affecting fast-food industry marketing is the growth of the population sixty-five years of age and over. This group has burgeoned from a mere three million persons at the turn of the century to a projected growth of 27.9 million by 1990 (Current Population Reports, 1975). Finally, a demographic trend that appears to be a definite positive attribute for the fast-food restaurant is the movement towards one-person households. The diseconomies of preparing a meal for one person provide powerful incentives for these individuals to spend greater proportions of their food budget in the fast-food market.

A concern exists, however. It appears that sales activity in the fast-food segment, as well as all segments, catering to away-from-home eating is being severely affected by the current economic climate. For example, A. C. Nielsen Company (1981) indicates that the overall real growth for eating out fell one percent (1%) in 1980, the first decline since the 1974 recession year.

TABLE 1

REAL GROWTH OF RESTAURANT SALES
1975 - 1980

Year	% Growth by Type Establishment			%
	Fast Food	Restaurant*	Drinking**	
1975	8.0	5.0	-4.0	4.0
1976	14.0	2.0	-2.0	5.0
1977	3.0	3.0	-1.0	3.0
1978	-0-	6.0	-1.0	2.0
1979	-0-	2.0	3.0	1.0
1980	2.0	-3.0	4.0	-1.0

Source: The Nielsen Researcher, No. 3, 1981

*Includes cafeterias and restaurants that may sell liquor, but over 50% of sales are for food items.

**Sales include over 50% in on-premise liquor.

An analysis of the data in Table 1 indicates that total growth of restaurant sales; that is fast-food restaurants, cafeterias and drinking establishments, declined one percent in 1980 with restaurant sales declining 3.0

percent. Fast-food establishment sales, however, grew by 2.0 percent for this period. The most notable growth was in the area of drinking establishments. These figures suggest that restaurant sales may be tied to economic conditions. For example, consumers apparently are willing to forego the luxury of a full service restaurant and may be opting for fast food in lieu of their own kitchens. Such behavior could leave a significant impact on the fast-food industry.

It appears that as more and more Americans eat out, their demands for higher-quality, nutritionally well balanced diets increase. Furthermore, these same individuals seem to be showing a preference for "lingering" while eating out over the traditional quick "take-out." Results of this attitude change can precipitate declines in customer traffic among fast-food restaurants as is indicated by the relatively fewer number of fast-food units which have opened in recent years (Restaurant Business, 1979). Concern with quality food and changing consumer attitudes has prompted some fast-food locations such as Marty K's and Swenson's in California, Grizzly Bear in Oregon, Mr. Gatti's in Kentucky, and the Country Breadboard in New York to boldly compete using healthy foods, with a strict avoidance of the "burger" market which they claim is saturated (Young, 1979).

It can readily be seen that the changing lifestyles and population composition, shifts in the economy, and new attitudes toward eating out present challenges and opportunities for dynamic tactical marketing actions.

Tactical Actions

Owners and managers realize the vital nature of the present fast-food position and are investigating and implementing new tactical actions to rejuvenate industry growth patterns. The roster of tactics discussed below appears to represent attempts to move the industry back in the life cycle and reconstruct healthy growth patterns.

Menu Diversification

This device, used by hamburger-oriented operations to decrease dependence on high-priced beef, has had a significant impact upon restaurant traffic and revenues. Some, such as McDonald's, Burger Chef, and Hardee's, have expanded their menus to include breakfast (Marshall, 1979; Riggs, 1980). Others, such as Wendy's and Roy Rogers, are testing the concept with limited programs in several test areas. Burger Chef devised the Funmeal to reach their secondary Full Nest I (Wells and Gubar, 1966) target market. The Funmeal consists of a packaged total meal including a hamburger, french fries and soft drink (Restaurant Business, 1979). Other menu-diversification tactics include salad bars, fish and chicken sandwiches and beverage additions such as beer.

Atmospherics

This two-phase tactic was precipitated by a concern towards cleaner restaurant environments and better interior design. Poor atmospherics allowed competition to ruffle the feathers of Kentucky Fried Chicken management and enlightened their perception of exactly what consumers demanded in a KFC restaurant. Church's Fried Chicken, which entered the market by offering a double-dipped and marinated chicken dinner, reassured customers of its atmosphere of cleanliness by allowing customers to observe the chicken being cooked (Marshall, 1978).

Virtually all fast-food restaurants are making changes in store design. Fast-food units are repositioning

themselves to attract the growing adult market that prefers a leisurely meal, on premises. As such, atmospherics redesigned to create a more leisurely, relaxed atmosphere with greater seating capacity, may prevail. For example, McDonald's outlets located in posh suburban areas are going rustic (The Economist, 1980) by eliminating plastic and replacing it with wood to encourage a more personable appearance for the adult upscale target market. Hardee's has added "dining rooms" to many of its locations while Bonanza has added carpeting, muted lighting, murals, and new seating arrangements (Young, 1979).

Quality

As previously mentioned, consumers are especially concerned that they are not receiving the quality expected for the dollars expended. Therefore, not only is the fast-food industry implementing major changes in atmospherics, but they also are upgrading the quality of their food offerings to complement decor changes and meet needs of new target markets. Research indicates that many people will eat out, despite a seemingly higher cost for food away from home, simply because the food tastes better. While one cannot assume an association between quality and taste, it is important to note that almost 68% of those interviewed by Nielsen (Nielsen Researcher, 1981, p. 6) indicated that certain foods taste better away from home. **Table 2** presents these data.

TABLE 2

COMPARISON OF LOCATION WHERE FOOD TASTES BETTER

Food Product	Tastes Better at Home (% Mentioning)	Tastes Better Away from Home (% Mentioning)
Steak	18.6	23.2
Ethnic Food	18.0	20.2
Hamburgers	12.8	13.2
Other Meat	37.7	14.4
Fish	N/A	41.4
Pizza	N/A	10.7
Fried Chicken	14.9	N/A
Vegetables	22.7	N/A

Source: The Nielsen Researcher, No. 3, 1981.

N/A: Not Available

Inspection of the Table indicates that the foods most often mentioned as tasting better away from home are steak, ethnic food, and fish while other meats and vegetables were most often considered to be better at home. It appears as though fast food managers should plan their menus around quality entries of steak, ethnic food and fish and perhaps improve the quality of hamburgers and pizza.

Brand Leveraging

Despite the previously-mentioned menu expansions, quality changes, and atmospheric revisions, other fast-food managers perceive that a healthier position in the industry can be maintained through brand leveraging (Tongberg, 1981). Brand leveraging, also known as horizontal expansion, is not adding diversified products to the menu as previously discussed, but rather adding new dishes using basic menu items. For example, Pizza

Hut and Pizza Inn maintain brand leveraging by expanding their menus within the pizza/pasta category. Taco Bell and Wendy's also have expanded their basic menus with new, similar dishes and maintain that this tactic keeps labor and production costs stable and public image clear (Ashton, "Mixed Signals," 1979). As Tongberg indicates, leveraging can be an attractive, new product development tactic for the 1980's which will be consistent with the growing financial cautiousness that will pervade much of this decade.

Promotion Mix

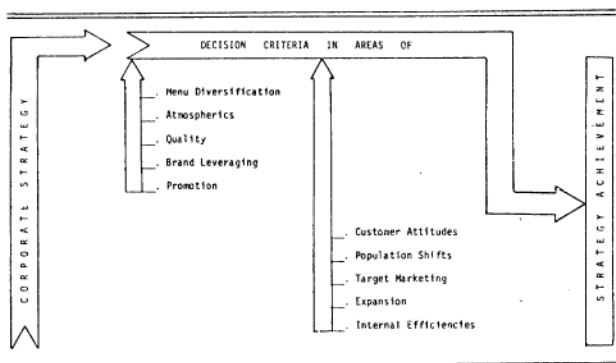
Fast-food advertisers spend almost \$450 million with the media each year. Print accounts for a mere 3.5 percent of media spending with the remainder being paid out for broadcast (Marketing & Media Decisions, 1980). Aggressive attempts are being made to lure the eighteen to forty-nine year old market, with primary emphasis toward women with families, especially women who have strong involvement in the food decision-making process. Non-comparative advertising dominates the market. Non-comparative advertising seems to be more appealing to potential customers because the ads and commercials are perceived as being more informative, believable and truthful (Shimp and Dyle, 1978).

New Directions

Managers of fast-food restaurants over the years have provided products and services which have pleased the American population. However, shifts in the economy, along with consumer demands, menu expansion, restaurant atmospherics, quality and cleanliness have stimulated these managers to promulgate new tactics aimed at operationalizing corporate-level strategic plans and encouraging growth in a predominantly saturated market. Figure 1 presents a detailed decision model outlining tactical actions already discussed along with new directions. Present tactics are making firm entrenchments into the market, however, suggested new directions for decision planning lie ahead which focus on expelling the causal factors associated with the apparent decline in fast-food revenue. The suggestions are not purported to be inclusive or ordered in any way but merely presented to assist the manager in his decision making. As you can see, implementation of the tactical decision criteria allows achievement of corporate strategic plans.

FIGURE 1

DECISION MODEL FOR UNIT MANAGERS OF FAST-FOOD RESTAURANTS



Customer Attitudes

Changing attitudes towards fast-food restaurants seem to be emerging. This may be a function of age shifts, general concern about health and food, or an inherent

desire to eat out inexpensively, but at a leisurely pace. Fast-food managers must analyze their local markets to find out if any one or all of these conditions exist. If one or more exist, then the manager must take measures to match the restaurant's offerings to the changing attitudes. For example, in a study correlating eating preferences with self-image (Sadalla and Burroughs, 1981), it was found that those who described themselves as "Fast-Food Devotees" were religious, logical, conservative, competitive, family oriented and anti-drug. Their favorite foods were the Whopper, Kentucky Fried Chicken, hot dog, Big Mac, milk shake, submarine sandwich and pizza (Sadalla and Burroughs, p. 56). This suggests that symbolic characteristics of food should be considered in attempting to develop menus and in promoting the attributes of the particular restaurant to the market. Precisely, the manager must effectively match the predisposition of his or her customers to the conditions of change within the financial and physical boundaries of the operation.

Population Shifts

Although it appears as though fast-food managers are attempting to attract an "adult" market (the 18-49 age group), the potential of the market sixty-five years of age and older should be recognized. One fast-food chain is appealing to this market already. Arthur Treacher's Fish 'n Chips is offering a discount for the older-adult segment through the "Thrifty Sixty Club" (Media Decisions, 1978). Others need to recognize that although on fixed incomes, this group, if properly nurtured, provides the potential for success for many fast-food restaurants, especially in predominantly older-adult areas.

Target Marketing

While target marketing has been addressed subtly in the decision areas discussed above, further elaboration seems appropriate at this point. Menu diversification was presented previously as a viable tactic to provide growth opportunities and decrease dependence on high-priced beef. In recent years, however, fast-food restaurants have been diversifying their menus with such vigor as to cause a blurring of their target markets. Specifically, this trend has caused an overlapping of operations with a resultant dissolution of market boundaries. Marketing efforts designed to appeal to designated segments must be developed in order to position, or reposition as the case may be, a restaurant to its market. This may require menu contraction or specialization such as the leveraging tactic previously discussed. Whatever step is taken, the outcome should be a counterattack on market saturation for the restaurant as well as a building of restaurant loyalty. Loyalty perhaps could be built through several effective methods. For example, it is well known in advertising literature that promises delivered in advertising and promotional messages must be implemented to enhance effectiveness. Sensitivity on the part of fast-food personnel, not only to the market but also to promises delivered, is mandatory. These personnel come into the closest contact with the customer, and as such have the greatest impact on customer attitudes. Their roles, by definition, place them in the unique position of being a "follow-up program" at the point of sale for advertising and promotional efforts. Therefore, service personnel can become vital catalysts in building brand loyalty for the restaurant and in securing a portion of the fast-food market.

Expansion

Expansion may occur at the local as well as international level. As multinational marketing becomes ingrained in the operations of American corporations, opportuni-

ties for internationalization in the fast-food industry seem endless. Foreign markets seem to be exhibiting a demand for the American fast-food concept which may provide an arena for export opportunities for domestic fast-food operations. Kentucky Fried Chicken, to name one, has about 1,200 stores in other countries with nearly \$200 million worth of business (Enterprise, 1981). The original recipe is the same, but side dishes vary according to cultural tastes. For example, in England, "chips" instead of mashed potatoes are served and Middle Eastern customers receive a salad called tabouli instead of cole slaw. Locally, managers can do essentially the same by expanding into new geographical areas and developing menus designed for the taste of that target market.

Internal Efficiencies

A manager of a fast-food restaurant can become totally familiar with the decision criteria explicated in the model. However, this knowledge will not be the ingredient for success unless it is used to properly design and implement a program for the local unit. The manager should consider the following points for maximum results: (1) the restaurant should have clearly stated objectives, (2) goals should be rigorous but realistic and must be consistent with corporate goals so plans at the corporate level can be carried out, (3) decision criteria should be presented to central management or the owner, as the case may be, and should receive approval prior to implementing, (4) once approved plans should be presented to and have the support of employees, and (5) a means of control should be established to monitor success of the program. This could be the gathering of feedback information from employees, sales monitoring, and measuring the degree of goal achievement.

It is interesting to note that fast-food organizations have initiated advisory councils and associations in recent years for the sole purpose of determining what managers of individual units need in order to grow (Restaurant Business, 1979). This association may provide the ideal atmosphere for assisting the manager in organizing his program as well as developing training programs for restaurant service personnel.

Summary and Conclusions

The fast-food industry has experienced depressed growth in recent years. Poor economics, mounting inflation and the fuel shortage have contributed to a decrease in customer traffic with a concomitant decrease in sales in the fast-food industry. These factors, in conjunction with increasing competitiveness among chains, have fast-food operators looking "face-to-face" at a saturated industry. Changing life styles, the trend toward older adults in the American population, and the tendency to eat out more often have fast feeders competing to attract an adult market rather than the younger market pursued in the past.

This paper focused on tactical actions and suggested new directions which managers of local fast-food restaurants may employ to attract older-adults and families, to increase traffic and unit growth, and to stimulate sales-growth patterns. Menu diversification, atmospherics, food quality, brand leveraging, and new promotional appeals have been implemented, in one form or another, by many to counterattack the alleged saturation in the industry. Results, in most cases, have been positive. Promotional appeals have been both successful and unsuccessful.

New directions for marketing planning were suggested

for the manager. While this paper does not purport to have extrapolated all possible new directions for action planning, discrete implementation of those suggested should greatly enhance the propensity for success. Further research, in the form of an empirical study, seems appropriate at this juncture to assign importance weightings to the suggested variables and to determine if additional variables could be included in the model. Partitioning one fast-food restaurant for study might suggest effective utilization of the variables. The industry has passed into a phase in which managerial skills at controlling cost and quality and in devising and executing marketing intelligence have become dominant. Saturation in this industry does not need to be an enigma so long as managers employ marketing planning in meeting the needs and desires of its clientele. Those that realize the changes and "swing" with the changes will survive!

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SENSORY PROFILING AND RETAILER SELECTION

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ABSTRACT

After identifying selected characteristics of generic tomato juice, an experiment was conducted to enable a comparison of attribute ratings for generic tomato juice and two types of retail suppliers. Descriptive Analysis (QDA) techniques were used for collecting and analyzing the data. Three types of information were then plotted on appropriate polar axes: (1) ratings for selected product attributes prior to store identification, (2) changes in attribute perceptions after store identification, and (3) attribute ratings of retail suppliers after store identification. After connecting appropriate plotted points, different sensory profiles appeared in association with two different types of stores and their products. These profiles could be helpful to producers in selecting retailers who are likely to be most effective in marketing their products.

INTRODUCTION

With the increasing demand for generic foods, there is a corresponding need to better understand how these items are perceived by consumers in association with different types of stores. It can be especially important to know how consumers' perceptions of these generics might vary in association with different stores. If it is found that generics are viewed more favorably at selected stores, this information could aid suppliers in choosing the best retail outlets for their products. This kind of aid to the retailer selection process could be especially helpful to the food industry, where generics are assuming an ever more prominent place in the total product mix.

Generics now constitute approximately five percent of our country's two billion dollar grocery industry (6). Since Jewel Food Stores introduced generic labelling to the Chicago area several years ago, more than 40 percent of the nation's supermarkets have added generics to their product mix (6). These items are often sold at low prices which reflect economies in distribution, advertising, product development, and other aspects of the total marketing effort (7). As many as 240 generic items may now be found on supermarket shelves.

The real impact of generic sales volume in the overall grocery market is best understood by looking beyond their modest five percent of total grocery sales. In some individual product categories which currently include generic offerings, these items often account for more than 25% of total sales. Examples of product categories in which generics are popular include many types of paper products, plus a variety of canned fruits and vegetables, and pet foods. Some observers predict that this form of food retailing could capture up to 25 percent of the overall grocery market within the next several years (6).

The rising importance of generic foods in the grocers' product mix prompts a corresponding increase in the importance of understanding consumer perceptions of these items and the stores in which they are sold. Therefore, an experiment was conducted to enable comparisons of sensory profiles of a common food item and two different types of retail suppliers. After a preliminary survey to determine several attributes commonly associated with tomato juice and its retail suppliers, the

most popular attributes were selected for use in this QDA experiment.

EXPERIMENTAL DESIGN

The preliminary experiment reported here utilized a before and after study design, and was intended to determine some perceptual profiles of a common generic product and two of its retail suppliers. These profiles could then be compared for purposes of determining some implications for channel management. Taste tests were utilized to gather subjects' perceptions of uniform product samples before and after corresponding retail suppliers were identified. Jewel Supermarket was identified as the juice supplier for some of the respondents, while Aldi Discount Foodstores was identified as product supplier for the others. A modified Quantitative Descriptive Analysis (QDA) procedure was used for collecting data and developing sensory profiles conducive to visual interpretation.

EXPERIMENTAL MATERIALS

Retail suppliers and product samples were selected for convenience in performing these experiments. Jewel and Aldi food stores were selected as retail suppliers because they seemed representative of two popular types of generic food retailers: conventional supermarkets and discount grocers, respectively. Tomato juice was the generic item chosen for use in this study because most respondents were likely to be familiar with it and feel comfortable in communicating about its attributes.

Measuring instruments were based on a modified QDA scaling format. This format was considered appropriate for its intended purpose, and was awaiting an early and timely application to the comparison of generic attributes and store profiles. This layout enabled each attribute to be rated by marking vertically across a horizontal line extending between two bipolar adjectives. In terms of its early development, this was essentially a modified semantic differential and was therefore considered to qualify as an interval or ratio scale for statistical purposes. It could then produce data amenable to parametric analytical procedures. One instrument was devised for determining ratings on eight product attributes: tart, metallic, light, salty, after-taste, flavor strength, freshness, and aroma. Another instrument was devised to determine ratings on eight different store attributes: service, sophistication, affluence, quality, variety, cleanliness, convenience, and progressiveness.

METHODOLOGY

A convenience sample of respondents utilized 50 males and a corresponding number of females from a university student population. This sample was further subdivided into two groups containing equal numbers of male and female subjects. All respondents were assembled in a university classroom for the experiment.

After product attributes were explained to the satisfaction of all respondents, the subjects in each group were asked to taste uniform product samples and rate their attribute levels without knowing the identities of corresponding retail suppliers. Subjects in the first and second groups were then asked to taste juice considered to be from Jewel and Aldi food stores,

respectively. Ratings of product attribute levels were again recorded. Then each respondent was asked to rate attributes of the suppliers identified in association with his sample of juice. Three sets of completed measuring instruments were collected during the experiment, one immediately after each set of ratings was recorded.

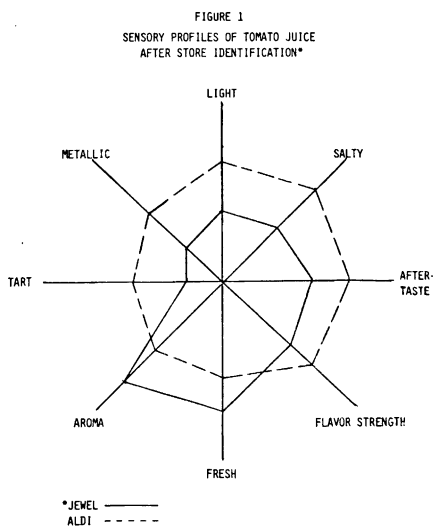
ANALYSIS OF DATA

For each group of respondents, three sets of ratings were produced and analyzed. There were two sets for each of eight product attributes, and one for each of eight supplier attributes. Mean values were first computed for the before and after product ratings. Mean values were similarly computed for each company attribute or characteristic. These ratings were used in all subsequent analyses, however the word "mean" was thereafter implied but not stated in order to simplify discussion.

Before and after ratings from the two groups of respondents were first compared by utilizing appropriate statistical tests. Results were interpreted to reveal no significant differences between product attribute ratings produced by the two groups prior to store identification. However, there were numerous significant differences between the two groups of product and store attribute ratings after supplier identification.

Selected parts of the data are represented graphically here because visual comparisons are the primary focus of this paper. Appropriate sets of polar axes were designed for plotting data in a manner conducive to visual interpretation. To determine the labelling of axes for plotting sensory profiles of product attributes, after-ratings associated with Jewel were arranged in ascending order of magnitude. A corresponding ordinal arrangement of attribute labels was then applied to polar axes in a clockwise direction, beginning with taste and ending with aroma. A similar procedure was used in arranging axes for plotting sensory profiles of supplier characteristics. After arranging Aldi's attribute ratings in ascending order, corresponding labels were applied to polar axes, beginning with service and ending with progressive.

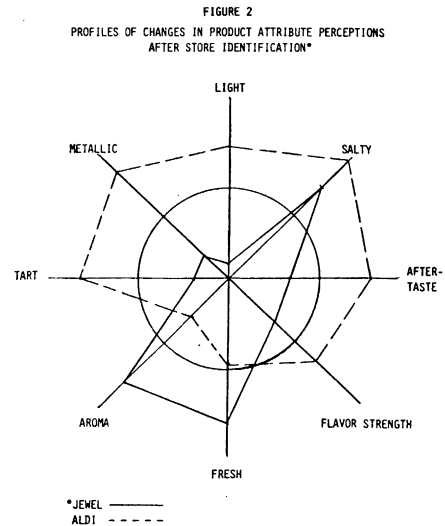
Numerous product attribute profiles were developed for purposes of comparison. An example is shown in **Figure 1**. Product ratings associated with each retail sup-



plier were plotted here after store identification. Plotted points associated with Jewel and Aldi were then connected by solid and dashed lines respectively to form completed profiles. Ratings associated with Jewel

appeared to exceed those associated with Aldi on the attributes of freshness and aroma only. Jewel ratings were significantly lower on all other attributes. As the ratings are viewed in a clockwise direction, those associated with Aldi appear to increase at a slower rate than do those associated with Jewel.

Other types of attribute profiles are exemplified in **Figure 2**. These profiles of changes in product attri-

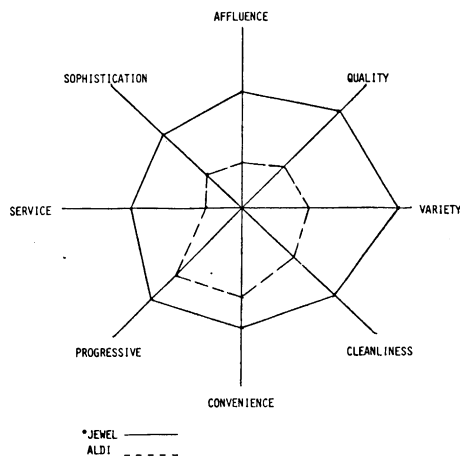


bute perceptions were developed by plotting differences between "before" and "after" ratings. Original ratings, regardless of magnitude, were first plotted at the mid-points of all axes. They were connected by a continuous circle. Then positive and negative differences between before and after ratings were plotted at appropriate distances outside and inside the circle respectively. Perceptual changes associated with each store then appeared as distances between each profile and the solid circle.

These "after" profiles were systematically compared with original values indicated by the circle, with each other, and with the ascending order of values reflected in the arrangement of axes. For example, after Jewel was identified as the supplier of the tomato juice being sampled, ratings increased regarding the attributes of salty, fresh, and aroma. Jewel ratings were significantly lower on all other attributes. When Aldi was identified as the juice supplier, ratings increased significantly regarding six of the eight attributes. Aldi ratings were essentially unchanged regarding freshness, but lower on aroma. Jewel and Aldi ratings changed in opposite directions on all attributes except salty and freshness. Salty was the only attribute for which both ratings changed in the same direction. As Jewel's after ratings increased with the clockwise arrangement of axes, the rating changes after store identification remained in opposite directions except for those associated with the attribute of salty and freshness. However, the comparative directions of perceptual changes appeared to reverse at the upper end of this progression. Aldi and Jewel were primarily associated with positive and negative changes respectively until aroma was reached at the end of this sequence. Then the direction of change appeared to reverse, with Aldi and Jewel changing in negative and positive directions, respectively.

Sensory profiles were similarly developed for ratings of store attributes as shown in **Figure 3**. These profiles were also systematically compared with each other. For example, after identification, ratings associated with Jewel exceeded those associated with Aldi

FIGURE 3
SENSORY PROFILES OF STORES
AFTER SUPPLIER IDENTIFICATION*



regarding all supplier attributes. Both Jewel and Aldi ratings were lowest on service and sophistication. Jewel ratings were highest on variety, while those of Aldi were highest on the progressive attribute. Aldi ratings increased significantly from service to progressive. Jewel ratings appeared to increase gradually from service to variety, but tended to decrease thereafter.

The after profiles in Figure 1 and the perceptual change profiles in Figure 2 were then compared with store profiles shown in Figure 3. Jewel's comparatively low product ratings and predominantly negative perceptual changes in Figure 1 and 2 appeared to be associated with comparatively high ratings on store attributes as indicated in Figure 3. Aldi's comparatively high product ratings and predominantly positive perceptual changes in Figures 1 and 2 were associated with relatively low ratings on store attributes as shown in Figure 3. Perhaps this is because retailers like Jewel with a more robust store profile are viewed as selling products with attributes present in modest or carefully measured amounts. In contrast, retailers like Aldi with a relatively slight profile may tend to be associated with the presence of product attributes in greater or less tasteful amounts.

Perhaps these comparisons indicate that conventional retailers and discount food stores are respectively associated with various characteristics of higher and lower socioeconomic groups. Similarly, supermarkets and discount stores, like higher and lower income consumers, may be generally associated with carefully measured and excessive amounts of each product attribute. For example, higher and lower income people have been respectively associated with foods having moderate and excessive amounts of starch, calories, and seasoning. Therefore, products from conventional supermarkets may be viewed as having more regulated and tasteful amounts of most characteristics. In contrast, merchandise from discount food stores may be viewed as having excessive, less tasteful, or more cumbersome degrees of most product attributes.

CONCLUSIONS

The use of sensory profiling for comparing product and store attributes could lead marketers to a better selection of products and channel members at the retail level. To the extent that different shapes of store profiles can be reliably associated with different shapes of product profiles, this information might enable a closer match between consumer needs and the

characteristics of products and stores. Retailers may be able to predict the profiles of generic products sold and stock these items which best fit their customer's needs. Producers of generic items might also be able to select retailers best able to hit desired target markets.

More research is needed in order to adequately evaluate profile comparisons arising from this preliminary experiment. For example, it would be helpful to know which product and store attributes are most important to the consumer purchase process. It would also be useful to know the ideal levels of these attributes as perceived by consumers in a particular target market. This information would enable a better assessment regarding the managerial implications of sensory profiles generated by this experiment.

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IS MULTIDIMENSIONAL SCALING (AND OTHER ESOTERICA)
FOR THE SMALL RETAILER?

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Abstract

The paper is concerned with the degree of use of non-metric multidimensional scaling (and, by implication, other marketing research esoterica) by small retailers. The issues explored are the value of multidimensional scaling (MDS) to small retailers, factors limiting the use of MDS by small retailers, current mechanisms available to small retailers for conducting research using MDS, and changes affecting the future use of MDS by small retailers. Several recommendations for research are included.

Introduction

During the past decade, numerous different marketing research methodologies have been applied to problems faced by small retailers and other small businesses. Many of these techniques are often perceived as highly sophisticated or esoteric by managers of small businesses. This paper is concerned primarily with one such technique, i.e., multidimensional scaling.

Two studies conducted by the authors (McWilliams, 1971, and Scott, 1981) indicate there may have been a change in the willingness of small retailers to use information provided by multidimensional scaling in their marketing decision-making, although it appears that small retailers still take advantage of the technique less than their larger competitors. In this paper, small retailers are considered to be non-chain, local, independent retailers.

Of course, all small retailers should utilize the best information gathering techniques that are economically feasible in order to improve their decisions. A seat-of-the-pants management style is often inefficient, particularly if additional information is available at a reasonable cost that will allow significantly better decisions. As indicated above, this paper is concerned with the technique of multidimensional scaling and why small retailers still do not take the advantage of the technique as extensively as larger retailers even though acceptance of the technique appears to be changing. The issues relevant to multidimensional scaling may also apply to other esoteric (perceived) marketing research techniques, e.g., multivariate analysis, conjoint analysis, etc..

The objective of this paper is to explore issues concerning use of multidimensional scaling by small retailers for proprietary marketing research, i.e., research where the results are for the private use of the firm(s) originating and/or paying for the research. The issues explored are: (1) the potential value of multidimensional scaling to the small retailer; (2) the factors currently limiting use of multidimensional scaling by small retailers; (3) the current mechanisms available to small retailers for conducting marketing research using multidimensional scaling; and (4) the changes in the future allowing a more extensive use of multidimensional scaling by the small retailer.

The Potential Value of Multidimensional Scaling

If multidimensional scaling is to be used by the small retailer to enhance marketing decision making, it must provide valuable information about the retailer's market. The potential market information value of multidimensional scaling will be communicated by the following: (1) explaining multidimensional scaling in a non-technical manner, including types of data required for input and analysis of data output; (2) identifying major marketing decision areas which might utilize the information provided by multidimensional scaling; and (3) providing examples of decision situations in which multidimensional scaling has helped small retailers to determine more viable marketing strategies.

Explanation of Multidimensional Scaling

The metric form of multidimensional scaling, i.e., scaling of measurements based on interval or ratio data, originated in the biology discipline (as described in Kruskal and Wish 1978:22) for studying proximities between species. Nonmetric adaptations of multidimensional scaling, i.e., scaling of measurements based on ordinal data, were made by a number of researchers, Coombs (1964:444), Torgerson (1952), Shepard (1962), in order to apply the technique to psychological behavior. Marketing applications of multidimensional scaling were developed by researchers such as Green and Carmone (1970) and Green and Rao (1972) for the study of market perceptions (usually researched as similarities judgements) and market preferences (usually researched as preference ranks).

As stated above, multidimensional scaling can be applied by the researcher to analyze either metric data (interval or ratio) or nonmetric data (ordinal). This paper is concerned only with the application of multidimensional scaling for the analysis of non-metric data because most behavioral marketing research data is ordinal. We will use the acronym "MDS" to refer to multidimensional scaling of nonmetric data in the remainder of this paper.

MDS is a computer based technique designed to transform ordinal (rank order) data, such as perceptions in the form of stimuli similarity judgments, preference ranks, etc., into output revealing the respondents overall perception or preference functions. In the case of stimuli e.g., retail stores, similarities measurements, MDS requires input data in the form of a ranking of pairs of stores from the most similar pair to the least similar pair. In the case of customer preferences, MDS requires only store preference ranks. Typically, a specialized questionnaire is used to elicit the necessary MDS data from respondents. For store similarities measurements, the questionnaire usually asks for respondents' unstructured judgements concerning the degree of similarity between stores included in the study. Other questions are often also used to determine criteria used by respondents when making their similarities judgements. For customer

preference measurements, the questionnaire simply asks the respondent to rank the stores.

The output of MDS similarities judgments is a set of coordinates identifying points representing the stores. The points may be placed on a "map" to better communicate the respondents' perception of relative similarity between the stores. If two points are physically located close together within the map, they are perceived as relatively similar by the respondents. The map will present the points in n-dimensional "space," with each dimension representing a criterion applied by respondents when making their similarities judgments. For example, distances between the points will represent the respondents' judgments of similarity between each pair of stores, with each dimension representing a criterion, e.g., quality. MDS does not provide identification of the dimensions (criteria) directly, although Jain and Etgar (1977) have completed an interesting study using MDS in a retailer situation which combines information on similarities judgments with information about the criteria used in making the judgments.

MDS is an improvement over other market behavior measurement techniques because, as explained above, it takes data which is only ordinally scaled and transforms it into output which is on a metric scale (Shepard 1962); and (2) provides a visual "map" of perception and preference relationships between the stimuli (Kruskal & Wish 1978). Other attitude measurement scales, e.g., semantic differential scales, Likert scales, Thurstone scales (Churchill 1979), do not provide these advantages.

The above explanation of MDS has been nontechnical in nature. For those who are interested, considerably more complex descriptions of the technique and its applications and programs can be found in Green and Carmone (1970), Green and Rao (1972), Kruskal and Wish (1978), or in the Bell Laboratories MDS package manual (1973).

Major Decision Areas for MDS USE

MDS can provide information relevant to a wide range of major retail marketing decisions, such as strategy selection, image, development, market position determination, positioning strategy, and selection of market segments. These decisions certainly should be based, in part, on how customers perceive the retail competitors. It is clear that if the decision maker's estimate of differences between competitors varies from customer perceptions, then ill-advised marketing decisions may well result.

Examples of Retailer Benefits From Two MDS Studies

As indicated previously, McWilliams (1971) and Scott (1981) have applied MDS to study small retailer marketing situations. In each of these studies, the authors found that using MDS to compare perception and preference differences between managers and customers could lead to beneficial changes in retailing strategy. McWilliams (1971) found that one store included in the study was perceived by the manager as having a "fashion" image. However, customers perceived the store as being very similar to another store which was definitely in the "discount house" category. Further investigation revealed that the discount image was the result of substantial in-store and price promotional tactics used by the manager of the "fashion" store. As a result of the MDS study, the manager realized that action must be taken in order to capture the desired share of the fashion market.

Scott (1981) found that the criteria used to make the store similarities judgments differed between store managers and customers. While both managers and customers agreed that quality of the product line offered was a major criterion in determining similarity between stores, managers indicated they believed that their stores' interior layout, i.e., decorations, room groupings, etc., was the second most important criterion in identifying similarities between stores. However, the second most important similarities criterion identified by customers was style of furniture. As a result of this finding, two of the store managers changed their promotional strategies from price and store interior to quality and style of furniture. Therefore, each store now has a more definitive positioning strategy as well as a clearer idea of the store's image in the market.

Another finding of the McWilliams and Scott studies was that several of the stores were operating in a manner quite consistent with their customer image. These retail stores received positive reinforcement for their marketing strategies, allowing them to concentrate on subtle strategy refinements as opposed to major strategy corrections.

In summary, MDS can offer significant value to the small retailer when it is used as a tool to plan, modify, or refine marketing strategy. However, as indicated earlier, larger firms (which may either have marketing research departments of their own or regularly retain outside firms to conduct marketing research) are more able to use advanced techniques, such as MDS, more frequently than small firms. This is due, in part, to the existence of several factors limiting the use of MDS by small retailers.

Factors Limiting Use of MDS

Strong resistance to the use of MDS by retailers was encountered by the authors when conducting the studies mentioned above. Considering this resistance, it is the author's judgment that the major factors which limit the use of MDS by small retailers are: (1) non-marketing orientation which may preclude seeking additional information about markets; (2) nonresearch orientation which often precludes seeking additional quantitative decision information; (3) managerial resistance due to perceived complexity of MDS; (4) lack of understanding of the applicability of MDS; (5) lack of consultants who apply MDS; (6) lack of access to the computer hardware necessary to use MDS; and (7) lack of availability of computer software designed for small retailer use of MDS.

McWilliams (1971) encountered significant resistance from each of these limiting factors. In 1971, MDS was a relatively new marketing research technique and information about the technique was not widely distributed, particularly among retailing practitioners. The computer hardware and software for MDS were still very much in the developmental stage. In addition, the small retailers in the McWilliams study had difficulty recognizing the technique's value. However, they did recognize the value when the MDS results were presented and explained fully to them.

The resistance encountered by Scott (1981) was based on a general attitude represented by factors 1 & 2 above, i.e., a nonmarketing orientation and a nonresearch orientation which inhibited seeking additional decision information. However, since the need for assistance in determining store image originated with two of the store managers who later participated in the study, it appears that these orientations may be changing significantly, at least for some small retailers.

One purpose of the Scott (1981) study was to test whether small retail store managers would accept, i.e., understand and be able to apply, MDS in a study of their image. The fact that some of the managers changed their marketing strategy based on the results of the study indicates that use of the technique, when explained carefully, will be accepted.

In summary, several factors which limit the use of MDS by small retailers exist. However, the changes in resistance observed between the McWilliams (1971) study and the Scott (1981) study appear to indicate the limiting factors are somewhat reducing in importance.

Current Mechanisms for Using MDS

Currently, there are very few internal or external mechanisms available which allow small retailers to take advantage of MDS. The external mechanisms which are available include marketing research consulting firms and some universities which have the necessary computer capability to work with MDS. However, small retailers generally do not employ to the same degree services of marketing research consulting firms, compared to larger firms, probably due to cost and the relatively smaller size of the market.

Some universities offer courses requiring the students to produce marketing results for a "real" organization. The research may use sophisticated techniques, such as MDS. These projects are usually part of a course in marketing management, marketing research, or are generated through the Small Business Institute program. The Small Business Institute program is a cooperative program between select universities and the Small Business Administration. The S.B.I. program is designed to provide small businesses with research and/or consulting assistance in the form of student analysis teams under the direction of a university faculty member.

Some small retailers have sufficient knowledge (or employ people who have sufficient knowledge) to apply MDS without outside assistance. However, even these firms must currently have access to a mainframe computer, as well as MDS programs, before they can embark on a research project using the technique. Personal conversations with a number of computer software preparation houses indicates "canned" MDS programs are not now available for either the micro or mini computers, the type of computer typically available to small retailers. Even if MDS programs were available now for smaller computers, processing speed is a major limitation.

Some small firms do have access to a computer network system which uses a remote mainframe computer and also has MDS programs available. For example, a real estate firm in Seattle, Washington uses such a system, including a remote access time-sharing terminal, to apply MDS and other advanced techniques to help analyze real estate markets.

In summary, mechanisms for small retailer use of MDS are currently limited to employing marketing research or consulting firms, working through the Small Business Institute, cooperating with some university classes, or having substantial knowledge of MDS plus access to a mainframe computer with MDS capability. However, this situation appears to be changing and new advances in computer technology which may make MDS more available to the small retailer appear to be just on the horizon.

Expectation for Future Use of MDS

In the authors' judgment, there are a number of trends which indicate small retailers may soon have the capability to apply MDS, and other advanced techniques, without outside assistance.

These trends include: (1) an increased need for the type of information provided by MDS; (2) an increased acceptance of MDS as well as an ability to use MDS; (3) an increased use of MDS by marketing consulting and research firms; (4) advances in computer hardware technology; and (5) refinements in MDS software.

Concerning the first trend, it is apparent that small retailers are facing increased levels of competition. Increased competition is responsible, in part, for the greater than eighty percent failure rate of new businesses in their first five years. Consumer perception and preference information, such as that provided by MDS, can be an important tool to all retailers, particularly as competition becomes more intense.

Concerning the second trend, the authors have observed an increasing willingness on the part of small retailers to accept MDS as a useful technique. The McWilliams (1971) and Scott (1981) studies have been used in this paper to indicate changes in retailer attitudes toward MDS over the past few years. Unfortunately, it was not possible to include the same set of retailers in both studies. However, general changes in attitude toward MDS and the change in ability of small retailers to utilize findings of an MDS study are discernible when comparing the two studies. The change in acceptance attitude is probably a result of a generally increasing level of knowledge evident in small retailer organizations; more of a research oriented management philosophy based on widespread acceptance of the marketing concept; and better marketing of sophisticated marketing research technology by major marketing research and consulting firms.

Concerning the third trend, marketing research or consulting firms are probably using MDS more due to an increased demand for the type of information MDS can provide. The authors contacted three national marketing research firms and each indicated they do apply MDS. However, the authors also contacted three local (Anchorage, Alaska) marketing research firms and none indicated they apply MDS. With the improvements evident in computer hardware and software technology, this gap probably will close in the future.

Concerning trend number four, computer hardware technology is changing so rapidly it is difficult to envision the computer system small retailers will be using in the future (Dolotta, et al 1976). The authors believe most small retailers will soon have sufficient computing power to apply MDS due, in part, to decreasing prices of micro and mini computers (Sippl & Sippl 1979). Orme (1979) states that all managers should become informed now on the scope and costs of microprocessors, and of microprocessing trends, even if it means hiring a computing consultant.

Concerning trend number five, the authors expect MDS for micros to be available within the next year. Our conversations with software distribution houses revealed that the firm which developed STATPAK, a micro-computer statistical package, is now working on a program package to include a number of multivariate techniques, including probably MDS. The microprocessing software industry includes software brokers, distributors, and specialized software manufacturers that are working to improve mini and micro computer power.

Currently available microprocessor software includes an SPSS program for micros, a similar survey research standardized program - ACCESS 80, and a statistical program package (STATPAK) which includes nonparametric statistical analysis. These programs are but of a few of those but they indicate what may be expected in the future.

Recommendations

Our recommendations will address two areas; general recommendations concerning the future availability and use of MDS and recommendations for further research. General recommendations concerning the future availability and use of MDS are:

- . Marketing research or consulting firms serving small retailers need to expand their knowledge of the more sophisticated marketing research techniques in order to better serve the demands of clients who are becoming increasingly sophisticated.
- . The Small Business Administration needs to improve its distribution of marketing research information; particularly information concerning advanced techniques such as MDS.
- . University schools of business should make their students more aware of the applicability of sophisticated marketing research techniques such as MDS to problems concerning small retailers.

Our recommendations for further research are:

- . Determination of the actual degree of use of sophisticated marketing research techniques by small retailers.
- . Development of models designed to represent small retailer decision processes concerning adoption of marketing research techniques.
- . Programs for sophisticated marketing research techniques need to be developed which are compatible with mini and/or micro computers.
- . The potential marketing research value of small computers for small retailers needs to be clarified.
- . Standardized and "user friendly" programs need to be developed to allow small retailers to more easily take advantage of the more sophisticated marketing research techniques, such as MDS, without outside assistance.

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OPTIMAL SITE SELECTION WITHIN COMPLEX MARKETS:
A PRELIMINARY SOLUTION

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Abstract

Although site selection has always been an important retailing decision, the selection of new sites in recent times has become more complex. The complexity of new site selection emanates from the reduction in the number of major regional malls being constructed, by the desire of many retail chains to enter smaller population communities, and the desire to maximize market share in existing markets by either opening new units or by improving assortments, employee productivity, or atmospheric elements to increase sales from existing units.

The purpose of this paper is to focus on the methodology of assessing improved shopping frequency through either the expansion of additional stores in existing markets through adding multiple facilities which decrease customer driving time or by improving existing store attributes such as quality and variety of merchandise, speed of service, and courtesy of employees which increase shopping satisfaction.

Introduction

Past research into site selection methodologies are limited in scope to include either a descriptive analysis of market potential within a given market area, shopping center, or the potential for an individual store (Huff, 1966; Huff and Blue, 1966; Nelson, 1958; Nakanishi and Cooper, 1974) or ascertaining what psychological dimensions are salient to store patronage decisions and how competitors are viewed along these dimensions (Stanley and Sewall, 1976).

Typically, many grocery chains, womens specialty stores, chain discount stores, as well as gasoline retailers and others are constantly looking to expand store location within their existing markets. Growth is an important strategy of many retailers. For example, the Southland Corporation opened 666 new stores in 1979. Many of these stores were in market areas already served by 7-11 outlets. Given the desire in a market already served by 7-11 and competitors, what factors contribute to the decision to add one or more stores? This question provides the purpose and direction of this paper.

Travel time or distance to a retail outlet is known to have a strong influence on the probability of purchasing at that given location. The greater the distance from a store the lower the probability of purchasing. Other attributes can influence the willingness to purchase at a given outlet. The variety of merchandise at one location may cause consumers to by pass one or more stores in favor of the store with the greater variety. The atmosphere and decor of a store may also influence purchasing behavior. The question posed, then, is one of speculation over the importance of both distance and attributes of a given retail outlet in predicting purchasing frequency.

Methodology

The focus of this study is a major metropolitan area within the western United States. Six branches of a regional thrift store are located in close proximity to each other within this market. The maximum distance between any of the six stores is 15 miles, with each of the six stores strategically located along a major thoroughfare for easy customer access.

Approximately one hundred fifty patrons were surveyed in each of the six stores, resulting in a total of 880 completed interviews. Patrons reported a variety of information, including distance measures to the store from their place of residence (the reported measures were transferred into city-block and euclidean distance measures), overall qualitative evaluations of the store such as liked most and liked least, evaluations of a quantitative nature such as the rating of quality and variety of merchandise available, courtesy and helpfulness of employees, price, speed of service, cleanliness, atmosphere and decor. One additional question asked for the customers' perceptions of their shopping frequency at the given store. Customers who visited the store once or more weekly were considered weekly shoppers. Those shopping once a month but less than 4 times were categorized as monthly shoppers and those shopping more than once a year but less than 12 times were categorized as yearly shoppers. A final category for shopping frequency was the first time shopper at each store.

Store location and customer residence information was recorded by cartesian coordinates on a gridded 40 mile by 45 mile map of the metropolitan area. These grid coordinates were used to determine travel distances to each store.

Distance and store attribute variables were separately entered into the discriminant analysis which, when tested across the six stores, indicated how consistently the discriminant model predicted purchase frequency. Next, the combination of distance and store attribute variables were entered into a discriminant model which in similar fashion examined their joint strength in predicting purchase frequency. Each of these predictive functions were next transformed and used to test the classification ability of the function by classifying weekly and less frequent purchasers.

Stage two of the analysis extends the analysis of distance and store attribute information to include the identification of additional locations within existing markets. In this analysis, the previously derived discriminant weights are applied to the discriminating variables and then entered into a cluster analysis. The clustering of shoppers into more than six groups results in the identification of additional clusters, each of which centers on a new site location.

The prediction of purchase frequency using both distance and attributes of a given retail outlet was conducted using two purchase frequency groups: those shopping once or more weekly, and those shopping less than four times per month. First time shoppers were included in the latter group.

Initially, the weekly and less frequent shopper groups were differentiated for each of the six stores using a two way multiple discriminant analysis of the form:

$$D_k = d_{k1}z_1 + d_{k2}z_2 + \dots + d_{kp}z_p \quad (1)$$

where D_k is the score derived from the kth discriminant function, where

$1 \leq k \leq p-1$, and p is the number of independent variables.

d_{kp} is the pth coefficient or discriminant weight obtained for the kth discriminant function.

z_p is the standardized value of the pth independent (Distance of store attribute) variable used in the analysis.

For the two group case, the discriminant weights d_{kp} are a linear transformation of the unstandardized weights of a multiple regression analysis. For the standardized case, the discriminant weights are identical in both discriminant and multiple regression analyses.

The linear discriminant functions that produce the additive linear profile from distance and store attribute variables are first used to predict purchase frequency.

Findings

Distance Analysis

The prediction of purchase frequency was based on city block metric and euclidean distance measures. The city block metric measure is the most accurate measure of actual driving distance from home to store. It is computed as the sum of vertical and horizontal distances within a cartesian plane. The uniformly rectangular city blocks that were characteristic of the community of study make the city block metric measure ideal for the problem at hand.

In contrast to the city block metric, the euclidean distance measure is in the form of straight line/shortest path distances from the store location to the residence. The euclidean distance measure is, in the literature, assumed analogous to perceptual distances.

The prediction of purchase frequency using the distance measures shows that shoppers who purchase weekly or more frequently, were correctly classified 70 - 80% of the time (see Table 1). It was further observed that the euclidean distances out performed the city block distances even though the city block distance is much more representative of actual driving patterns.

The standardized discriminant coefficients computed for the distance variables were observed to form a consistent pattern across both the aggregate analysis for the six stores, and the analysis of the individual stores. The standardized discriminant coefficients for the euclidean distances were observed to be near 1.00 for all stores and the aggregate analysis. Although the euclidean measure was most important in predicting purchase frequency, the city block measure showed little pattern across stores, and was of little consequence. It was entered in only three of the six discriminant functions.

Store Attributes

In addition to the distance measures that served as predictor, shopper's overall qualitative evaluations of the store were found to be related to purchase frequency (see Table 2). Evaluation included merchandise quality, variety and price, courtesy and speed of service, and the cleanliness and atmosphere and decor of the store.

TABLE 1
DISCRIMINANT AND CLASSIFICATION ANALYSIS RESULTS
PURCHASE FREQUENCY BY DISTANCES

Importance of: Distances	X^2 F Ratio	Prob <	Mean Euclidean Distances	
			Weekly Shopper	Less Frequent Shopper
1. Multivariate				
All Stores	22.43	.001	8.20	13.18
Store 1	1.44	.230	13.55	17.28
Store 2	10.72	.001	5.77	17.13
Store 3	8.68	.013	5.68	12.11
Store 4	2.86	.091	9.54	13.39
Store 5	8.58	.014	5.80	10.00
Store 6	3.34	.068	6.36	9.57

Importance of: Distances	X^2 F Ratio	Prob <	Standardized Discriminant Coefficients	
			Weekly Shopper	Less Frequent Shopper
2. Univariate				
All Stores				
Euclidean	21.24	.001	1.35	
City Block	11.36	.001	.46	
Store 1				
Euclidean	1.45	.720	1.00	
City Block	.23	N.S.	.23	
Store 2				
Euclidean	11.16	.001	1.00	
City Block	.003	N.S.	.003	
Store 3				
Euclidean	4.48	.013	1.24	
City Block	7.79	.006	7.79	
Store 4				
Euclidean	2.89	.091	1.00	
City Block	.16	N.S.	.16	
Store 5				
Euclidean	5.86	.017	1.09	
City Block	4.41	.014	4.41	
Store 6				
Euclidean	3.39	.068	1.00	
City Block	.14	N.S.	.14	

TABLE 2
DISCRIMINANT AND CLASSIFICATION ANALYSIS RESULTS
PURCHASE FREQUENCY BY STORE ATTRIBUTES

Importance of: Attributes:	X^2 F Ratio	Prob <	Standardized Discriminant Coefficient	
			Weekly Shopper	Less Frequent Shopper
I. All Stores				
1. Multivariate				
	25.85	.001		
2. Univariate				
Merchandise Quality	18.06	.001	.83	
Store Cleanliness	10.17	.001	-.79	
Employee Courtesy	8.11	.001	.82	
Store Atmosphere and Decor	6.55	.01	.43	
II. Individual Stores				
Store 1				
1. Multivariate				
	7.61	.011		
2. Univariate				
Speed of Service	5.94	.016	.67	
Price	3.91	.022	.53	
Store 2				
1. Multivariate				
	3.94	.047		
2. Univariate				
Prices	4.01	.047	1.00	

Importance of Attributes:	X ² F Ratio	Prob <	Standardized Discriminant Coefficient
Store 3			
1. Multivariate	9.51	.050	
2. Univariate			
Merchandise			
Quality	4.61	.033	.63
Employee			
Courtesy	3.53	.032	.42
Store			
Cleanliness	2.87	.038	-.56
Store Atmosphere & Decor	2.44	.050	.51
Store 4			
1. Multivariate	9.38	.052	
2. Univariate			
Merchandise			
Quality	2.18	.142	.71
Employee			
Courtesy	2.25	.109	-.73
Store Atmosphere & Decor	2.28	.082	-.66
Store			
Cleanliness	2.41	.052	.82
Store 5			
1. Multivariate	No Variables Entered		
2. Univariate	No Variables Entered		
Store 6			
1. Multivariate	10.54	.005	
2. Univariate			
Merchandise			
Quality	8.87	.003	1.24
Price	5.47	.005	-.56

The multivariate analysis conducted for the group of six stores showed that the quality of merchandise was the most important variable in predicting purchase frequency. Employee courtesy and store cleanliness were the next most important predictors, with store atmosphere and decor being the least important predictor.

The univariate analysis of the store attributes showed that merchandise quality, employee courtesy, and price were in general, the most important predictors of purchase frequency. These variables entered several of the six individual store models. The true disposition of this importance may however be questioned in that the standardized discriminant coefficients appear to be unstable in both magnitude and direction. This instability is evidenced in Table 4, where the percentage of shoppers correctly classified as weekly shoppers and less frequent shoppers is presented. In almost all cases, the store attribute measures did not predict weekly purchase frequency as well as did the distance measures alone. This finding is of managerial importance in that here, as in all patronage analyses, the most frequent shopper is also the shopper of most importance in planning market strategies.

Combined Distance and Attitude Measures

The multivariate and univariate discriminant models which predict purchase frequency using the combination of attitude and distance measures, are found in Table 3. The multivariate analysis conducted for the group of six stores shows that distance is more important in predicting purchase frequency than are any of the store evaluation attributes. Additional support for this finding is gained from the fact that this importance of distance measures is consistently observed across the

univariate analyses, just as it was previously observed for the distance models.

TABLE 3
DISCRIMINANT AND CLASSIFICATION ANALYSIS RESULTS
PURCHASE FREQUENCY BY STORE ATTRIBUTE AND DISTANCES

Importance of Attributes and Distances	X ² F-Ratio	Prob <	Standardized Discriminant Coefficients
I. All Stores			
1. Multivariate	48.28	.001	
2. Univariate			
Euclidean	21.24	.001	.94
Merchandise			
Quality	19.76	.001	-.59
Store			
Cleanliness	13.98	.001	.61
Employee			
Courtesy	11.43	.001	-.30
Store Atmosphere & Decor	9.57	.001	-.36
City Block			
Distance	8.25	.001	.34
II. Individual Stores			
Store 1			
1. Multivariate	10.721	.030	
2. Univariate			
Speed of Service	5.94	.016	-.62
Euclidean			
Distance	3.93	.022	1.07
Price	3.29	.023	-.47
City Block			
Distance	2.76	.030	.71
Store 2			
1. Multivariate	14.68	.001	
2. Univariate			
Euclidean	11.16	.001	.86
Price	7.73	.001	-.53
Store 3			
1. Multivariate	17.33	.008	
2. Univariate			
City Block			
Distance	7.79	.006	1.63
Merchandise			
Quality	6.34	.002	.61
Employee			
Courtesy	4.87	.003	.47
Euclidean			
Distance	4.01	.004	1.05
Store			
Cleanliness	3.42	.006	-.27
Speed of Service	3.03	.008	-.30
Store 4			
1. Multivariate	12.49	.029	
2. Univariate			
Euclidean			
Distance	2.89	.091	.51
Merchandise			
Quality	2.77	.066	-.65
Employee			
Courtesy	2.71	.047	.67
Store Atmosphere & Decor	2.66	.035	-.71
Store			
Cleanliness	2.58	.029	.52

Importance of Attributes and Distances	χ^2 F-Ratio	Prob <	Standardized Discriminant Coefficients
Store 5			
1. Multivariate	10.52	.015	
2. Univariate			
Euclidean Distance	5.89	.017	1.05
City Block Distance	4.42	.014	.64
Store Cleanliness	3.62	.015	-.45
Store 6			
1. Multivariate	11.84	.008	
2. Univariate			
Merchandise Quality	8.87	.003	1.08
Price	5.47	.005	-.47
Euclidean Distance	4.10	.008	.35

It is apparent from Table 4 that the combination of distance and attitude measures leads to an interesting pattern of results. The combination distance and attitude measures increase the total percentage of correct classification over that observed for distance or store attribute models alone. This increase in percentage of correct classification is, however, due to an increase in the correct classification of the less frequent purchaser. That is, the distance model alone best predicts the patronage of the high frequency shopper who shop the store on a weekly or more often basis. However, the combined distance and store attribute model is superior for predicting patronage of the shoppers who visits the store less than once per week.

TABLE 4
PERCENT CORRECT CLASSIFICATION
COMPARISON OF DISCRIMINANT MODELS

Stores:	Distance Measures	Attitude Measures	Distance And Attitude Measures
All Stores			
Weekly	75.3%	71.1%	65.8%
Less Frequent	41.0%	43.9%	53.9%
Store 1			
Weekly	70.5%	75.0%	65.9%
Less Frequent	39.2%	47.1%	52.9%
Store 2			
Weekly	89.3%	82.1%	82.1%
Less Frequent	47.5%	35.8%	57.5%
Store 3			
Weekly	60.0%	73.3%	73.3%
Less Frequent	50.0%	46.6%	65.5%
Store 4			
Weekly	89.3%	82.1%	74.1%
Less Frequent	37.8%	53.8%	63.9%
Store 5			
Weekly	72.7%	All Attributes were N.S. None entered the Discriminant Model	69.7%
Less Frequent	51.8%		59.6%
Store 6			
Weekly	77.8%	66.7%	74.1%
Less Frequent	40.3%	47.9%	52.1%

Implications and Summary

The decision of whether distance models or qualitative models of store evaluation are most relevant to site selection decisions is not new to the marketing

literature. However, whereas traditional models (gravity type) have established the probability of a consumer shopping at one of the several existing sites, this research extends the consideration of the patronage problem into the realm of identifying additional potential sites. Associated with this problem is the question of whether to employ euclidean distance models or psychological patronage models to define new site locations. This question has not been thoroughly addressed in the literature (Stanley and Sewall, 1976). Indeed, the prospect of applying psychological patronage variables to the euclidean distances employed to define a new site is most intriguing. The research presented in this study is a first step in this research process of integrating psychological and distance measures.

The focal point is to assess the relative value of distance measures as compared to psychological measures in predicting purchase frequency. The findings of the study indicate that the distance model predicts weekly or more frequent patronage better than does the store attribute model, or a combined distance and store attribute model. This finding is of considerable importance in that it suggests that distance between the store and place of residence is the most critical factor explaining high frequency shopping behavior. Expressed in terms of the basic classification of shopping behavior, minimal shopping distance is responsible for patronage of the convenience and emergency good shopping within a given store. This finding is both intuitive, appealing, and important in that the superiority of distance measures to image measures derived from attitudes about store attributes has also been demonstrated. The second major finding of importance was that less frequent shopping behavior was best predicted using a combination distance and store attribute model. This combination model decreased the correct classification of the high purchase frequency shopper.

The consideration of the relationship between store image, as evidenced in the qualitative evaluation of store attributes and site location is lacking in the literature. The growth in sophistication in understanding store image and shopper life styles, has expanded the potential for site location and trade analysis. Future models of the site problem will include as independent variables: store image, consumer differences, and dynamic changes in market areas occurring as populations mature or shift. With the retail markets near saturation in many trade areas, the need for more accurate site prediction within the multiple site location problem will increase.

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ENHANCING THE POWER OF CHANNEL LEADERS

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Abstract

Effective leadership is necessary to maintain efficiency and cooperation within a marketing channel. Power is the major variable in determination of the channel leader. Institutional economics provides concepts which enhance the traditional marketing concepts of power. Using a case study, the concepts of social traps, boundaries, ordering the agenda, and transaction costs are used to elaborate upon the application of the traditional power sources.

Introduction

Economic specialization contributes to increased productivity. It also, however, creates interdependence. Within a marketing channel, each member firm performs specialized functions which create a significant level of interdependence.

As a result of this interdependence, the coordinated effort of all channel members is mandatory to achieve the macrogoals of the marketing channel. However, microgoals of the individual channel members may impede the coordinating efforts directed towards achieving the macrogoals. Therefore, a leader usually emerges to direct the channel. The leader coordinates the pertinent activities of other channel members, controls channel issues, and leads the channel system (Michman and Sibley, 1980). The effectiveness of the channel leader and the authority that channel members relinquish to it is a function of many factors, including power (Bowersox, etc., 1980). Power refers to the capability of one firm to influence, dominate or control the behavior of another channel member (Rosenbloom, 1978). Generally, the prevailing behavior among channel members is cooperation (Bowersox, etc., 1980). By effectively using power a channel leader can improve cooperative efforts. But on occasion a conflict may arise in the marketing channel, often regarding the transactional process (Michman and Sibley, 1980). The resolution of a conflict is likely to be a function of the relative power possessed by the channel leader and the other channel members.

In this paper, the role of power in maintaining channel cooperation and reducing channel conflict will be explored. The traditional power sources provide the theoretical framework which is expanded by a new contribution. Several institutional economic concepts are adapted to channel design. These concepts augment the understanding of marketing channels design and provide strategies for maintaining cooperation within a channel. This is achieved by examining a specific marketing channel conflict between the leader and a major group of suppliers. In the first section of the paper, the elements of channel power are discussed. In the second section, background information about the specific example is provided. The third section contains a detailed description of the interactions of channel members and the use of power by the channel leader. The paper concludes with a summary and conclusion.

Bases of Power

Sociologists have identified five sources of power which are particularly applicable to distribution channels: reward power, coercive power, legitimate power, expert power, and referent power (French and Raven, 1959). Business theorists have suggested that these five sources comprise the non-economic bases and they have suggested that two additional sources comprise the economic bases: control of resources and size of firm (Michman and Sibley, 1980). In addition, this paper will introduce four factors which strengthen the traditional sources of channel power: social traps, ordering the agenda, transaction costs, and boundaries. Each of these factors and the power bases will be defined briefly here. The complex interactions between the sources of power and the strengthening factors will be discussed in the next section.

Reward Power

Reward power is based upon the belief that one organization has the ability to give something of value to another channel member. These rewards may be either tangible or intangible (Michman and Sibley, 1980) and the amount of power generated increased with the size of the reward which one individual believes that another can administer (Loudon and Della Bitta, 1979). And as a firm actually utilizes rewards, an increased attraction will result and hence, the firm will gain additional power (French and Raven, 1959).

Coercive Power

Coercive power refers to the ability of a firm to punish or remove a reward from a second firm that has not conformed to expected behavioral patterns. The potential to punish a channel member is sufficient for coercive power to exist. Negative sanctions may be pathological actions that prove less functional over time than the other power bases. Coercive power has been separated from other sources because it alone involves potential punishment. Of all the other power sources identified by French and Raven, the channel members submit willingly, rather than begrudgingly, to the power of another channel member (Hunt and Nevin, 1974).

Legitimate Power

Legitimate power stems from the belief of one channel member that another channel member has the "right" to prescribe behavior. Three bases for legitimate power have been suggested: cultural values, acceptance of a social structure, and designation by a legitimizing agent (French and Raven, 1959). Within a nonintegrated marketing channel, no formal hierarchy of authority exists. Individual firms may still perceive a hierarchy, however (Stern and El-Ansary, 1982). The credibility of the leader, often expressed as "should" or "ought to," is the foundation for legitimate power (Sims, Foster, and Woodside, 1977).

Expert Power

Expert power is derived from the belief of one channel member that another member can provide some special expertise and is a frequent source of channel power. The strength of expert power depends upon the perceived

difference in the skill or knowledge between the channel members. Once the source of expert power is shared, the power may erode unless the receiver perceives additional sources. Thus, positioning, with respect to the communication and information network, is critical to the retention of expert power (Stern and El-Ansary, 1982).

Referent Power

Referent power is the psychological identification of one channel member with another. Usually the channel member identifies a common goal and thus feels a oneness. Referent power may emerge because a firm wants to become a member of a prestigious channel or because of the effective use of reward power.

Resource Power

The control of scarce resources creates dependency within a marketing channel and generates channel power. A firm which controls capital, manpower, materials, technology, or some other limiting factor of production can exert tremendous influence in a marketing channel.

Size Power

Size differential between channel members also provides a base of power. The larger firm usually has at its disposal all of the other sources of power. In addition, it can expand and replace channel members, if necessary.

Social Traps

A social trap is a situation in which the incentive to each individual member of a group encourages behavior that, if enough members pursue this behavior, proves detrimental to the group as a whole. A social trap exists when the reversal of reinforcements creates a situation in which the personal reward is in opposition to the collective advantage (Platt, 1973). Perhaps the best example of a social trap is a labor-management dispute. If a labor union strikes an employer, some employees may choose to cross the picket line while others will honor the line. Both groups, however, realize that individuals crossing the picket line will continue to receive pay during the strike and will receive all the benefits won by the strikers. Thus, the individual maximizes profit by crossing the picket line, but if everyone pursues this strategy, the strike will fail. Social traps often exist naturally in marketing channels and the channel leaders normally have at their disposal forms of reward power that can be utilized to reduce the power of other channel members. Often a conflict situation can be defused and cooperation can be reinstated.

Ordering the Agenda

Controlling and ordering the channel's agenda involves the ability to determine when an event will take place, which events will occur, the order in which events will occur, and even the location. For example, the authority to determine the timing of a new contract yields the leader greater control of the contents. Further, the authority to schedule the payment of performance bonuses either before or after new contract discussion can be utilized to secure a greater level of cooperation.

Transaction Costs

"Human interaction is not free... The existence of differential transaction costs creates opportunities for one person's choices to impact on others,... Three varieties of transaction costs can be distinguished: contractual, information, and policing," (Schmid, 1978). Contractual costs are the costs of reaching an agreement with another party. Information costs refer to the costs of acquiring the information necessary to interact effectively with others. Policing costs are the costs of enforcing a behavior or excluding the benefits from those who do not contribute to the production. Existing marketing channels have established communication networks which are usually vertical but are occasionally horizontal. These networks generally operate efficiently and economically. Any activity which occurs outside this network will encounter relatively higher transaction costs. Contractual and information cost may in fact severely limit the potential to reorganize an existing channel or develop a new channel.

Boundaries

The question of boundaries is directed at how a given channel member is grouped with other channel members. The issue involved is one of determining who are members of the channel, who are not, and who are potential members. While boundary issues are often geographic, the concept extends to nongeographic applications (Schmid, 1978). In the case examined in this paper, the channel leader controlled the boundaries and was able to re-establish channel cooperation by bringing in new suppliers. Existing channel members thought that transportation costs precluded new members.

Background

The channel leader discussed in this case a major national food processor whose brand names have high consumer recognition. This leader was dependent upon approximately 3,000 suppliers (farmer-growers) for raw materials. Historically, about five months before the production process was to begin, the processor negotiated and contracted with each individual supplier. The channel generally exhibited cooperation. In the mid 1970's, however, the suppliers attempted to alter this channel arrangement by forming a supplier association (exclusive agency bargaining unit) to negotiate collectively for all suppliers. Through collective action they hoped to enhance their channel power and to improve their economic position. This conflicted with the leader's emphatic policy of negotiating only with individual suppliers. Although the suppliers were dissatisfied with several provisions of the contract, the major conflict involved prices.

The situation described lasted three years. The first year many suppliers refused to sign production contracts because the price was considered too low. Through the collective effort of many suppliers, the association achieved success and was able to secure a higher contract price from the channel leader for all suppliers.

Cooperation prevailed the second year as the suppliers and their association were satisfied with the leader's price offer.

Conflict arose again the third year because the supplier again felt that the price was unsatisfactory.

During the first two years, however, the leader had been developing the groundwork and information flow necessary to utilize its power more effectively. Thus, it was able to completely neutralize and eliminate the suppliers' association and again it was able to negotiate with individual suppliers.

Power and Leadership in a Market Channel

Conflict had arisen in the marketing channel and cooperation had been reduced. The channel leader desired to reduce the conflict in order to achieve channel goals more effectively and the leader wanted conflict reduced on its terms.

Relative Size of Channel Members

In the case under examination, a primary factor contributing to the leadership of the marketing channel was the absolute difference in size between the processor and the individual suppliers. The leader has gross revenue totaling hundreds of millions of dollars while most suppliers grossed less than \$100,000 each. As would be expected, the leader has greater channel control of its suppliers where it functioned as a monopsonist than it had in selling its branded items to the national supermarket chains where it competed in an oligopolistic environment.

Control of Resources

The control of scarce resources also provides economic power. In this case, the leader controlled the production quotas (acreage allotments) of suppliers. No other processor was located in the area creating a monopsonistic position for the leader. By careful allocation of this resource, the channel leader was able to increase the suppliers' dependency upon itself.

In this example, economies of scale also created a scarce resource. The equipment used in the final phase of production (harvesting equipment) was owned and operated by the channel leader. This was a natural arrangement because the high fixed cost could be spread over more units (acres). But it also created scarcity. Many suppliers did not own any harvesting equipment, even for the other products they may have produced for other channels. Anyone who chose to leave this channel and produce other products was faced with the prospect of a major capital investment.

Reward Power

In this channel, reward power, in many forms, was a major variable in creating cooperation among channel members. The channel discussed was located in a sparsely populated agrarian community which provided little alternative or supplemental employment opportunity. Many of the children of suppliers earned college expenses by working summers for the channel leader, the only major employer in the area. The potential reward was obvious, since a major goal of most suppliers was to have their children attend college.

Another source of reward power was the production dates (planting dates) and product variety (seed variety) which were controlled by the leader. During the first year of conflict, favorable dates and varieties were given to those suppliers that were loyal, signed the original contract offered, and did not participate in the association. When the leader and the association eventually settled, the leader gave the negotiated price to those who had remained loyal and had already signed for the lower price. This provided

reward power to the leader, and created a social trap for suppliers!

In this case the leader rewarded loyal suppliers with both the best production dates and products, and the higher price negotiated by the suppliers association. Suppliers recognized that the association had raised the price for everyone. But they also recognized that loyal suppliers received the greatest reward because they had both better production factors and the better price. And thus, a social trap was created. In this situation, each supplier was encouraged to optimize individual profits by signing the contract offered by the channel leader, while telling other suppliers to strike. Most suppliers also recognized that they were simply one of 3,000 suppliers. Their individual action would have virtually no impact on the final outcome. Theoretically, this dooms the success of any collective action by suppliers. This was exactly what happened! The association was dissatisfied with the price offered the third year and initiated a suggestion that suppliers not sign production agreements. Many individual suppliers, however, signed the contract while encouraging others not to sign. When the association contacted suppliers to determine the amount of production controlled by the leader and the amount controlled by the association, many suppliers would lie. They denied that they had signed a contract, when in fact, they had. Thus, the leader was able to control the vast majority of the production and the association ceased operation.

Expert Power

The power generated by size enhanced the noneconomic sources of power. In this case, the leader used fieldmen to represent it in negotiations with suppliers. Fieldmen also provided suppliers with information regarding production practices and consultation when required. This expertise, which was unavailable through other sources and could not be procured by individual suppliers, allowed the suppliers to operate more efficiently and profitably. It also provided expert power which the leader could use to control the channel.

Retaining expert power, however, required a continuing effort. Here the leader maintained the fieldman's expertise through an on-going program of research and development. New products (plant varieties) and new production practices were continually developed by the leader.

In many sectors of agriculture, research and development, especially new products and production practices, is conducted by universities and disseminated through the extension service. The leader could have relied upon universities for research and development. By subrogating its role, however, it would have forfeited its expert power.

Coercive Power

It has been suggested that the withholding of a reward is equivalent to a punishment (French and Raven, 1959). Coercive power is often most effective when used in a channel exhibiting extreme imbalance of power. As already identified, this is characteristic of the subject channel. Suppliers in this example failed to recognize a source of punishment or coercive power that the leader could impose--boundaries. Because the raw product was much bulkier than the finished goods, transportation costs provided an economic boundary and precluded the leader from contracting with suppliers that were located at a distance from the plant. This lulled suppliers into believing that only they could receive the reward of a production quota. Much to

their dismay, they discovered that the leader and not the association controlled the boundaries. During the third year of conflict, the leader contracted with new suppliers and expanded the geographical boundaries. While this action imposed additional costs upon the leader, it was effective in limiting the power of the association and coerced many suppliers into signing contracts.

The ability to apply coercive power through changing boundaries was partially a function of the production process as designed by the channel leader. Earlier it was reported that the channel leader provided harvesting equipment for suppliers. This equipment was also the only specialized equipment or unique capital investment that was required in the production process. Thus, new suppliers could be easily enticed into the channel because they would incur little cost.

The biological nature of the production process also enhanced the leader's ability to secure new channel suppliers. The biological production process was annual rather than perennial. Thus, new suppliers could start production immediately which meant that the leader-processor would encounter no downtime.

However, coercive power must be used with extreme caution. By withdrawing a reward, the channel leader may force suppliers to exit from the marketing channel. In this case, several suppliers voluntarily chose to leave this channel permanently and they started supplying products for other channels.

Legitimate Power

The agenda, or the order in which events occurred, was controlled by the channel leader because of its perceived legitimate power. For many years the leader's fieldmen had offered suppliers the contract for the next year during the month of December. December was not a coincidence. Suppliers could produce other products for other channels and December was the month of the lowest annual price for the other product. Thus, the contract price appeared more favorable. The ability to order the agenda, or control the timing of contract offers, enhanced the leader's position. During the period of conflict, the suppliers attempted to alter this by tying the contract price to some other price using a seasonal average as the basis. The perceived legitimate power of the channel leader was instrumental in resolving this aspect of the conflict favorably for the leader.

Referent Power

Referent power is built over an extended period of satisfactory relationships. In this case, the channel leader's staff of fieldmen had established identification with many channel suppliers. When the conflict arose, many suppliers remained loyal to the leader because of the friendship, rapport, and trust built over time. This proved useful to the leader because some production was assured. A second benefit also occurs to the leader in that the association lacked referent power and was at a comparative disadvantage in securing memberships. Further, as the channel leader brought new suppliers into the channel it increased its referent power. The new suppliers had just been rewarded with a production quota and thus would likely identify the leader as the referent source of power.

Transaction Costs

An established channel normally has an effective communication network in place. This network tends to reinforce existing channel operations while inhibiting change because of transaction costs. In this case the channel leader had an established force of fieldmen that could contact suppliers rapidly and inexpensively. The suppliers were accustomed to a verticle flow of information and when the suppliers association was formed, a horizontal flow of information had to be established to contact each of the 3,000 suppliers. The monetary and nonmonetary cost of establishing horizontal relationships was relatively high for the association. Further, the association's network was probably much less efficient because of the lack of expertise, the lack of facilities, and the lack of a complete supplier list. As a result, the leader's existing communication network allowed it to reach suppliers more effectively because of the lower transaction costs.

As the leader expanded the boundaries and new suppliers signed contracts, the association's communication network encountered additional problems. The association was forced to communicate with suppliers with whom it had no credibility, and in fact, the association would be unaware of the identity of new members.

Summary and Conclusions

A leader generally evolves in a marketing channel to direct efforts of the collective members. This leader has the various sources of power at its disposal to maintain a cooperative environment in the channel. No leader, however, has absolute power and thus must carefully manage its power to insure that the channel achieves efficiency.

In addition to the traditional sources of power, four factors were identified in this paper which contribute to the leader's authority. These factors were described through a case study in which the leader was able to successfully resolve a conflict with suppliers and restore cooperation within the channel. The leader was a monopsonist while the suppliers existed in an environment approaching pure competition.

Social traps, ordering the agenda, transaction costs, and boundary issues all tended to interact and reinforce the leader's position in this example. As the suppliers' association attempted to redesign the channel, a new communication network was required. The costs of establishing this system, the transaction costs, made success unlikely. The channel leader was also able to expand the boundaries by bringing in new suppliers. Thus, existing suppliers were discouraged from maintaining the conflict situation. In this channel, the leader effectively rewarded loyal channel suppliers. When a conflict developed, all suppliers recognized that collective action could secure a higher price for the entire group. The suppliers also recognized, however, that members loyal to the leader secured both the higher price and the leader's rewards. Because of this negative incentive, the social trap, the collective action failed.

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THE EFFECT OF ECONOMIC DEVELOPMENT ON THE STATUS OF MARKETING RESEARCH

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Abstract

The quality and scope of marketing research in the less-developed countries is usually disparaged and a superior level of activity in the developed countries is implied. This descriptive study based on data from Turkey and New Zealand does not provide evidence to positively correlate the level of economic development with the status of marketing research.

Introduction

It has been nearly two decades since Boyd et al. (1964) stated that marketing research (MR) should be one of the easiest areas in marketing to export since it can, supposedly, be applied regardless of the state of economic development. They do conclude, however, that the appropriateness of the use of MR techniques depends on the state of economic development and suggest that MR techniques need to be modified before being used in a particular underdeveloped country. Moyer and Hollander observe (1968) that marketing has been ignored and considered as a parasitic function in the developing countries. However, it does not follow that the success of the marketing concept and the utilization of the MR function has been conspicuous even in the developed countries, with the possible exception of the United States.

A review of the literature (Kaynak and Yavas, 1980) on international MR shows that research done in the less-developed countries is often disparaged. In fact, an overwhelming number of articles connote a certain degree of superiority in the quality of MR conducted in the developed countries. Most studies tend either to compare underdeveloped countries with the perceived level of MR activity in the States or merely to present the state-of-the-art in a given country (Dragan, 1973; Saddik, 1973; and Wind, 1967). Furthermore, evidence furnished on the basis of personal observation or convenience samples stresses operational aspects such as research design, data collection and analysis. The so-called strategic issues (Chapman and Wong, 1978) such as organization and staffing of the marketing research function seem to be neglected.

The primary purpose of this paper is to examine the relationship between the level of economic development, and the status of MR by comparing various measures of MR activity in a developed and a less-developed country. It is not the contention of this study to resolve the issue of concomitant variation between economic development and the status of MR versus causality. In fact, views regarding the relationship between economic development and MR activities are far from being uniform. It is suggested (Drucker, 1958; Folz, 1967) that MR is the most effective engine of economic development through market expansion and aids in mobilizing latent economic energy. Another author (Wind, 1967) emphasizes the "interdependence" of economic development and the penetration of MR. On the other hand, there is no shortage of practitioners and even academics in the less-developed countries who feel economic development precedes that of MR. While the two phenomena seem to "feed" on each other only further comparative studies can establish the time occurrence of these variables and unearth other causal factors. Hopefully, this study will serve as a modest step in investigating whether the developed countries

are really significantly ahead of the less-developed countries or whether there are important differences within the groups as compared to the variations between groups, in terms of the acceptance and sophistication of the MR function.

Methodology

In a study of this type, it is highly desirable to find typical countries from each category with regard to their level of economic development as well as area and population. The United States was ruled out since it represents an untypical case among the developed countries. Unfortunately availability of compatible data limited the choice of countries to New Zealand and Turkey. Since Sherbini's classification (1967) puts New Zealand in the first group representing the highly developed countries and Turkey in the third group including the semideveloped countries, care must be taken in interpreting the results. Comparisons between pairs of countries from other groups may yield different results. However, in spite of the fact that these two countries have significantly different population sizes, they show commonality in terms of their dependence on agriculture, existence of a rapidly growing industry and the presence of three major centers of economic activity.

TABLE 1
STRUCTURAL CHARACTERISTICS OF NEW ZEALAND AND TURKEY

	NEW ZEALAND	TURKEY
Population (million)	3.2	41
Population increase	1.9%	2.4%
GNP/capita	\$4680	\$860
Steel consump./capita (tons)	677	85
Electricity prod. (m.Kwh)	20,910	18,230
Passenger cars (000)	1205	472
Telephones/1000 persons	52	3
Tv sets/1000 persons	263	54

Source: 1977 Statistical Yearbook, U.N.

The data for this study are obtained from two different sources. The Turkish survey (Kurtulus, 1979) was administered personally to 300 companies representing a random selection of firms from the "List of Very Important Companies" published by the Istanbul Chamber of Industry. The data were obtained in New Zealand (Barker, 1981) by administering a mail questionnaire to 220 companies selected randomly from "The New Zealand Business Who's Who" containing listings of companies of national importance. There is no reason to believe that the two lists are significantly different from each other in terms of their representativeness. Both lists, however, include only the more important companies in economically significant geographical regions. The percentage of usable questionnaires is 85% for Turkey and 68% for New Zealand which compares very favourably with the 39% response rate achieved in the U.S. Survey of Marketing Research (Twedt, 1973). The difference in the response rates between Turkey and New Zealand may be attributed to the effectiveness of personally administered questionnaires over mail questionnaires.

The non-response error in both surveys is reported to be insignificant. However, both sets of data indicate that responses to questions on research subjects,

staff size and research expenditures tend to be overstated. Due to the nature of the sources from which the respective samples are drawn, it must be noted that the respondents in both countries represent the larger and better known companies and consequently generalisations regarding the individual countries will probably lead to over-statements.

Type and Size of Companies

It is not surprising that New Zealand has a higher percentage of services and marketing intermediaries (Table 2) due to its level of economic development. However, the difference in the number of industrial manufacturers is very much affected by the smaller population of New Zealand which limits the demand for the establishment of several manufacturers in the same industry.

TABLE 2
CLASSIFICATION BY PRIMARY BUSINESS ACTIVITY

BUSINESS ACTIVITY	NEW ZEALAND	TURKEY
A. Industrial products	24	92
B. Consumer products	27	54
C. Indus. & consumer products	31	43
D. Other - services, retailers and wholesalers	<u>62</u>	<u>65</u>
	(n=144)	(n=254)

While it is easy to classify the different companies according to primary business activity (Table 3), there are problems in classifying them in terms of sales volume. The method of using the official exchange rate to determine the equivalent sales volume was rejected due to the big differences in the unit prices of different products in the two countries. This would have resulted in under- or over-stating the sales volume of respondents. Therefore, companies were classified into three categories by analyzing sales volume in their local currencies relative to the standards of each country. Although experts in the field were consulted in this classification, it still remains highly subjective. The under-representation of larger companies in New Zealand is not, however, due to sampling or non-response but is a function of the local conditions.

TABLE 3
CLASSIFICATION OF THE COMPANIES BY SIZE

COMPANY SIZE*	NEW ZEALAND	TURKEY
A. Small	68	94
B. Medium	51	90
C. Large	<u>28</u>	<u>70</u>
	(n=147)	(n=254)

*Significant at $\alpha = .1$ but not at $\alpha = .05$

Departmental Organization

The departmental organization of the MR function is shown in Table 4.

TABLE 4
CLASSIFICATION OF THE MARKETING RESEARCH ORGANIZATION

TYPE OF ORGANIZATION*	NEW ZEALAND	TURKEY
A. Formal department	35	114
B. No MR department but at least one researcher	77	34
C. No MR employees	<u>38</u>	<u>106</u>
	(n=150)	(n=254)

*Significant at $\alpha = .001$

The figures indicate that the basic MR organization in the two countries is quite different and the number of

MR departments in Turkey is significantly greater than in New Zealand. There appears to be a general inclination in New Zealand not to formalize the structure of the MR function. The existence of disproportionately few formal MR departments in New Zealand may be explained by the traditionally conservative attitudes of the business community which has been under the heavy influence of accounting orientated managers. The fact that, until joining the EEC, Great Britain was literally the only major buyer of New Zealand's agricultural output accounts for the discrepancy between the acceptance of the marketing concept and economic development. While the number of formal MR departments suggests the MR function is more established in Turkey, the presence of many companies which confess they do not employ researchers negates this observation. There are more companies in Turkey which appreciate the usefulness of MR but the gap between the extremes is also more pronounced as compared to New Zealand.

Growth of Formal MR Departments

The historical growth of MR departments which have a formal structure is presented in Table 5.

TABLE 5
CLASSIFICATION OF THE GROWTH OF FORMAL MR DEPARTMENTS

FORMATION YEAR*	NEW ZEALAND	TURKEY
A. Before 1960	7	12
B. 1960-1969	5	31
C. 1970-1973	7	31
D. After 1973	<u>16</u>	<u>40</u>
	(n=35)	(n=114)

*Not significant at $\alpha = .15$

The growth pattern of the formal MR departments in the two countries shows no significant variation. Neither is there any significant difference in the rate of formation of MR departments in Turkey or in New Zealand on the bases of company size or type. The data suggest very strongly that the rate of growth in the establishment of formal MR departments is rather fast in both countries. More than 50% of the departments have been formed after 1970. However, even the figures associated with the growth rate after 1970 do not show any significant variation between the two countries. The reasons for this behavior do not appear to be associated with the rate of development. In addition to the effect of EEC restrictions on Great Britain's agricultural imports which had an impact on New Zealand, both countries were very much influenced by the dramatic increases in crude oil prices. The data in Table 5 illustrate quite vividly the impact of the ensuing "export drives" on the establishment of formal MR departments in both countries.

Size of Marketing Research Staff

The distribution of the size of the MR staff (Table 6) in companies which have a formal MR department or at least one employee engaged in research shows no significant difference. Detailed analysis of the data shows that two-thirds of the companies have full-time staff members in Turkey, whereas this ratio declines to one-third in New Zealand. While this suggests that the marketing concept has achieved wider acceptance and penetration in Turkey, the relative size distribution of the companies (Table 3) would lead one to expect New Zealand to have smaller MR staffs. The overwhelmingly large number of formal departments (Table 4) when viewed in conjunction with staff size increases the likelihood that the Turkish companies have merely given departmental status to their full-time MR employees.

On the other hand, there is a trend in New Zealand to have full-time employees devote only part of their efforts to MR thereby retarding the formation of formal departments. In both countries larger consumer goods producers tend to employ more researchers. This finding signifies that the behavior of established companies in both countries is influenced more by market conditions, and information needs as dictated by the type of product rather than the level of economic development.

TABLE 6
CLASSIFICATION OF COMPANIES
BY THE SIZE OF MR STAFF

STAFF SIZE*	NEW ZEALAND	TURKEY
A. 1 person	28	40
B. 2 persons	19	26
C. 3 persons	16	18
D. 4-5 persons	20	21
E. More than 5 persons	<u>13</u>	<u>19</u>
	(n=96 cos.)	(n=124 cos.)

*Not significant, $\alpha = .92$

Organizational Hierarchy

In those companies that have a formal MR department (n=35 New Zealand and n=114 Turkey) the executive to whom the head of the MR function reports is presented in Table 7.

TABLE 7
CLASSIFICATION OF FORMAL MR DEPARTMENTS BY THE TITLE
OF THE EXECUTIVE TO WHOM THE MR HEAD REPORTS

MR HEAD REPORTS TO*	NEW ZEALAND	TURKEY
A. Top management	14	49
B. General management executive	3	19
C. Sales/marketing executive	11	36
D. Other	<u>4</u>	<u>5</u>
	(n=32)	(n=109)

*Not significant at $\alpha = .20$

The results show no significant difference between the two countries and further analysis revealed that in both countries the probability of having a MR manager reporting to top level executives (A and B in Table 7) increased significantly for larger companies. Most of the MR heads reporting to top level executives in the medium and smaller companies are sales and/or marketing managers. In general, the smaller the company the more likely it is to have the sales or marketing manager as the head of the MR function rather than having an MR manager reporting to the sales manager. The distribution of companies by the size of MR staff and the executive to whom they report does not lend any support to the hypothesis that the organizational acceptance of the MR function is significantly different in the two countries.

MR Expenditures

Due to the shortcomings associated with converting New Zealand dollars and Turkish lira and using the amount of money spent on MR as an indication of activity, it was decided to express MR budgets as a percentage of sales. In New Zealand, only three of the 112 companies responding to this question indicated that they are spending between 1% to 2.5% of their sales on MR. The rest stated that their expenditure is less than 1% of sales. In Turkey, approximately 70% of the respondents (n=94) spend less than 1%, 20% between 1% to 2.5%, and 10% indicated spending more than 2.5% of their sales on MR. Some Turkish companies seem to engage in more extensive research. However, attempts

to convert Turkish liras to New Zealand dollars and to compare the absolute magnitudes of the expenditures on MR did not help in identifying valid trends because of the immense differences in MR costs, especially those relating to salaries. For instance, a thousand dollars spent in New Zealand on a personally administered questionnaire will produce approximately a quarter of the responses which the same budget could produce in Turkey.

Further examination of the data indicates that in both countries company size correlates significantly and positively with MR expenditures.

MR Subjects

Using the same classification as the one utilized in the AMA surveys (Twedt, 1973), it was possible to group the types of MR activity under five headings in Table 8.

TABLE 8
CLASSIFICATION OF MR SUBJECTS

MR SUBJECT*	NEW ZEALAND	TURKEY
A. Advertising	74.3	28.7
B. Business economics	65.7	56.6
C. Corporate responsibility	54.3	28.3
D. Product	62.9	71.8
E. Sales and markets	<u>74.3</u>	<u>73.8</u>
	(n=35)	(n=104)

*Spearman rank correlation is 0.68

The most important difference between the two countries is in the more frequent use of advertising research in New Zealand as compared with Turkey. Predictably, corporate responsibility is ranked at the bottom of the list in both countries while sales and market research is placed at the top. It would be appropriate, however, to mention that on the basis of this researcher's experiences in the two countries, respondents seem to have over-stated their position. Also, there is the question of frequency of conducting research. The company which conducts advertising research on a regular basis checks the appropriate alternative as well as the one which shows sporadic interest in it. Clearly, the problem of frequency and quality of research must be taken into account in future studies in order to obtain meaningful and valid comparisons between countries as well as between successive administrations of the questionnaires.

In both countries advertising research is conducted predominantly by outside agencies which explains partly the difference between the two figures given since there are more "quality" agents in New Zealand. The remaining three areas, other than corporate responsibility research, are usually carried out by the MR departments rather than the other departments in the company or outside agencies. In terms of the utilization of the above areas, in both countries, manufacturers of consumer products lead the classification on the basis of type of business. Retailers, wholesalers and service organizations are last in both countries. These trends remain the same when one looks at those companies with no formal MR department but employ at least one researcher.

Characteristics of Marketing Research Personnel

Analysis of the question on the characteristics of MR personnel shows that the percentage of females is 18% in Turkey and 31% in New Zealand. The percentage of female MR employees in Turkey is lower than in other professional and business activities due largely to the reluctance of women to accept jobs that entail some

travel and the apprehension of employers in having female researchers contact predominantly male customers outside the metropolitan areas. However, there is an increase in the number of women employed in MR as this percentage was previously reported to be 14% (Kurtulus, 1976). The difference in the percentage of women employed in these two countries is fundamentally due to their different levels of socio-economic development.

Classification of the MR personnel by their incomes (Table 9) indicates that the researcher in New Zealand tends to command a higher salary than his colleague in Turkey. This may very well be due to the relative shortage of qualified personnel in New Zealand as compared to Turkey rather than economic development.

TABLE 9
CLASSIFICATION OF MR PERSONNEL BY INCOME

LEVEL OF INCOME*	NEW ZEALAND	TURKEY
A. Low	10	83
B. Medium	52	95
C. High	<u>24</u>	<u>36</u>
	(n=86 persons)	(n=214 persons)

*Significant at $\alpha = .001$

In both countries, however, the average salaries received by MR personnel are higher than the average salaries paid to other managerial employees occupying comparable positions.

TABLE 10
CLASSIFICATION OF MR PERSONNEL
ON THE BASIS OF EDUCATION

LEVEL OF EDUCATION*	NEW ZEALAND	TURKEY
A. High school	6	68
B. College	56	114
C. Post-graduate	11	34
D. Other	<u>8</u>	<u>21</u>
	(n=81)	(n=237)

*Significant at $\alpha = .001$

The data on education (Table 10) denote that high school graduates are under-represented in New Zealand and over-represented in Turkey. Conversely, college graduates are over-represented in New Zealand and under-represented in Turkey. This is in line with the general educational levels of the two countries which is related closely to the issue of economic development. There is no significant variation in the number of researchers with post-graduate qualifications in either country. On the basis of the trend established in Table 10 and the difference in the general level of education, this is not an expected finding. Perhaps the existence of more formal MR departments furnishing the position of manager in the larger companies is responsible for this occurrence.

While the type of employer is significant in Turkey in terms of the level of compensation, in New Zealand there is no perceivable difference among the employers.

The distribution of MR personnel according to their research experience is presented in Table 11.

The difference between the median ($m = 5.85$ years) in Turkey and the median ($m = 3.4$ years) in New Zealand is also very significant. The relative inexperience of the researchers in both countries is rather inconsistent with the establishment pattern of the MR departments as depicted in Table 5. The most likely explanation of the phenomenon is that successful

TABLE 11
CLASSIFICATION OF MR PERSONNEL
BY RESEARCH EXPERIENCE

RESEARCH EXPERIENCE*	NEW ZEALAND	TURKEY
A. Less than 5 years	65	107
B. 5-10 years	11	77
C. More than 10 years	<u>10</u>	<u>51</u>
	(n=86)	(n=235)

*Significant at $\alpha = .001$

researchers are using MR positions at the entry level as a stepping-stone to higher positions. Experiences in both countries also support this conclusion. Obviously this is a pattern that must be broken if either country is going to establish a core of proficient researchers with an understanding of the business environment to enable them to use more sophisticated techniques and to reach valid and practical conclusions.

Conclusions

The data indicate that there is no significant difference between New Zealand and Turkey in terms of:

- (1) The historical trend in the establishment of the formal MR departments, which is higher after 1970.
- (2) The number of MR staff employed by individual companies, about 2 or 3 in both countries.
- (3) The positions to whom the boss of the MR function reports in those companies having a formal MR department.
- (4) The importance given to "sales and market research" as a research subject. In both countries it is ranked at the top of the list.
- (5) The relative unimportance of "corporate responsibility research" which is placed at the bottom of the list.

Some of the more important differences between the two countries are:

- (1) There are significantly more formal MR departments in Turkey and consequently more MR managers.
- (2) The tendency to employ full-time marketing researchers is higher in Turkey. There is a higher inclination among the New Zealand companies to have full-time employees devote only part of their time to MR.
- (3) In Turkey, significantly more companies allocate more than 1 percent of their sales to MR but the most widely mentioned budget figure is less than 1% in both countries.
- (4) There are significantly fewer high school graduates engaged in MR in New Zealand.
- (5) The staff in New Zealand have less MR experience. The difference in the medians, 2.4 years, is significant.

Additionally, in both countries, practitioners tend to utilize observation, jury of experts and survey techniques more often than quantitative techniques such as regression analysis and experimentation. Therefore, by examining the quality and the subject matter of research, the staff and the techniques used in MR, it is not possible to conclude that there is any

significant overall difference in terms of the penetration and acceptance of MR in Turkey and New Zealand. This is really not a surprising conclusion if it is noted that up until the last decade accountants were the leaders in the business world of New Zealand and engineers were the dominant force in Turkey. Regardless of the economic development of the two countries, they are both dependent on their primary agricultural products and modern management techniques are being assimilated slowly. It appears very likely that, as the two countries feel increasing pressure to export, they will turn to marketing and this in turn will stimulate the need as well as increasing the acceptance of the MR function. In conclusion, this comparative study of New Zealand and Turkey furnishes little evidence which can be used to correlate economic development with the status of marketing research. Factors such as the acceptance and diffusion of the marketing concept, pressure to export more due to negative balance of payments and surplus outputs are some of the potential candidates explaining the state of MR in these two countries, rather than the level of economic development.

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A CROSS-CULTURAL COMPARISON OF THE
ATTITUDES OF CONSUMERS AND BUSINESS PEOPLE
TOWARDS CONSUMERISM

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Abstract

The attitudes of U.S. consumers and business people from Long Beach, California towards current consumerism issues were compared with those of their Swedish counterparts in Uppsala. Significant differences were found not only between the two countries, but between consumers and business people as well. The present Swedish experiment of attempting to establish marketing and production guidelines through negotiations between governmental and industry authorities was also discussed.

Introduction

In recent years, there has been a substantial increase in the attention paid to consumerism and consumer policy in the U.S. Naturally this increased interest has resulted in increased attempts to measure and evaluate attitudes towards current consumerism issues. Thus, consumers alone have been studied (Barksdale and Darden 1972; Hustad and Pessemer, 1973) as have business persons (Greyser and Diamond, 1974; Miller and Sturdivant, 1977; Webster 1973; Woodside, 1977) and the two groups have been compared (Dornoff and Tankersley, 1975; Shuptrine, Pruden and Longman, 1975). Common findings included consumer dissatisfaction with and distrust for current business practices, with much of this negativism apparently explained by noting the differing perceptions of consumers and business people toward marketplace activities.

Efforts to measure the current state of consumerism, however, have not been nearly as numerous or successful. Thus, Greyser (1977) attempted to evaluate the impacts of the consumer movement over the past decade by sampling groups of consumers, business and government leaders, and consumer activists. He found that all groups were apparently dissatisfied with the present regulatory system, that the public favored the idea of a new federal government agency for consumer advocacy, that the business community was sharply out of step with the American people on consumerism issues, and most people questioned the honesty and accuracy of advertising.

The data for all of these studies were collected within the U.S. This implied that intra-cultural comparisons were sufficient for evaluation. A supplemental, and complementary, approach would be to make a comparison with a referent outside the cultural system being studied. Because consumerism is at least partly a function of the socioeconomic system, a useful referent culture would need to be similar to the U.S. along these same socioeconomic lines; and since the referent culture would be used to make comparisons with the U.S., it would be desirable that the society have a consumer policy system that was a precursor to and, perhaps, more sophisticated and/or more efficient than the U.S.'s.

Any of the Scandinavian countries meet these requirements; however, there has probably been more documented concerning the Swedish system than any of the others. Not only did the consumerism movement, as a significant sociopolitical force, begin earlier in Sweden (i.e., early 1950's) than in the U.S., but Swedish policy became substantially more formalized and exten-

sive than its U.S. counterpart.¹
Consumer Policy in Sweden

As of 1970, Thorelli (1977) described Swedish consumer information policy as consisting primarily of government-sponsored agencies. They handled such functions as comparative product testing, standardization of informative labeling for consumer goods, stimulation of price consciousness among consumers, and articulation of the consumer viewpoint before government bodies.

By 1975, Sweden had consolidated considerably its consumer information programs. The numerous government agencies had been reduced to three, and consumer policy strongly supported direct interference in marketplace operations--e.g., eliminating products from the market by negotiation, threats of "blacklisting" a firm in order to protect consumers (Johansson, 1976).

In June, 1976, consolidation was completed. All consumer policy agencies were centralized within the National Board for consumer Policies (Konsumentverket), headed by the Consumer Ombudsman (KO), and "charged with the responsibility to assist consumers and to improve their position in the market" (NSBCP, 1977). Additionally, the Marketing Act was enacted, with three general provisions:

1. Advertisements or other marketing actions judged as misleading or otherwise improper may be prohibited.
2. A tradesman who in his marketing neglects delivering information of particular significance to consumers may be required to give such information.
3. Products judged either unsafe or "manifestly unfit for their main purpose" may be prohibited.

Thus, by 1978, Sweden had fully and officially adopted the theory of the "weak consumer." As Sven Heurgren (1977), the Consumer Ombudsman, explained: "For a long time the legislation in Sweden, as in many other countries, has assumed that the purchaser and the seller are two equal parties in the market. In practice the consequence has been that the interests of the seller has been dominating. The companies themselves have, to a large extent, formed the methods used when selling to consumers. These methods have, of course, been as favorable to the seller as possible. Many times they ignore the interests of the consumer.

"However, times have changed and a new opinion has grown up. The idea of two equal parties in the market doesn't seem very realistic today. Therefore, the society must, through legislation, support the weaker part--the consumer--in the market. (pp 1-2)

"This way of thinking has characterized consumer legislation in Sweden during the last (few) years. It is a common trend to back up the consumer side in order to get a better balance between the interests of the purchaser and the seller.

1

For an extensive review of the development of Swedish consumer policy, (Thorelli, 1971), Chapter 7.

Thus, the Swedish policy system before 1975 was very similar to the present U.S. system: a variety of separate agencies handling functions such as testing products, providing consumer information, and voicing consumer views within government. While the Swedish agencies were primarily government-sponsored, the U.S. system was augmented by, among others, non-government organizations such as Consumer's Union (product testing) and Public Citizen (consumer lobbying). Beginning in 1976, however, differences between rather than similarities in began to characterize the two systems. While U.S. consumer policy of 1980 remained an essentially fragmented system, Swedish policy in 1976 moved towards consolidation; and while direct U.S. government interference in the marketing activities of firms was rare, the Swedish government after 1978 strongly accepted the need for such intrusive efforts in order to achieve a more balanced marketplace.

Since the early history of the U.S. consumerism movement paralleled that of Sweden, it was reasonable to view consumerism in Sweden as a precursor to the movement in the U.S. In addition, it was not unreasonable to assume that future developments in the U.S. system would continue to parallel those in Sweden. Thus, Sweden would also become a possible predictor of the effectiveness of future U.S. consumerism efforts.

Hypotheses

It was obvious that, as of the mid 1970's, Sweden had felt a need to alter the direction in which its consumer policy system had been moving. If this altered approach was indeed more effective in helping to balance consumer and business interests, then it was reasonable to expect that the overall perceptions of business activities in Sweden would be more positive than those in the U.S.

1. Attitudes toward current consumer policy and the need for such policy will be more positive in Sweden than in the U.S.

The length of time that peoples in the two societies had been exposed to the influences and restrictions of consumer policy may have had significant effects on the manner in which they perceived their consumer policy systems. Thus, because Swedish consumer policy had been in existence longer and was more extensive than U.S. policy, it was reasonable to expect that Swedish consumer, having had greater opportunities to be exposed to consumer education programs, would be better able to accurately evaluate current business practices.

2. The difference between the attitudes of consumers and business people toward general consumerism issues will be less in Sweden than in the U.S.

Methodology

Instrument Development

During Fall, 1978, an initial instrument was designed and pretested in Long Beach, California. One hundred-thirteen items, derived from both past research (Barksdale, Darden and Perreaulty, 1976; Cunningham and Cunningham, 1976; Lenahan, Thomas, Taylor and Padberg, 1973) and selected so as to represent all current, relevant consumerism areas, were administered to a stratified sample of consumers and business people. Responses were then factor analyzed and preliminary assignment of factor names was made. Pretest results were re-examined in Sweden with the assistance of several Swedish researchers. A scoring system was developed which conservatively examined differences between

items.² With minor exception, the 42 items scoring highest were selected for inclusion on the final instrument.³

Sampling Design

Since a cross-cultural comparison was to be made, it was essential to select an area in Sweden having similarities with the U.S. test area, Long Beach, California. Uppsala Läns, a metropolitan area approximately 40 miles north of Stockholm, was chosen. Both areas had the following characteristics: Relative closeness to a much larger, more dominant city (i.e., Long Beach to Los Angeles and Uppsala to Stockholm); considering the sizes of the respective countries, relatively similar population sizes; the presence and influence of a large, major university; and the presence of many small and moderate-sized businesses but few large-sized ones.

While the two cities were socioeconomically similar, this in no way implied they were representative of their respective countries, neither Long Beach of the U.S. nor Uppsala of Sweden. On the contrary, there was every reason to expect significant demographic and attitudinal differences between the test areas and major segments of the parent populations. To assure samples representative of each country (rather than each city) would have required the drawing of two major, national samples. However, without research efforts to support the value of such undertakings, it would not have been reasonable--either financially or methodologically--to do so. If, on the other hand, the present study was able to provide evidence as to the worth of comparing U.S. consumerism efforts to those of Sweden, then the feasibility of such large-scale, national efforts would be greatly increased.

Consumer Sample Because of expected heterogeneity of residents along relevant dimensions, both U.S. and Swedish consumer samples were stratified on two levels: By social class, and within class by census tract. Census tracts were divided into four social classes--upper, middle, working, and lower--on the basis of income, occupation, and dwelling area variables.

Research on the nature of consumerism among lower-income, lower-social class consumers indicated that such individuals perceive their world significantly different from middle-class consumers and do not particularly relate to the consumerism problems that their middle-class counterparts do (Andreasen, 1976; Berry, 1972; Caplovitz, 1963). It was reasonable to assume that an instrument designed to measure what was seen as essentially a middle class phenomenon--i.e., consumerism--would not be valid when applied to lower class groups. Thus, these lower class segments were excluded; and the relevant population consisted of upper, middle, and working class segments.

In Uppsala, in-person interviews were conducted during March, 1979; the resultant sample included 204 usable questionnaires. A similar survey was conducted in Long Beach during October, 1979, resulting in 243 usable questionnaires. Over 90% of all questionnaires handed out were returned (204/225 in Uppsala and 243/275 in Long Beach).

2

Criteria for including an item was as follows: (1) factor loadings $\geq .50$; (2) within significant factors, items with correlation coefficients $\geq .35$; (3) high compatibility with the Swedish culture.

3

For a comprehensive review of the development of this validated cross-cultural instrument, (Klein, 1982).

Business Sample Businesses interviewed were selected from business directories supplied by the chambers of commerce of the two cities. A simple random selection procedure was used in Uppsala. In Long Beach, in an attempt to match the sample with the already-selected Swedish one, firms were stratified by type of business and then randomly selected within each category. Business sampling in Sweden produced 55 usable questionnaires; in the U.S. 75 usable questionnaires were obtained. Approximately 70% of all questionnaires distributed were returned (55/80 in Uppsala and 75/110 in Long Beach).

Results

It was not sufficient that respondents in two different cultures merely be presented with the physically-same items. To be cross-culturally valid, it was necessary that items be perceived similarly by both groups (Klein, 1982). Thus, two separate factors analyses were performed--one on the total Swedish data, one on the total U.S. While factor analysis does not provide a significance test on the similarity of two groups, it was reasonable to assume that items which grouped similarly in both cultures had, in fact, been perceived similarly by both groups of respondents. Thus, only such "common items" were ultimately included. The final instrument consisted of 20 common items loading on six distinct factors (Table 1).

TABLE 1
FINAL INSTRUMENT

Factor 1: MOST BUSINESS IS CONCERNED ABOUT AND RESPONSIVE TO CONSUMER.

Items:

- Most business firms make a sincere effort to help displeased customers.
- Most manufacturers really want to fulfill warranty obligations.
- In general, business firms usually accept responsibility for their products and guarantees.
- When consumers have problems with products, they have purchased, it is usually easy to get them corrected.
- Most companies' complaint departments back up their products and effectively handle consumer problems.

Factor 2: CONSUMERS NEED PROTECTION AND EDUCATION TO COMPETE EFFECTIVELY WITH BUSINESS

Items:

- The government should set minimum standards of quality for all products sold to the consumer.
- More frequent health and safety warnings on packages are necessary to adequately inform the consumer of possible dangers.
- Business should be legally liable for the pollution it or its products cause.
- Consumer education should be a required portion of a manufacturer's advertising budget.

Factor 3: GENERALLY THE QUALITY OF PRODUCTS HAS BEEN DECREASING

Items:

- Products that last a long time are a thing of the past.
- In general, the quality of repairs and maintenance service provided by manufacturers is getting worse.
- In general, I am dissatisfied with the quality of most products today.

Factor 4: OUR BUSINESS SYSTEM IS MORE EFFICIENT THAN THAT OF MOST OTHER COUNTRIES

Items:

- Consumers in the {U.S./Sweden} are much more protected by government regulation than in most other countries.
- {American/Swedish} - made products are less dangerous than those of most other countries.
- The {American/Swedish} business system operates more efficiently than that of most other countries.

Factor 5: PACKAGING TODAY IS ESSENTIALLY HONEST

Items:

- What is seen on the outside of a package is often not what you get on the inside.
- Package sizes show in a correct way the amount of product contained inside.

Factor 6: BUSINESS IS PRIMARILY SELF-SERVING IN NATURE

Items:

- All business really wants to do is make the most it can.
- The main reason a company is socially responsible is to make more sales.
- Companies try to influence the government to better their own standings.

Table 2 presents results of t-test comparisons between the two overall groups for each factor. Comparisons of consumers alone and business people alone are also indicated. Since each factor consisted of several items, the mean score of all items for a particular factor was used as the attitudinal measure.

TABLE 2
FACTOR MEANS FOR U.S. AND SWEDISH RESPONDENTS

Factor	Consumers		Business		Total	
	Sweden (n=204)	U.S. (n=213)	Sweden (n=55)	U.S. (n=75)	Sweden (n=259)	U.S. (n=318)
Responsiveness	3.28	3.42	2.64	2.85	3.15	3.29
Protection	1.61	2.13**	2.01	3.20**	1.70	2.42**
Quality	3.39	2.80**	3.89	3.51	3.50	2.97**
Efficiency	2.82	2.71	3.05	2.32**	2.87	2.62*
Packaging	5.01	4.42**	4.87	4.03**	4.98	4.33**
Self-Serving	2.51	2.39	3.64	3.26	2.75	2.59

*p < .01
**p < .001

As Hypothesis 1 suggested, Long Beach and Uppsala respondents apparently held very different views toward consumer policy and business. Of the six attitudinal areas compared, significant differences between the two groups existed for four (p < .01). Thus, Swedes expressed a greater need for consumer protection, felt more positive towards product quality, were less ego-centric concerning the efficiency of their own business system, and were more skeptical towards honesty in packaging. Hypothesis 1, however, also predicted the direction of respondents' attitudes--i.e., Swedes were expected to be more positive, more accepting of consumer policy. The data appear to support this expectation. Certainly the Swedes' expressed need for consumer protection and education supported the hypothesis. And since both Swedish and U.S. consumer policies have included significant efforts at upgrading product quality, the Swedes' attitude on Factor 3 may be interpreted as being more accepting of such an approach. Finally, considering the extremely negative attitude, among both consumer and business respondents, towards the credibility of packaging information, it

was reasonable to assume that Swedes would strongly support legislation or other action to reduce such packaging deception.

Hypothesis 2 was concerned with the distance between the views of consumers and business people. Swedes were expected to be more in agreement than their American counterparts. The hypothesis was also supported by the data. Considering the four attitudinal areas where significant differences between the two countries were found to exist--i.e., Factors 2, 3, 4, and 5--in each instance the difference between consumer and business attitudes was less in Sweden than in the U.S. (Table 3). In the two cases where there was no observed difference between the two cultures--i.e., Factors 1 and 6--the distance between consumers and business was greater in Sweden. A possible explanation may involve the overall effectiveness of Swedish consumer programs. These two attitudes are the most general of the six. If it is assumed that Swedish consumer policy was influential in affecting people's attitudes in the four more specific areas, then it is also reasonable to assume that altering generalized attitudes may take a greater effort or a longer time. Thus, the wide difference between consumers and business remains.

TABLE 3
DIFFERENCES BETWEEN ATTITUDES OF
CONSUMERS AND BUSINESS PEOPLE

Factor	Mean Differences in	
	Sweden	U.S.
1. Responsiveness	.64	.57
2. Protection ^a	.40	1.02
3. Quality ^a	.50	.71
4. Efficiency ^a	.23	.39
5. Packaging ^a	.14	.39
6. Self-Serving	1.13	.87

^aSignificant differences at the .01 level between U.S. and Swedish respondents has already been established for these factors. See Table 2.

Demographic Variables

Information from business respondents was collected concerning type of business, respondent's position in firm, number of employees, and annual pretax income. No significant relationships were found between demographic variables and attitudinal measures.

Consumer demographic information included age, sex, education, income, marital status, and dwelling type. Generally, relationships between demographics and attitudes were nonsignificant. However, several interesting ones emerged, and each seemed to apply regardless of culture.

For example, age appeared to be the most discriminating variable, showing significance ($p < .05$) with five of the six factors. Generally, as age increased, positive attitudes towards business also increased. However, concerning consumer protection, the relationship was U-shaped, with the middle age groups (36-45 and 46-55) expressing the lesser need for such programs. Either these people feel more able to take care of themselves or, as is more likely, they are business management, and their responses more accurately reflect this role than their role as consumers.

Education also provided insight into the need for consumer protection, with those respondents having less

than a high school education expressing the greatest desire for consumer education ($p < .01$). Consumerism research has consistently concluded that those who are most in need of protection--the lower income, more poorly-educated consumers--are the ones least likely to get it or be able to use it. Swedish policy reflects a similar view (Heurgren, 1977). Apparently, these consumers are also aware of the relative disadvantages they face in their market dealings and are signaling a desire to improve their position.

Discussion

Unlike the U.S., where efforts have been sporadic and poorly organized, Sweden has made consumer education and awareness a way of life for its consumers. Thus, it is not surprising that Swedish consumers, with greater opportunities to appreciate the protection provided and education subsidized by the Swedish government, agreed more strongly with Factor 2.

Swedish business also seems to have recognized the benefits of enhanced consumer awareness. With a more intelligent consumer, the product selection process by consumers becomes more sophisticated causing business to compete more aggressively by providing a higher quality product. This in turn may increase customer satisfaction resulting in higher profits. It would also provide an explanation for the wide differences in perceived product quality decreases between U.S. and Swedish consumers (Factor 3).

U.S. business, on the other hand, has been steadfastly opposed to virtually all proposed consumer protection legislation. The distance between U.S. business respondents and all other groups on this issue was reflective of such an attitude. Of all the comparisons made between U.S. and Swedish business people, the difference in attitude was greatest for this factor; so too for all comparisons between U.S. business and U.S. consumers. If Long Beach is at all typical of U.S. business people, then U.S. business is apparently not yet prepared to encourage and/or accept the responsibility for educating American consumers.

The difference between U.S. and Swedish respondents concerning the perceived efficiency of their respective business systems was not predicted. It was more reasonable to expect that nationalistic feelings would result in both groups of respondents expressing at least moderate agreement towards the superiority of their own system. Such was apparent with the two consumer groups; however, there was a great difference between the views of U.S. and Swedish business people: Of all groups, U.S. business respondents expressed the most positive attitude; Swedish business people expressed the least positive. It may be that the perceived level of government intervention into Swedish industry is so high that many business people feel stifled and/or intimidated. In conversations with Swedish business people, this view was expressed. The current attempt by Konsumentverket to negotiate manufacturing and marketing guidelines with various industries may only be adding to this perceived threat.

Discriminant Analysis

It appeared throughout the analysis that although similarities emerged, Uppsala and Long Beach respondents were significantly and relevantly dissimilar. To test this observation, a multiple discriminant analysis was performed on the data.

The six mean factor scores were subjected to a two-way, step-wise discriminant analysis to predict which types of respondents belonged to which culture. It was apparent that three factors--2, 3, and 5--were the most

efficient set of variables for distinguishing between Uppsala and Long Beach respondents. Of the 576 respondents, 436 or 75.7 percent were correctly classified. A χ^2 test based on the Mahalanobis D^2 statistic found the difference between the means of the two groups to be significant beyond the .001 level.

It was, therefore, possible to characterize Uppsala and Long Beach respondents according to their attitudes toward consumerism as follows:

Sweden: A Swede is likely to feel strongly that, to compete effectively with business, a consumer needs protection and education. If one is undecided or approximately neutral towards a perceived decrease in product quality he/she is most likely to be Swedish. And if an individual is highly distrustful of packaging information, he/she is most likely a Swedish resident.

U.S.: If an individual holds somewhat weak feelings towards the necessity for consumer protection, he/she is most likely American. Yet the more likely one is to believe that product quality has deteriorated, the higher is the probability of residence in the U.S. And if one expresses moderate skepticism towards packaging information, an American is the most likely prospect.

Conclusion

In its attempt to develop effective consumer policy, the U.S. has been following an approach which parallels that of Sweden, but 10-15 years behind--i.e., attempting to restore the competitive balance between consumers and business through legislation and information and complemented by increased product testing when products reach the marketplace. That such an approach can produce attitude change in the desired direction seems evident from this and other studies. Whether this is the most effective approach is not nearly so certain.

Sweden, at least, has concluded that it is not. "Now we have discovered that product testing and information is not enough. One of the reasons for that is that those traditional methods did little to help those consumers who were worst (sic) off.... In order to support those people we have to influence the manufacturers and distributors more directly." (Heurgren, 1977) This attitude has led to the present attempt to establish guidelines through negotiations between governmental authorities and representatives of industry. Such guidelines would not only specify acceptable marketing practices but product quality levels as well. The approach has the advantage of reducing both the need for formal legislation and burdens on the court system.

Having only begun in 1977, it is still too early to determine the overall effectiveness; however, initial efforts appear to be producing positive results.

"Our experiences show that there is a desire in industry to participate in writing our guidelines. Konsumentverket has so far published 13 different guidelines (in) which agreements with business representatives have been reached. The greatest difficulty, however, is the duty to give negative information about (one's own) products. It is easier to write about product safety and improper marketing." (Heurgren, 1979)

A major objective of this study was to demonstrate the value of a cross-cultural comparison in evaluating the effectiveness of current U.S. consumer policy. At least in this study, Swedish residents in Uppsala appeared to be more satisfied with and more accepting of the consumer policy efforts of their government than their American counterparts in Long Beach; and Long

Beach may not be atypical in this respect. Recent evidence (Barksdale and Perreault, 1980) indicated that while U.S. efforts have been considerable over the past decade, relatively few changes were seen in the attitudes of consumers--i.e., U.S. consumers remained largely dissatisfied with the consumerism efforts of business and the protection efforts of government. It may, therefore, be worthwhile for U.S. authorities to consider moving towards non-traditional methods, such as industry negotiating for solving consumerism problems. Certainly it will be interesting to watch developments in Sweden over the next five years.

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DEVELOPMENT OF MARKETING CHANNELS IN
DEVELOPING COUNTRIES
THE TURKISH CASE

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Abstract

This paper aims to determine and evaluate the developments of distribution channels in developing countries, especially in Turkey, and to develop some proposals. Firstly, the structure of distribution channels in Turkey is described and discussed. Secondly, major trends in both wholesaling and retailing are determined and evaluated. It is concluded that even slight improvements in distribution may cause important cost reductions.

Introduction

Although, the subject of distribution channels has not been fully developed in marketing theory, it has been and still is one of the most frequently researched topics especially in comparative marketing studies. This is mainly due to the vital importance of this traditional marketing function in terms of cost efficiency. The present economic crisis plays an important role in raising the question of cost consciousness of decision makers at all levels of the economy. Thus, both practitioners and theoreticians in the field of marketing have become more sensitive to the marketing decision areas where a significant percentage of total marketing costs has occurred and cost reductions are possible (Kurtuluş, 1980, p.247). This need has motivated all types of research, exploratory, descriptive and causal, related to distribution. The objective of this paper is to determine and evaluate the present state and the developments of distribution channels in developing countries with special emphasis on Turkey, and to develop some proposals.

Turkey has 779,452 square kilometers of land area and about 46 million population with almost 40 % in 0-14 age group in 1980. The annual rate of population growth is 2.5 % and this average growth rate is expected to continue. About 53 % of the population is living in the rural areas whereas 47 % is in the urban areas in 1980 (The Turkish Economy, 1980, p.99).

Turkish economy has created 2189.8 billion TL. GNP with current prices in 1979 or 209.5 billion TL. GNP with 1968 prices in 1979. Turkish economy has faced very high inflation rates especially after 1976, 24.10 % in 1977, 52.6 % in 1978 (The Turkish Economy, 1979, p.263) 63.9 % in 1979 (The Turkish Economy 1980, p.236). In 1979, 24 % of the GNP was created by the industry sector, 22 % by the agricultural sector, 13 % by the trade and 41 % by the other sectors. The services sector constitutes the major category in the others group. Thus, more than 1/3 of GNP is created by commercial and services sectors. Sixty percent of the economically active population is engaged in agriculture and related activities and a significant proportion (14 %) of the active population is unemployed in 1979. Turkey has a mixed economy in which the public and private sectors have an almost equal share in manufacturing industries. The balance of foreign trade probably poses the most vital problem for the economy. The foreign trade deficit has been above 40 % of the total, reaching 2.3 billion in 1978 and 2.8 billion in 1979, mainly caused by increases in oil prices. Significant changes in life styles and in consumption patterns have taken place as

a result of relatively rapid industrialization especially after 1970.

This brief review indicates that marketing oriented expenditures have a very important place in the Turkish Economy. Especially the ability of an excessive number of persons to subsist in commercial occupations implies that the marketing costs are higher than the necessary level for less developed or developing economies including Turkey (Preston, 1968, p.20). This makes the topic more important in these countries since some marginal changes or slight improvements in distribution systems may cause significant cost reductions at both micro and macro levels. But unfortunately, policy makers in developing countries have not focused their attention on the distribution sector until recently (Dholakia and Dholakia, 1978, p.541). This situation is also valid for Turkey. Although, there is no unique distribution system for all economies (Currie, 1968, p.128), some guidance can be obtained from the economies utilizing more efficient distribution systems. Therefore, comparative and even descriptive studies are needed in the area.

Although, in several studies a very significant proportion of company managers have checked distribution channels as the most important decision area, the policy makers have ignored this fact in formulating the public policy toward distribution (Kurtuluş, 1976, pp. 60-61). This can be easily observed by examining the economic development plans of the Turkish Republic. Even in the last (1979-1983) plan, the importance of this sector has not been fully understood (Kurtuluş, 1980a).

Structure of Distribution Channels in Turkey

Major characteristics of three main sectors, industrial goods, consumer goods, and services will be described in this part of the paper.

Channels of Distribution for Industrial Goods

Industrial goods account for more than half of the value of the production of manufacturing industry, which amounts to 21 % of the GNP in 1979 (Kurtuluş, 1980a).

The exclusive distribution through selling agents and/or selling personnel is the typical characteristic of the distribution policy of this sector. Compared with the manufacturers, selling agents are not powerful enough. Therefore, channel leaders are manufacturers in most cases.

Vertical integration lead by manufacturers through general distributors and retailers is observed in some industries recently. Almost all of the functions except financing, warehousing and transportation are performed to some extent by manufacturers. Selling agents are the main source for financing the manufacturers. Although, theoretically cost oriented pricing seems to be the dominant pricing approach, in reality demand oriented pricing is applied more frequently.

Almost nothing has been spent for advertising, except for some unimportant prestige advertising, since personal selling and some sales promotion activities are the major promotional tools. Although, conditions are changing, the sales concept is still dominant in this sector.

Channels of Distribution for Services

Services including banking, insurance, tourism, transportation, communication, education, commerce and other marketing activities have the greatest share in the GNP. Because of high unemployment and high migration to urban areas, increasing numbers of people have become salesmen, mostly peddlers in recent years. In this sector, banking and insurance are the most important sub-sectors.

In Banking there were a total of 38 commercial banks operating in Turkey in 1979; 11 of them being public banks, 23 of them being private national banks, and 4 of them being international banks. Competition among these banks to attract more deposits caused an increase in the number of branches and heavy advertising expenditures especially after the stabilization program as of January 25 th, 1980 which introduced measures for a more liberal economy including free interest rates for bank deposits and credits. At the beginning of 1980, there were 5739 branches of commercial banks in Turkey leading to intensive distribution (Bankalarımızın 1979 Sonu Bilanço Kâr ve Zarar Hesapları, 1980, pp.7-19). Competition in terms of service differentiation, such as express service, credit cards, night and weekend services, travelers checks etc., has started recently but has grown fast (Okuyay and Kumcu, 1980, p.3). Banks as a leading sector have been spending almost 20 % of the total advertising expenditures in both 1978 and 1979 and this share is expected to increase in 1980 (Görüş, 1979b, p.19).

There were a total of 36 insurance companies at the beginning of 1980, 21 of them being national and the rest being foreign companies (Rapport sur l'Active des Assurances en Turquie, 1980, p.11). Insurance services are supplied to the institutional and personal customers through licensed insurance sales personnel and insurance through bank branches has become an increasing practice as a result of financial consolidations between banks and insurance companies. Thus, the proportion of total insurance sales through selling agents has significantly increased because of this new development. Besides bank branches, insurance agents are small individual companies. As a sector, insurance is still new and most of the population is not convinced of the benefits of insurance. But unfortunately, one of the least developed areas in terms of marketing applications in Turkey is certainly insurance.

Channels of Distribution for Consumer Goods

About 2/3 of the per capita income has been spent for private consumption in Turkey in recent years (Görüş, 1979a, p.7) as in other developing countries (Meyer, 1968, p.1).

A significant part of the research on the distribution channels in developing countries has centered on the food industry since the most important proportion of the consumer's budget is spent on food in these countries (Kurtuluş, 1979, p.8). Various types of channels of distribution have been used in food distribution in Turkey. At both wholesale and retail levels intermediary institutions in food distribution are very large in number and vary in type, for example on the retail level supermarkets, markets, grocery stores, peddlers, etc. But these are generally powerless institutions. Channels of distribution are mostly very

complex ranging from direct selling mostly through cooperatives to four level channels, namely broker - wholesaler - wholesaler and retailer - small retailer (Kaynak, 1977, p.10). There is not enough specialization among channel members and the allocation of distribution functions, such as handling, warehousing, financing, risk taking, standardization, etc., among members of the channel is arbitrary. Thus, intermediary institutions perform only a few of these functions, especially financing and transportation, as a result of their current status. Limited mobility of consumers, high frequency of purchase and cultural factors also cause long and complex channels. During the last few years the importance of supermarkets has been growing. New supermarket chains have been entering the food market especially in big cities. But the outreach is one of the major constraints in this development (Goldman, 1974, p.16). In rural areas, traditional channels of distribution are still dominant. Therefore, these intermediary institutions should be reorganized, financially reinforced and stimulated to use modern management and marketing techniques.

Most of the food producers are working on a small scale except the canned food producers (Şireli, 1967, p.15). Canned foods are generally distributed through their own general distributors. Research indicates that the conflict between general distributors and markets including supermarkets at retail level is significant. In an exploratory study it was found that the major source of this conflict comes from the differences in role understandings and role expectations of both sides (see Table 1) (Kumcu, 1978, p.17). These findings can be utilized in managing conflict efficiently in these channels.

TABLE 1
SOURCES OF CONFLICT IN CANNED FOOD DISTRIBUTION

Levels	Conflict			
	General	Objective	Role	Perception
Production Level (General distributor)	+	-	+	-
Trade Level (Grocery Markets) ¹				

(+) indicates existence of conflict

(1) The term grocery market indicates large grocery stores.

The consumer durable products have gained great importance in the Turkish economy during recent years, especially after 1970. In 1978, more than 16 % of the consumers' budgets was spent for these products. Changes in life style, very fast urbanization, marketing activities and high inflation have stimulated the demand for consumer durables. The major characteristic of this sector is mainly the financially powerful producers and exclusive distribution through general distributors, which are generally vertically integrated with producers, and selling agents at the retail level. In this producer controlled distribution system, vertical integration including selling agents is also observed. Handling, warehousing and transportation are performed by the general distributors whereas pricing, customer services and promotional functions are performed by the producers, and the other marketing functions, such as, contact, financing of customers and delivery are performed by the selling agents. Mostly the sales concept is dominant in this oligopolistic industry. Promotional campaigns, mostly advertising campaigns, are undertaken by producers. Exploratory research indicates that in very few cases, about 20 %, the needs and wants of consumers are taken into consideration at first place in product planning and development stage (Öztürk, 1979, p.187).

All these major characteristics of channels of distri-

bution can be briefly summarized as in **Table 2**.

TABLE 2
MAJOR INDICATORS OF CHANNELS OF DISTRIBUTION IN TURKEY

Sector	Main Characteristics	Expectations Related to Marketing Concept and Applications
Industrial Goods	sales concept, exclusive distribution, controlled by producer, low advertising	slight improvement
Services	modernization in the marketing concept, intensive distribution, very heavy advertising and service differentiation, heavy competition	high improvement
Consumer Goods	long and very complex channels, too many mostly small intermediary institutions, arbitrary allocation of marketing functions	slight improvement
Durables	mostly sales concept, exclusive distribution, controlled by the producer, vertical integration otherwise significant conflict	average improvement

Developments in Wholesaling and Retailing

Qualitative and quantitative changes and developments in both wholesaling and retailing have taken place in Turkey in accordance with the economic development. Analyses will be based on the existing three censuses of industry and business establishments in 1950, 1963 and 1970 undertaken by the Republic of Turkey, Prime Ministry State Institute of Statistics (Census of Industry and Business Establishments, 1950, 1964 and 1975). These detailed censuses cover all the industry and business establishments in the country. These censuses are undertaken periodically, every ten years and unfortunately getting the results normally takes years. Some personal evaluations will also be included in the analysis, since the latest census carries only 1970 figures.

Developments in Wholesaling

The wholesale sales are defined as "yearly sales to retailers for resale, to producers for their own needs, and to official institutions excluding cars" by the Turkish State Institute of Statistics. But it should be mentioned that sales figures should be accepted as pessimistic estimates since it is expected that the respondents have given minimum sales figures as reported for the tax purposes.

During 1950-1970 period the number of people working in wholesaling has increased 32 % from 49,590 to 65,520, number of wholesalers has increased 80 % from 12,586 to 22,650, and total wholesale sales have increased 49 % with fixed (1968) prices from 19.5 billion TL to 29 billion.

Although the number of wholesalers has increased significantly during 1950-1970 period, averages related to whole group indicate unimportant changes (see **Table 3**) (Kumcu, 1980, p.12).

TABLE 3
SOME IMPORTANT AVERAGES RELATED TO WHOLESALERS IN TURKEY

	1950	1963	1970
Number of retailers per wholesaler	7.02	6.67	7.64
Number of working persons per wholesaler	3.94	3.52	2.89
Sales per person (million TL*)	0.39	0.33	0.44
Sales per wholesaler (million TL*)	1.55	1.15	1.28
Population per wholesaler	1613	1474	1574

(*)with 1968 prices

Further analysis indicates that wholesalers are very heterogenous in terms of both sales volume and number of persons employed (see **Table 4**) (Kumcu, 1980, p.13). Thus, two contradictory developments have been observed in the wholesaling sector during 1950-1970 period. The first development is the large increase in the number of small wholesalers which resulted from old semi-wholesalers becoming wholesalers and new small wholesalers entering the sector. This development certainly has negative effects since these micro establishments are far from being sufficient to implement the necessary wholesaling functions. The second development is the increase in both number of large wholesalers and in their average sales having the highest relative increase for about 50 % during 1950-1970 period whereas the general average sales were declining with 1968 prices. This may be interpreted as a positive development in terms of the ability to utilize more modern marketing techniques (Kurtulus, 1980c, p.52).

TABLE 4
DISTRIBUTION OF SALES IN TERMS OF SIZE OF WHOLESALERS

Size of Wholesaler	Number of Wholesalers			Sales with 1968 Prices		
	1950	1963	1970	1950	1963	1970
Number (thousand)	12.6	20.1	22.7	19493	23075	29095
	%	%	%	%	%	%
1-2 persons	35.7	60.5	66.1	12.7	21.1	27.1
3-9 persons	56.5	36.0	31.0	56.0	51.5	47.3
10-49 persons	2.8	3.1	2.7	10.0	18.0	18.1
50+ persons	0.9	0.4	0.2	18.4	9.4	6.9
Unknown	4.1	-	-	2.9	-	0.6

Significant differences are observed between 1963 and 1970 results in the distribution of wholesalers in terms of major sectors (see **Table 5**). Although, the data are gathered from a limited number of wholesalers, especially the increase in both number and sales of wholesalers in consumer durables sector as a result of fast development of the related industry appears to be clear.

TABLE 5
SECTORAL DISTRIBUTION OF WHOLESALERS

Sectors	1963		1970	
	Number	Sales	Number	Sales
	%	%	%	%
Foods and beverages	12.5	9.9	14.2	11.6
Other consumer goods	11.7	10.4	23.2	25.2
Consumer durables	5.2	8.2	15.0	21.4
Other	70.6	71.5	47.6	41.8

n=425 wholesalers.

Except an increase in tendency of becoming a corporation and a slight increase in the number of cooperative wholesalers in 1970 compared to 1963, no significant changes are determined between the distributions of wholesalers in 1963 and 1970 in terms of legal structure of the establishments (Kumcu, 1980, p.15).

Geographical distribution of wholesalers is also studied. A significant geographical concentration in the developed regions, especially in the big cities such as Istanbul, Ankara and İzmir, is determined and this concentration is found to be increasing during the period of 1963-1970 (see **Table 6**). This result is consistent with the high geographical concentration in the industry (Kurtuluş and Erimçağ, 1980, pp.35-36). The importance of Istanbul as a wholesaling center has been increasing significantly reaching almost 2/3 of the total wholesale sales in 1970.

TABLE 6
GEOGRAPHICAL DISTRIBUTION OF WHOLESALERS

Cities	1963		1970	
	Number %	Sales %	Number %	Sales %
Adana	2.8	1.8	1.5	1.0
Ankara	7.3	11.5	6.7	5.3
Bursa	3.1	1.6	1.6	1.1
Eskişehir	1.4	0.7	1.1	1.5
Istanbul	52.8	55.0	58.9	63.5
İzmir	15.6	11.7	13.1	14.6
Konya	2.1	1.8	1.6	1.7
Others	15.0	15.9	15.5	11.3

Developments in Retailing

During the same period, number of persons working in retailing has increased 135 % from 131,678 to 310,720, number of retailers has increased 95 % from 88,298 to 173,044, and total retail sales have increased 411,9 % with 1968 prices from 6.2 billion TL. to 31.9 billion TL. This finding indicates a significant increase in retail sales compared to the wholesale sales from 1950 to 1970. This result should not be interpreted as a surprising one when one takes into account the developments in the Turkish economy summarized in the introduction.

All of the averages related to the development of retailing sector clearly indicate that retailing has showed a significant raise during 1950-1970 period (see **Table 7**) (Kumcu, 1975, p.7). Thus, this finding can be interpreted as a significant increase in the importance of retailing in the Turkish economy.

TABLE 7
SOME INDICATORS RELATED TO THE DEVELOPMENT OF RETAILING IN TURKEY

	1950	1963	1970
Number of working persons	1.5	1.7	1.8
Sales per person (thousand TL*)	47.3	85.0	102.6
Sales per retailer (thousand TL*)	70.5	142.5	184.2
Population per retailer	230	221	205

(*) with 1968 prices.

Further evaluations show that retailers are also heterogeneous in terms of both sales volume and number of persons employed (see **Table 8**). Although huge increases in both number of small retailers and in their sales are observed during 1950-1970 period, average sales of middle sized retailers have been increasing significantly. This may be interpreted as old small retailers having grown fast and new small retailers having entered the sector faster as a result of the existing economic environment discussed earlier.

Significant differences are determined in sectoral distributions of retailers between 1963 and 1970 (see **Table 9**). **Table 9** indicates that important increases in both number of establishments and sales have taken place in food and beverages retailing. New supermarkets have also played a significant role in this development.

TABLE 8
DISTRIBUTION OF SALES IN TERMS OF SIZE OF RETAILERS
(Kumcu, 1975, p.9)

Size of Retailer	Number of Retailer %			Sales with 1968 Prices		
	1950	1963	1970	1950	1963	1970
1-2 persons	0.69	0.88	0.84	0.33	0.46	0.66
3-9 persons	0.30	0.11	0.15	0.57	0.41	0.28
10-49 persons	0.01	0.002	0.002	0.10	0.10	0.03
50 persons	-	0.008	0.008	-	0.03	0.03

TABLE 9
SECTORAL DISTRIBUTION OF RETAILERS

Sectors	1963		1970	
	Number %	Sales %	Number %	Sales %
Foods and beverages	0.05	0.02	0.16	0.14
Other consumer goods	0.42	0.33	0.16	0.14
Other	0.53	0.65	0.68	0.72

Except a significant increase in becoming a corporation no significant variations are observed in legal structure of the retail firms between 1963 and 1970 (Kumcu, 1975, p.10).

Geographical distribution of retailers is determined as in **Table 10**. Naturally, a significant geographical concentration is observed in retailing in Turkey. But in contrast with the development in wholesaling, geographical concentration in retailing has been declining. This can be easily seen in the increase in both number and sales of small cities in the others category.

TABLE 10
GEOGRAPHICAL DISTRIBUTION OF RETAILERS
(Kumcu, 1975, p.10)

Cities	1963		1970	
	Number %	Sales %	Number %	Sales %
Adana	0.04	0.05	0.04	0.04
Ankara	0.14	0.16	0.14	0.18
Bursa	0.02	0.02	0.03	0.03
Eskişehir	0.03	0.07	0.02	0.02
Istanbul	0.34	0.32	0.24	0.28
İzmir	0.07	0.06	0.07	0.07
Konya	0.01	0.02	0.03	0.02
Others	0.35	0.30	0.43	0.36

All these developments in wholesaling and retailing in Turkey are briefly summarized in **Table 11**.

TABLE 11
MAJOR DEVELOPMENTS IN WHOLESALING AND RETAILING

Sector	Main Characteristics	Expectations
Wholesaling	significant increases in total number resulting high raise in small wholesalers, very heterogeneous grouping, increase in number of cooperative wholesalers, changes in sectoral distribution, increasing importance of consumer durables, very high and accelerating geographical concentration.	moderate changes
Retailing	very significant increases in number of retailers, in total retail sales, in number of persons working; raise in importance, growing middle size retailers, significant changes in sectoral distribution, raise in importance of food retailing mostly resulting from new established supermarkets, declining geographical concentration.	continuation of important changes

Conclusion

Generally, conditions of the economy of scarcity have dominated the Turkish economy as a result of imbalance between supply and demand in many sectors (Kurtuluş, 1978b, p.7). Although, these conditions have started to change recently, especially after the implementation of the new economic stabilization program accepted on the 25th of January 1980, the sales concept is still dominant in the economy. Channels of distribution as an important marketing decision area mostly maintain its complex structure. Most of the marketing functions are left to the channel members. But unfortunately, in most cases these functions are not performed sufficiently because of their financial, physical, managerial and organizational constraints. Besides a significant improvement in the services sector, only slight improvements are foreseen for the future developments.

Retailing has been changing very rapidly in terms of numbers, sales and employment whereas wholesaling maintaining its conservative structure. Although, a small proportion of wholesalers has grown in terms of sales, generally wholesalers are far from being sufficiently large to implement modern management and marketing techniques. Thus, modernization through reorganization has become a vital issue in wholesaling sector. But unfortunately, policy makers are not aware of the importance of the problem. Therefore, only moderate developments in wholesaling are expected for the near future whereas important developments are foreseen for the retailing sector mainly as a result of the introduction of department stores and supermarkets.

It is also expected that without significant changes in wholesaling in Turkey, it is impossible to make important improvements in the effectiveness of the distribution system. Thus, more attention should be given to this fact, since even slight improvements may cause significant cost reductions. Of course, both micro and macro approaches are needed in the area because of the important place of the marketing oriented expenditures in the Turkish economy.

All of these evidences support the hypothesis that marketing systems of less developed countries are less efficient than those of developed countries, that is economic development and efficiency of marketing systems are highly correlated.

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NATIONAL MARKETING AND PROTECTIONISM IN THE POST MTN ENVIRONMENT

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Abstract

The comparatively favorable reception calls for a New International Economic Order received during the seventies pointed to further export and industrialization opportunities for the developing countries. The conclusion of the Multilateral Trade Negotiations in 1979 may have ushered in a new era of international cooperation and continued the fifty year drive for free international trade expanding even more markets for the exports of developing nations. However, its emphasis on bilateral fair trade may have ushered in an era of protectionism. A correct reading of the emerging environment is critical to developing nations' strategic planning for the 1980s.

Introduction

The early seventies saw calls for the creation of a New International Economic Order. They were first articulated as the NIEO at the Sixth Special Session of the U.N. in 1974. Among other things the developing nations were calling for increased tariff preference and market access for their exports to the developed world, a shift of labor-intensive industries from the developed world to the developing world, and the indexation of their raw materials prices to inflation in the developed countries.

In general the NIEO suffered from three basic faults: (1) many of its provisions were inoperable; (2) it offered no solution to the internal barriers to growth in the developing countries; and (3) it failed to consider the emerging political realities in the developed countries (McCrohan, 1979). Political realities which require policy makers in the developed world to shut their markets and protect their labor intensive industries.

The purpose of this paper is to present some of the indicators of this emerging protectionist environment and develop a scenario based on them.

An understanding of the emerging global protectionism is critical to policy makers in the developing nations involved in international business development in that the nature of the new protectionism impacts on the resource and market selection decisions of multinational firms, their entry strategy, and their behavior within a particular market.

The Present Environment For Protectionism

The collapse of the Bretton Woods international monetary system in 1971 and the end of cheap energy in 1974 laid the groundwork for the present shift towards protectionism among the developed nations. For the first time since the end of the Second World War international trade was being viewed as a zero-sum game. Internal social and economic changes in the United States during the seventies made it increasingly difficult for successive administrations to actively promote free trade. Without the leadership of one major industrial power in the fight for free trade the world appears to be evolving into one where the developed economics enter into agreements to share world markets while protecting their own. This will result in a shrinking of potential markets for the output of the developing world while the output of the developing world increases as

these nations seek to follow the path of countries such as South Korea and Taiwan.

A number of factors seem to support this scenario. First is a temporal comparative analysis between the way marketing evolved in the U.S. during the latter part of the 19th century and what we see occurring in the present international environment. Second is the realization the economic development is, in part, a function of growth in the developed world as well as a resolution of internal barriers to growth in the developing world. Third is the provisions of the MTNs themselves. Fourth is the recent signing of the new Multi-fiber Arrangement. And, fifth is an increased awareness on the part of U.S. firms of the total cost of international involvement.

Marketing and The Existing Environment

The basic cause of the evolution of marketing in the U.S. in the latter part of the 19th century was the existence of chronic oversupply. The micro economic response to this phenomena moved from cartels, horizontal and vertical integration (Krooss, 1966). This was followed by various increases in market orientation from sales to the marketing concept.

A similar series of events can be observed in global markets within the past fifteen years. Immediately following the conclusion of the Kennedy Round of the General Agreement on Trade and Tariffs (1967), the industrialized nations experienced a surge in protectionist demands resulting in the use of 'voluntary' quotas as nations attempted to address the problem of oversupply amongst the few who had the ability to pay for what they consumed. The growth of trading blocs is similar to the horizontal and vertical integration experienced in the U.S. Finally, the emergence of international marketing on the part of governments as they become more involved with marketing research, pricing, credit, and sales promotion seems to point to an implied recognition of the problem of overcapacity.

The Impact of the LDCs

The LDCs appear to offer little relief on the demand side due to their traditional problem of population growth exceeding capital formation and the more recent pressure of oil payments. Attempts to follow a strategy of export led development only worsen the oversupply problem. Given the stagnation in the industrialized countries, it is extremely doubtful that they can absorb the output of one hundred more Singapores. Additionally, the narrowing of growth rates between the U.S. and the LDCs makes the U.S. a better market for capital which places additional restrictions on development projects. All this seems to indicate that most of the developing world will remain so if they attempt to follow development strategies based on export led development.

The Multilateral Trade Negotiations

The MTNs themselves, with their emphasis on Japan and the European Community, seems to support Boddewyn's (1979) analysis that "...they also simply codify protectionism." In summary, they cover five major codes of conduct: balanced concessions in tariffs, increased market access and rules for agricultural trade; modern-

ization of the trading system; and sectoral arrangements in steel, civil aircraft, and agricultural trade. A brief review of some of the tariff concessions demonstrates the sectoral bilateral view of trade that has developed amongst the major trading nations.

Concessions have been negotiated for agricultural products, for example:

- . Meat exports, including beef and poultry, to Europe, Japan, Canada and some LDC's;
- . Tobacco exports to Europe, Canada, and Australia;
- . Fruit exports to Europe, Japan, and some LDC's;
- . Vegetable exports to Europe, Japan, and some LDC's;
- . Wine exports to Japan and Canada;
- . Oilseed exports to Europe, Japan, Canada, and some LDC's, and
- . Nut exports to Europe, Japan, and some LDC's. (U.S. Department of State 1979)

as well as for industrial products which:

- . Reduce tariff disparities with Canada in export, oriented industries such as paper, computers, photographic equipment, and aerospace equipment;
- . Eliminate overall tariff disparity on dutiable trade with Japan from 4.3 points (U.S. 6.8%, Japan 11.5%) to 0.6 points the other way (U.S. 4.6%, Japan 4.0%). If duty-free as well as dutiable trade is accounted, Japan will have a 2.4% lower average tariff than the United States (U.S. 4.6%, Japan 2.2%);
- . Substantially reduce Japanese tariffs on computers, color film, paper, and semi-conductors;
- . Decrease the level of preference inherent in the growing free trade area in Europe through substantial reduction of European duties; and
- . Reduce the adverse trade impact of Canada's machinery program and made/not made in Canada provisions, which can lead to substantial increases in applied Canadian tariffs on short notice. (U.S. Department of State 1979)

The Multifiber Arrangement

When the initial Multifiber Arrangement was established in 1974 it appeared as if the developed and developing countries were moving towards an accommodation of each other's needs. In an environment where the textile output of the developing nations was growing at a rate of between 20-25% per year, demand in the developed world growing at a tenth of this, and approximately one half a million textile jobs lost in the European community during the preceding decade the developed nations agreed to accept a 6% annual growth in imports from the developing nations. In the United States the Trade Act of 1974 established the General System of Preferences which provided tariff relief to the developing nations.

The new agreement, concluded in December 1981, abandons the earlier goal of 6% per year growth and allows for bilateral agreements between individual developed nations and each supplier nation. In the United States it is expected that the Reagan Administration will establish growth rates for suppliers such as Hong Kong and Taiwan in a .5% to 2% range (Business Week, 1982).

Changing Strategies of Multinational Firms

Firms with international operations have begun to limit the autonomy of their operating units as they move into this protectionist environment. For example, Du Pont allowed its divisions a high degree of autonomy. However, this has resulted in a number of unanticipated problems for both U.S. and European divisions. When the market for certain chemical products is soft in the U.S., the domestic divisions would market them at de-

pressed prices in Africa. French producers of similar products consider themselves to have a preferred position in these markets. When anticipated sales did not occur, it increased the level of competition within the European Community. Du Pont Europe then had to sell the product at a discount which results in lower profits for the corporation as a whole. Greater centralization of international marketing decision-making appears to be appropriate for firms facing similar conflicts. The result of this will be increased costs for developing nations.

General Electric traditionally allowed its operations in the Far East to become progressively more sophisticated and the percent of local output used in the production process to increase. Given a healthy economy in the United States this strategy was acceptable to U.S. unions. However, it is doubtful that this process will continue in the face of severe unemployment in the United States.

Conclusion

In summary then, the following environment seems to be emerging. First, national marketing between the U.S., E.C. and Japan as stagnation and overcapacity cause nations to actively protect their own industries. These activities first become apparent with the increase in dumping disputes following the conclusion of the MTNs (Business Week, 1979). These earlier dumping charges primarily involved basic industries. However, they have recently shifted to the high-tech field with the Japanese exporters of high technology products charging that the U.S. government and domestic manufacturers are in a conspiracy against them (Business Week, 1982). Second, an increasing emphasis on bilateral trade as nations look for reciprocity on the part of their trading partners. And, third, a reduction in the qualitative expansion of investments in the developing nations as firms react to economic stagnation in their home countries.

The affect of this will be to effectively shut many of the developing nations out of markets in the developed world.

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CHARACTERISTICS OF FAST FOOD RESTAURANT PATRONS:
A SPECIAL EMPHASIS ON CONCERN FOR NUTRITION

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ABSTRACT

This study investigated the relationship between patronage of fast food restaurants and personal values, attitudes toward nutrition, life style, and demographics. The results indicate that more frequent patrons express lower concern for nutrition. Conversely, as emphasis on nutrition is associated with non-patronage of these outlets, it appears management of fast food restaurants may be faced with a potential market segment that can be served through offering and communicating the availability of more nutritious fast food menus. In addition, life style and demographics were found related to patronage.

INTRODUCTION

As an important food source alternative for Americans, restaurants have steadily gained in patronage over the years (Tinsley, 1979). In particular, fast food outlets have climbed rapidly in popularity during the past two decades (Bakos, 1979; Enderwood, 1980). Their rise to prominence has led market researchers to investigate the nature of the market segments claimed by these food outlets (Miller and Granzin, 1979). Studies have shown patronage of fast food restaurants (hereafter, FFRs) to relate to those variables commonly used in studies of other retail market segments, like demographics and life style (Tigert, Lathrop, and Blegg, 1971; Granzin and Miller, 1980).

Certainly, influences such as demographics and life style hold important implications for managerial decisions involving FFRs. However, those responsible for planning marketing strategy can benefit further from the enlarged understanding of their market segment that comes from links between patronage and other salient characteristics of these restaurant patrons.

For one thing, the changing values of Americans (Engel, Blackwell, and Killat, 1978) may be expected to bring changes in the products and services they demand (Henry, 1976; Vinson, Scott, and Lamont, 1977; Granzin and Bahn, 1981). This influence on behavior in the marketplace that comes from basic values can be manifested in many ways (Kanter, 1977; Carman, 1977). One manifestation of changing values that seems particularly relevant to the restaurant industry is Americans' growing emphasis on nutrition (Andres, 1978; Food Product Development, 1978; Wood, 1978, 1979).

Fast food restaurants have often been charged with providing foods that are inferior in terms of their nutritional content (Appledorf, 1974; Consumer Reports, 1975; Appledorf and Kelly, 1979). To the extent these charges are believed by restaurant patrons, the problem for FFR management becomes one of determining how this belief affects FFR patronage and how to overcome its presumably detrimental effects on patronage. Several FFR companies have already acknowledged the existence of present and potential customers who are nutrition conscious and have changed their food offerings accordingly (Food Service Marketing, 1975; Berlinski, 1979; Marshall, 1979). Nonetheless, considerably more needs to be learned about the existence and nature of a market segment that feels concern for nutrition.

This study, therefore, seeks to provide further data on the characteristics of the market segment(s) for FFRs. This research report furnishes information on the demographic and life style characteristics of FFR patrons (and non-patrons). Its main contribution, however, stems from the findings with respect to these consumers' personal values and their manifestation as attitudes toward nutrition.

METHOD

Data came from in-person administration of a self-completion questionnaire to 180 adult residents of a large western metropolitan area during July, 1981. The sampling scheme matched the age and sex characteristics of the sample to their incidence in the most recent census of the area. It also provided representation with respect to socioeconomic characteristics.

Respondents furnished the criterion measure by reporting the number of times per month they eat out at a fast food restaurant. Examples of this type of restaurant were given to ensure understanding on the part of respondents.

Attitudes toward nutrition were measured using seven five-point Likert scales, by means of which respondents reported their extent of agreement or disagreement with items such as "Children do not develop properly when they have improper diets." **Table 1** summarizes these items. Twelve personal values items were based on values selected from studies conducted by other authors (England, 1967; Scheibe, 1970; Kabish and Collier, 1981). The objective was to compile a reasonably concise set that the researchers judged relevant to purchase behavior. Values were also measured on five-point Likert scales.

Life style measures represented the respondents' participation in 12 leisure time activities. The rationale for using these activities was that time spent in off-work, voluntary pursuits best characterizes one's style of life (Williams, 1975; Granzin and Bahn, 1981). Number of days of participation was measured with respect to the appropriate reference period for each activity: per month, per quarter, and per year. Demographics items reflected both socioeconomic characteristics and media habits. Magazine readership of five periodicals and types of periodicals found predictive in previous studies was dummy-variable coded, as was listenership to five types of radio programming. The coding of these items is shown in **Table 1**.

Regression would have furnished a desirable method for statistical analysis of the relationship between frequency of visits to FFRs and the sets of predictor variables. However, the sizable number of persons who reported they do not patronize FFRs presented an irregular distribution that required using an analytical technique based on a categorical measure of the criterion variable. Respondents were therefore assigned to three groups: non-patrons, light patrons, and heavy patrons, by splitting the two

patron groups as closely as possible to the median frequency of visits to FFRs. This assignment of patrons to two purchase groups reflects the concept of light-half and heavy-half buyer groups propounded by Twedt (1964). The three patronage groups were analyzed by one-way analyses of variance and by discriminant analyses alternately based on each of the four sets of predictor variables (values, attitudes, life style, and demographics).

RESULTS

Table 1 gives the means for the three patronage groups, the univariate F-ratios, the probability of a Type I error, and the standardized discriminant coefficients for the significant roots. The footnotes to the table present the levels of significance for the canonical roots and the centroids for the three groups on the significant functions.

Values did not perform well as a predictor set. Competition and acceptance of others reached significance ($p .05$) by univariate test, but no obviously meaningful predictive pattern seems to exist for the values items. The discriminant analysis did not produce a significant function.

Attitudes fared considerably better. Three of the seven measures significantly differentiated among the three patronage groups: people use too much white sugar, pre-packaged foods have low nutrition levels, and nutrition in meal planning is important. In all three cases, there was a monotonic decrease in concern for nutrition with increasing frequency of visits to FFRs. Even for the non-significant predictors, this monotonic pattern predominated. The significant discriminant function ($p .001$) reflected concern with people's use of white sugar and the importance of nutrition in meal planning. The attitude that nutrition helps prevent disease acted as a suppressor variable.

Life style's predictive ability was carried by a single activity, going to movies. Increasing patronage was related strongly ($p=.000$) to increasing participation in movie-going. Both the univariate and multivariate analyses reflected this relationship. The variables acting as suppressors in the significant ($p .001$) discriminant function offered an interesting contrast, indicating that light patronage and non-patronage of FFRs is associated with attending symphonies, operas, ballet, and theater, with participating in individual and team sports, and with snow skiing.

Four demographics distinguished among the groups, according to the analyses of variance. Heavier patronage was associated with younger age, male sex, higher income, and preference for rock music radio programming. The significant ($p .01$) discriminant function supported these findings, but also featured the influence of suppressors that complicated the canonical description of the demographic characteristics of the FFR segment.

DISCUSSION

In general, the results support the conceptualization: attitudes toward the issue of nutrition provided the best prediction of patronage of FFRs. Usefulness of demographics and life style for characterizing the market for FFRs is also confirmed by the results of this study.

More specifically, the evidence supports the idea that those who frequent FFRs hold relatively less

concern for the importance of good nutrition to growth and maintenance of health. The pattern of responses for all seven attitudinal variables was remarkably consistent, even for variables found non-significant by statistical test.

While this finding must be considered with caution, the canonical function reflects contrasting life style patterns with respect to movie-going and viewing spectator sports versus attending cultural events, playing sports, and skiing--the latter two being active forms of leisure pursuits. Some of those who visit FFRs most frequently lead a more sedentary and less cultured existence. This interpretation of the results deserves further investigation, of course.

Demographics portray the FFR patron as predominantly male, younger in age and taste in radio programming, and better able to afford eating away from home. As these demographic measures abstract from the characteristics of the patrons of any particular chain of fast food outlets, their managerial significance may be somewhat limited. That is, the demographics for customers of a taco drive-in may differ considerably from those of a fried chicken outlet. Thus, managers would be well advised to accept the present findings largely as support for their individualized use of demographics for understanding their market segment.

Values appear to offer limited usefulness for managers planning marketing strategy. As is often the case in consumer research, these underlying measures of human behavioral tendencies added less than other, more manifest variables to the understanding of consumer choice. Values appear to be too basic a measure for the prediction task at hand.

IMPLICATIONS AND CONCLUSIONS

This study provides empirical results to support the conceptualized relationship between patronage of FFRs and attitudes toward nutrition, demographics, and life style. The results do not support the expected link to personal values.

Taken in a negative sense, this research shows that success of existing fast food restaurants depends, at least in part, on consumers' willingness to downplay the importance of nutrition. FFRs, as presently constituted, are apparently losing patronage from those interested in nutrition.

Conversely, taken in a positive sense, the present findings suggest a market potential exists among those persons who care most about the nutritional content of the food served in restaurants. Thus, the management question to be answered is: How far should the firm go in offering more nutrition to these consumers? Does a market niche exist for the firm that offers (and communicates the availability of) nutrients such as biotin, folacin, pantothenic acid, iron, and copper in balanced supply? Can fast food marketers capitalize on food offerings that provide an obvious reduction in such undesirable elements as sodium, cholesterol, and saturated fatty acid? Or, at a less intense level, can profit be derived from merely providing a more nutritious alternative to the common fare of hamburgers, french fried potatoes, and carbonated beverages?

To answer such questions, further research should be conducted to determine how managers must change their market offerings to win over nutrition oriented consumers. While the investigations will, of course, depend on the nature and objectives of the business

TABLE 1
DISCRIMINANT ANALYSES OF THREE PATRONAGE GROUPS WITH RESPECT TO FOUR SETS OF PREDICTORS

Variables	Group Means			F Ratio	p	Discriminant Coefficients
	Non-Patrons (n=27)	Light Patrons (n=80)	Heavy Patrons (n=73)			
Values ^a						
Competition	3.07	3.64	3.63	3.04	.050	---
Success in occupation	3.30	3.50	3.70	1.48	.232	---
Achievement	4.37	4.45	4.48	.33	.717	---
Venturing risk	3.41	3.46	3.36	.26	.774	---
Uniqueness	3.96	4.05	4.05	.20	.817	---
Money	4.85	4.18	4.16	2.12	.123	---
Control	4.22	4.39	4.25	.86	.427	---
Strong government	3.52	3.30	3.51	.74	.471	---
Acceptance of others	3.33	2.68	3.04	3.61	.028	---
Compromise	2.67	2.61	2.70	.11	.897	---
Autonomy	4.33	4.43	4.30	.44	.642	---
Religion	3.93	3.99	4.08	.21	.812	---
Attitudes Toward Nutrition ^b						
People are healthy regardless of diet	2.56	3.03	3.04	1.79	.171	.23
People use too much white sugar	4.22	3.95	3.58	8.67	.000	-.73
Pre-packaged foods have low nutrition	3.44	3.02	2.82	3.60	.029	-.10
Nutrition is important in meal planning	4.56	4.38	4.11	4.85	.009	-.57
Children need proper diets for development	4.22	4.30	4.03	2.63	.075	-.15
Nutritional information on label is important	3.96	3.73	3.68	.77	.463	.09
Nutrition helps prevent disease	4.22	4.20	4.21	.01	.991	.53
Life Style ^c						
Church work (monthly)	3.48	2.36	3.55	.78	.458	.10
Resting, loafing, just relaxing (monthly)	4.74	4.26	5.77	.98	.376	.04
Movies (monthly)	.78	1.41	3.26	8.68	.000	1.45
Spectator sports (quarterly)	1.67	5.66	7.72	1.76	.176	.30
Symphonies, operas, ballet theater (quarterly)	3.04	2.08	4.00	.68	.508	-.73
Individual and team sports (quarterly)	17.37	15.99	17.58	.04	.956	-.39
Snow skiing (yearly)	8.44	13.96	13.01	.18	.840	-.51
Camping, hiking, backpacking (yearly)	2.93	14.89	10.37	.95	.390	-.01
Vacations of a weekend or longer (yearly)	3.89	4.85	4.55	.49	.614	.06
Demographics ^d						
Age (years)	52.37	40.18	38.33	7.20	.001	-.81
Sex (0=male; 1=female)	.70	.58	.42	3.67	.027	-.52
Education (1=H.S.; 2=some college; 3=college degree; 4=graduate degree)	2.00	2.40	2.29	2.31	.103	.16
Background (0=rural; 1=urban)	.67	.74	.73	.25	.777	.12
Occupational prestige (1963 NORC scale)	70.33	71.31	70.15	.14	.867	-.18
Marital status (0=single; 1=married)	.59	.59	.64	.27	.761	-.17
Reads a newsweekly magazine (0=no; 1=yes)	.59	.55	.62	.35	.707	-.14
Reads Reader's Digest	.41	.34	.33	.28	.755	.01
Reads Playboy	.11	.10	.18	1.07	.345	-.18
Reads glamour magazines	.19	.18	.16	.03	.967	.00
Reads home-oriented magazines	.30	.36	.29	.53	.588	.39
Television viewing (7-point scale)	2.41	2.14	2.27	.51	.601	.02
Newspaper reading (minutes per day)	34.33	32.41	27.68	.95	.390	-.10
Income (6-point scale)	2.15	3.05	2.88	3.18	.044	.51
Number of children (1=1-2; 2=3-4; 3=5 or more)	1.33	1.11	1.19	.56	.572	.16
Prefers rock music radio programming	.07	.08	.26	6.16	.003	-.53
Prefers contemporary popular programming	.37	.38	.27	.97	.382	-.96
Prefers easy listening radio programming	.52	.32	.29	2.43	.091	-.94
Prefers country music programming	.04	.16	.12	1.44	.241	-.48

^aNo significant canonical functions. Therefore, no coefficients or centroids are given.

^bFirst standardized canonical function significant at $p < .001$. Group centroids are: Non-patrons, $-.67$; Light patrons, $-.19$; Heavy patrons, $.46$.

^cFirst standardized canonical function significant at $p < .001$. Group centroids are: Non-patrons, $-.62$; Light patrons, $-.24$; Heavy patrons, $.50$.

^dFirst standardized canonical function significant at $p < .01$. Group centroids are: Non-patrons, -1.18 ; Light patrons, $.15$; Heavy patrons, $.28$.

involved, it appears market potential lies at three levels.

First, FFR management may consider merely altering the present menu by adding or substituting specific items of obvious or promotable nutrition content. For example, fruit juices can supplement the popular carbonated beverages. Second, it may be profitable to offer a complete set of menu items to satisfy the selection needs of the nutrition oriented market segment. Here, an integrated set of the salads, soups and other complementary items now being offered by some FFR chains can be provided for the alternative segment. Third, it may be profitable to focus completely on the needs of those concerned with nutrition. In this case, the fast food restaurant would design and promote its food offerings specifically to meet the needs of this target segment.

In short, this research has shown the existence of a market segment that may be succinctly characterized in terms of its interest in the nutrition content of the foods it consumes. This finding does not obviate the need to consider such attributes of the food served as taste, price, and appearance. This study does, however, provide strong support for further research into the nature of the potentially profitable market segment.

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AN EXAMINATION OF ADVERTISING EXECUTION RELATED COGNITIONS
AS MEDIATORS OF COMMERCIAL MESSAGE ACCEPTANCE

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Abstract

Past studies of cognitive responses to advertising messages have focused primarily on thoughts related to the product and/or the message. This study examines the occurrence of thoughts evaluating the execution of the commercial message and their relationship to message acceptance.

Introduction

The use of cognitive responses or thoughts resulting from message evoked thinking as a way of studying advertising communication effects has received considerable attention in the marketing literature over the past few years (Belch, 1981; Calder and Sternthal, 1980; Mazis, 1975; Olson, Toy and Dover, 1977; Wilson and Muddersoglou, 1979; Wright, 1973). The cognitive response perspective to studying communication effects suggests that message recipients rely heavily upon the results of their internal evaluative processes - which are reflected in spontaneous cognitive cues - rather than on message content in arriving at an affective position regarding a persuasive communication. It is also assumed that message acceptance can be modeled in terms of the cognitive cues generated by a message recipient.¹

Different types of persuasive communications may evoke a variety of cognitive responses ranging from simple rehearsal of message content to highly evaluative reasoning concerning the acceptance or rejection of an advocate's position. A number of different categorization schemes have been used by researchers to classify the different mediating responses that are evoked by a persuasive message. Generally, the classification system used depends upon the process of concern in the study and attempts to use the verbalizations as an indication that the process occurred.

The most prevalent classification scheme identifies thoughts indicating that counterarguing or support-arguing processes are occurring. The former process produces message evoked thoughts opposing the position advocated in the message while the latter produces thoughts affirming the message assertions. Evidence that the generation of counterarguments decreases one's probability of yielding to a persuasive communication while the generation of support-arguments increases the tendency has been shown in a number of studies (Belch, 1981; Brock, 1967; Olson, Toy and Dover, 1978; Wright, 1973). Variations in this type of categorization has also been used whereby classification attempts to reflect reactions to specific parts of the message. Examples include Roberts and Maccoby's "point counterargument" (disagreement with an assertion's logic or content) versus "conclusion counterargument" (disagreement with a stated conclusion) and Ray, Ward, and Lesser's (1973) "situation counterargument" (Disagreement or challenge of a scenario depicted in a text).

In addition to counterarguments and support-arguments, source oriented thoughts which relate to thinking about

the message source or style of argument have also been used in several studies (Gillig and Greenwald, 1974; Roberts and Maccoby, 1973; Wright, 1973). While source derogations (statements expressing distrust, dislike or disapproval for the communicator and/or the approach taken in presenting the message) have been the most prevalent source oriented categorization used, several studies have used a positive counterpart, source bolstering, which attempts to capture positive feelings toward the communicator or the message style (Belch, 1981; Swasy, 1980).

The classification of cognitive responses into the categories discussed above attempts to reflect specific processes that are distinct from a final attitude expression. However, in some studies global attitude expressions have been counted as counterarguments or support-arguments (Cacioppo and Petty, 1979; Petty and Cacioppo, 1976) while some studies have categorized responses mainly in terms of valence using general categories such as positive thoughts or negative thoughts (Cacioppo and Petty, 1979; Calder and Sternthal, 1980).

While the classification schemes discussed above represent the most popular ways of classifying cognitive responses, other categorizations and definitions have been used including "connections" (Krugman, 1967), emotionality of responses (Miller and Baron, 1973) and problem framing thoughts (Wright and Ripp, 1980). According to Krugman, connections represent a process whereby a message recipient relates message content to one's own personal experiences or situation. Krugman's premise was that the generation of connections increases involvement with the message, thus heightening message processing activity and the probability of initiating attitude or preference deliberations for the product. Classification of thoughts by emotionality involves consideration of whether the response represents objective, logical ramifications or emotional reactions such as belief defenses. Finally, problem framing thoughts refer to the phase of preference deliberation whereby thoughts about which factors to consider or what comparison procedure to try during preliminary preference deliberations are considered.

The review presented above suggests that while there have been some variations in the categorizations used in studies examining cognitive responses, the primary emphasis has been on thoughts dealing with the message itself, i.e., arguments made in the message, the source of the message or the presentation style. Since most of this research has dealt with either print or audio stimuli where the primary focus is on the message arguments, these message related categorizations are logical. However when a more complex stimulus such as a television commercial is presented, these message laden categorizations may not be entirely representative of the cognitive processes engaged in by message recipients. Many of the thoughts generated in response to a television commercial may concern the execution of the advertisement rather than the message arguments per se. These thoughts may include reactions to factors such as the creative style used, visual effects, voice tones, actors, colors, etc. The amount of cognitive processing devoted to execution of the commercial has not received any empirical attention in studies of cognitive response. This is due primarily to the fact that cognitive response studies have not used television commercials as message stimuli. The one exception is a study

¹See Wright (1980) for an excellent review of theoretical and methodological issues concerning the use of cognitive responses in examining communication effects.

by Calder and Sternthal (1980) of advertising wearout. However, in this study the cognitive response instructions asked subjects to enumerate their thoughts relevant to using each of the advertised products. These instructions would suppress the tendency to produce thoughts concerning the execution of the commercial.

The objective of this study is to examine the occurrence of advertising execution related thoughts to commercial messages and the relationship of these thoughts to message acceptance measures (attitude and purchase intention). The occurrence of these thoughts should be of interest to advertisers, particularly if they mediate subsequent evaluations of the commercial message and advertised product.

Method

The data for this study was collected as part of an investigation examining the effects of advertising message structure and repetition on cognitive responses and their relationship to message acceptance. In the study the effect of four types of commercial messages for a new, fictitious brand of toothpaste were examined across three levels of exposure (one, three, five). All four of the commercials, which were produced for this study, made the same claims for the product. A one-hour television show was videotaped and used as the program context for the commercials. In addition to the stimulus commercial used in each experimental condition, ten other commercials which were left in the show were also seen. In all exposure conditions the stimulus commercial appeared at the end of the program and was the last commercial seen by the subjects.

A total of 260 subjects, recruited from church groups, viewed the program and various commercials under the assumption that they were participating in a research project evaluating current issues in television programming. Immediately after the program ended and the last commercial was shown, the subjects were read the cognitive response instructions and were given two minutes to list their thoughts to the stimulus commercial. After the cognitive response task for the stimulus commercial was completed, the subjects were asked to list their thoughts for one of the national brand commercials which appeared in the program. This was done in order to allow for a comparison of cognitive responses for the stimulus commercial with a national brand advertisement. The final task for the subjects was to respond to a set of dependent measures concerning their evaluation of the commercials and the products advertised. These measures included attitude and purchase intention measures for the advertised products.

The cognitive response classification scheme used for this study included three major categories of responses: product/message related thoughts, repetition related thoughts and advertising execution related thoughts. The product/message related evaluations included those of counterargument, support-argument, source derogations and curiosity thoughts defined by Wright (1973) as well as the categories of simple affirmations and simple disaffirmations described by Beaber (1975). An additional category, source bolstering, was also used. This categorization is the positive counterpart of source derogation in that the thought is positive in valence and is directed at the communicator or the approach taken by the advertiser.

Repetition related evaluations included any evaluation that addressed the fact that the commercial was seen more than one time in the program. This category was used since the multiple exposure condition subjects produced a number of thoughts addressing the repetition of the stimulus commercial. The third major category used

was that of advertising execution related responses. Ad-execution related thoughts were defined as statements directed at the execution of the commercial and included thoughts concerning the quality of the commercial, the creative style used, voice tones, colors, visual effects, etc. These thoughts were coded as being either positive or negative in valence. It should be noted that advertising execution related thoughts are distinct from source derogations and source bolsters. The latter two thoughts reflect a "message discounting" process resulting from thinking about the message source or style of argument while ad-execution type responses represent a reaction to the execution of the commercial rather than the message.

A three-judge panel was used to code the cognitive response protocols. The judges were given operational definitions of the response categories described above and were trained in the application of these definitions until each had a good understanding of the coding scheme and coding task. The scoring convention adopted for this study was as follows: if at least two of the three judges agreed in rating a cognition, that rating was assigned to the thought. Unanimous agreement among the three judges was achieved for 54.5% of the cognitions. Two of the three judges agreed on another 33.4% of the cognitions. Thus the model scoring convention resulted in a coding of 87.9% of the cognitions on the initial attempt. The remaining responses were coded by having the researcher serve as a fourth judge. The researcher's judgment agreed with one of the previous judges' categorizations on 95% of the remaining responses. Those cognitions which could not be classified were not used in the analysis.

An estimate of reliability for the protocol scoring was performed by calculating estimates of inter-judge reliability in assigning category scores to a subject's protocol. This analysis focuses on the agreement among judges regarding the frequency of each type of thought in the subject's protocol. This analysis of variance approach to reliability (Winer, 1971) was performed for each of the cognitive response categories used and yielded the following inter-judge reliability coefficients: counterarguments - .89, source derogations - .82, support arguments - .94, source bolstering - .85, simple affirmations - .80, simple disaffirmations - .69, curiosity thoughts - .95, repetition related positive - .92, repetition related negative - .95, positive execution - .82, negative execution - .90 and irrelevant - .90.

Overall, the evidence provided by the reliability estimates, along with the high percentage of agreement in the modal scoring convention, suggests that the coding definitions and procedures used in this study were successful in categorizing the responses given in the thought protocols.

Results

The overall distribution of cognitive responses to the stimulus commercials is presented in [Table 1](#). As can be seen in this table, the traditional product/message related cognitions account for a majority of the responses generated by message recipients. These responses collectively account for 63% of the total thoughts generated with counterarguments, support-arguments and source derogations comprising the large majority of the responses. Examination of [Table 1](#) also reveals that advertising execution related thoughts account for 28% of the responses to the stimulus commercials. Particularly prevalent are negative execution thoughts which comprise nearly 22% of the total thoughts generated by the subjects.

These results suggest that a significant amount of

TABLE 1
DISTRIBUTION OF COGNITIVE RESPONSE
FOR STIMULUS COMMERCIALS

Category	Number	Percent of Total
Counterarguments	118	15.9
Source Derogations	112	15.1
Support-arguments	80	10.8
Source Bolsters	48	6.5
Simple Disaffirmations	39	5.3
Simple Affirmations	24	3.3
Curiosity Thoughts	48	6.5
Repetition Related Positive	2	.1
Repetition Related Negative	65	8.8
Positive Ad-Execution	43	5.8
Negative Ad-Execution	162	21.9
Total	741	

cognitive ideation is devoted to evaluating the execution of a commercial rather than to the processing of the message arguments per se. One possible explanation for the high percentage of negative ad-execution responses is that the commercials used in this study did not have any people or action in them nor were they as creative as the national brand advertisements which appeared in the program. In order to test this possibility, the cognitive responses taken for the national brand commercial, which did contain people and action, were also examined. The distribution of responses to this commercial is presented in Table 2.

TABLE 2
DISTRIBUTION OF COGNITIVE RESPONSES
FOR NATIONAL BRAND COMMERCIAL

Category	Number	Percent of Total
Counterarguments	18	5.1
Source Derogations	46	12.9
Support-arguments	55	15.4
Source Bolsters	31	8.7
Simple Disaffirmations	26	7.3
Simple Affirmations	40	11.2
Curiosity Thoughts	35	9.8
Positive Execution	63	17.7
Negative Execution	42	11.9
Total	356	

Examination of the distribution of responses to the national brand commercial shows that nearly 30% of the responses to this advertisement were execution type thoughts. However, positive execution thoughts occurred more frequently than did negative execution thoughts as 18% of the responses were positive evaluations for the national brand commercial while 12% were negative.

The results presented thus far suggest that recipients of commercial messages engage in more than just evaluation of the advertising message in their processing of television commercials. As shown above, nearly a third of the cognitive responses generated to the stimulus commercial and national brand commercial were ad-execution type thoughts. While evaluation of the commercial quality and style appears to be common among viewers, perhaps even more important is the question of whether these execution related thoughts are mediating message acceptance and reactions toward the product. Table 3 presents the correlations of the individual product/message related cognitive responses with the message acceptance measures of attitude and purchase intention as well as the correlations between the advertising execution thoughts and the message acceptance measures.² As

²Simple affirmations and simple disaffirmations were not examined since the frequency of these responses was low and may have yielded spurious results.

can be seen in Table 3, the strongest relationship occurs between the negative execution thoughts and the message acceptance measures. With respect to the product/message related thoughts, the strongest mediator for both attitudes and purchase intention is source bolstering.

TABLE 3
CORRELATIONS OF COGNITIVE RESPONSES WITH
MESSAGE ACCEPTANCE MEASURES

Cognitive Response	Attitude	Purchase Intention
Counterarguments	-.136 ^b	-.128 ^b
Source Derogations	-.187 ^a	-.106
Support Arguments	.232 ^a	.110
Negative Ad-Execution	-.295 ^a	-.238 ^a
Positive Ad-Execution	.153 ^b	.119
Source Bolsters	.258 ^a	.190 ^a

a - significant at .01 level

b - significant at .05 level

It is interesting to note that negative execution thoughts show a much stronger relationship to the message acceptance measures than do counterarguments or source derogations. This finding may suggest that the message recipients' reaction to the commercial style and quality is just as important as the message arguments in determining subsequent evaluation of the product. It has been argued that television is a low involvement medium (Krugman, 1965). This may result in viewers focusing more upon the commercial style and execution than on the active processing of the message arguments presented in the ad.

Conclusions

The purpose of this paper has been to examine the occurrence of cognitive processing to commercial messages that includes evaluation of the message style and execution as well as reactions to the product/message arguments. The findings presented suggest that cognitive processing of commercials does include more than just evaluations and reactions to the message per se. Evaluation of commercial execution related thoughts show a significant relationship to message acceptance as measured by attitudes and purchase intentions.

The use of television commercials as a message stimulus in studies of cognitive response is very limited, as print and audio are the general message modalities employed in these studies. For audio and print messages (particularly those where a visual representation of the product is absent) there is little other than the message to compete for respondents' attention. Thus the generation of thoughts that focus primarily on the message arguments is logical. However, a commercial represents a more complex message stimulus and is likely to evoke thoughts concerning the ad itself as well as the message arguments. Researchers investigating the effects of television commercials should recognize that other things besides active processing of the message arguments may be occurring. The evaluation of the commercial execution appears to be a prevalent and important part of the cognitive processing for an advertising message.

These findings also suggest that advertising pretesting should be concerned with the viewers' evaluation of the commercial as well as their reactions to message content. This may be particularly true in the case of new products and commercials as initial evaluation may tend to focus more on the commercial itself and its creative style than upon message arguments. For more established

brands, viewers may be aware of the product's features and attributes and less likely to evaluate the product based upon their reactions to the commercial.

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CHILDREN'S SELF-PERCEPTIONS OF
THEIR PARTICIPATION IN RETAIL STORE PATRONAGE DECISIONS

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Abstract

The authors note the relative absence of studies of children's perceptions of their participation in retail store decisions. A sample of 121 fifth, sixth, seventh, and eighth-graders tested across four stages of three product decision areas revealed sex-, age-, product-, and subdecision-specific findings implying the operation of complex variables in the child consumer socialization process.

Introduction

While the vast majority of theories, conceptualizations, and empirical research on consumer behavior focuses on individual constructs and decision making processes, there is a substantial subset of concern for joint purchase decision making. The rationale for studying the family rather than the individual consumer stems from the observation that a great many purchases either implicitly pertain to joint decision making as a result of multiple family users of the product. Consistent with the fact that only a relatively small number of theorists and researchers has been working in the family purchase decision making area, is the fact that most findings and knowledge on this area are meager in comparison to those for individual consumer constructs. Nonetheless, a fairly consistent and widely acknowledged set of findings portrays family decision making as exhibiting systematic variance across: phases in the purchase decision process (e.g., problem recognition, search for information, final decision), subdecisions within the particular product purchase decision (e.g., color, style, brand, features), families in various stages of the family life cycle, and socioeconomic classes.

Within the subset of family purchase decision making research, two groups are clearly identifiable. That is, one body of research pertains strictly to the husband and wife and their perceptions of influence and/or participation in purchase decision making. The other group interprets the term "family" literally and attempts to include the influence and/or participation of children in the purchase decision making process under study. No heated controversy exists between the two groups, and there are logical reasons defending the position of either. The intent of this paper, however, is not to address issues to form a conclusion with regard to the efficacy of one approach over the other, but the present research endeavor does concern the influence of children (as perceived by the children themselves) in certain retail patronage decisions.

When one undertakes a review of the family purchase decision literature, one is immediately struck by the paucity of research on child involvement and influence in purchase decision making. Nonetheless, there are two types of data collection methods which have been used to study child involvement in the purchase decision making process. An early study in the marketing literature is the one conducted and reported by Wells and LoSciuto (1966) who made observations of mothers and children in a retail store environment. Their study, while primarily an expository one for the observation method, revealed differential influence of children across three product categories. The greatest

influence was observed in cereal purchase decision while less influence, although still distinct, occurred for candy and detergent purchases. A more recent observation study is reported by Atkin (1978) who observed interaction of parents and children in cereal selection. The findings revealed that older children tended to have higher rates of request initiation than did younger children and middle class children tended to have higher rates than did those from the working class. Atkin observed no distinct sex differences.

More studies on family purchase decision making have been conducted with self report methods than have been conducted with observation. At the same time, a wider range of purchase decision areas and potential explanatory variables have been investigated. For example, Bery and Pollay (1968) studied the breakfast cereal brand choice decision and determined that child assertiveness was not associated with brand choice, but child-centeredness of mothers was associated, and they therefore posited a "gate keeper" effect. Mehortra and Torges (1977) investigated a wide spectrum of explanatory demographics, psychographics, and media usage variables and determined that the likelihood of a mother yielding to children influence was a function of product-specific variables. Ward and Wackman (1972) determined that parental yielding was positively related to the age of the child. Jenkins (1978) determined that children influence as perceived by parents varied as a function of the product category and was greatest in vacation decisions. He also determined that the amount of perceived influence was positively related to a number of variables, including the number of children in the family, the age of the husband, and the number of years married.

Finally, a handful of studies have been addressed at what may be considered to be "retail" purchase decision areas. Nelson (1978) discovered high versus low-child involvement families with regard to pizza restaurant choice decisions. Similarly, Nelson determined that parents of large families perceived more child influence than those in small families. Szybillo and Sosaine (1977) investigated fast food restaurant patronage decisions and determined that children were substantially involved in various decisions and that involvement differed by subdecision. Tootelian and Windeshauser (1976), in a comparative analysis over a 10 year period, concluded that the trend of teenager involvement was for an increased amount of shopping activity with other family members, although personal attire and entertainment items tended to be areas where teenagers acted more independently. Finally, Moschis, Moore and Stephens (1977) reported in their study with 6th, 7th, and 8th graders that shopping goods such as clothing tend to be purchased jointly by adolescents and family members, whereas speciality items tend not to be. They postulate that adolescent-family involvement tends to be functional of social visibility and the price of the product purchased. Despite the fact that they referenced literature suggesting that females are more susceptible to peer influence than males they found no significant sex differences in shoes and clothing but did find significantly more independence for females in health care purchases, shirts, and jeans purchases. Also reported by these authors was a positive association between the amount of purchasing independence and age as well as a curvilinear relationship

across social classes.

Research Problem

In essence, then the current state of knowledge regarding the relative participation or influence of children in various retail store choice decisions is at a very early, descriptive stage. It appears that child involvement varies by product type, subdecision, sex, and age. The empirical evidence, however, is not definitive, and there is a clear need for further investigation. The focal point of the present research was aimed at children in the 5th, 6th, 7th, and 8th grades. These grades and corresponding ages were chosen as they define the "transition years" as a child progresses from grammar school to junior high school. Personal observation, intuition, experience, and isolated research findings are all in agreement that this is an especially important time period for children as they experience increasing social pressure from their peers and seek lessened parental control over their activities.

The focal decisions of the research effort were four stages in the retail store choice process. These were: (1) generic need recognition; (2) involvement or participation in suggesting stores to patronize; (3) actual store selection; and (4) engaging in store visitations. At the same time, the research took into consideration three distinct type of products. Based on the findings of previous research, it was decided to use shoes, a personal attire article, toys and games, a personal entertainment item, and birthday gifts for friends, as an example of gift-giving behavior. In all cases, the degree of perceived child participation was assessed on a scale ranging five points from the anchor, "never" to the end point, "All of the time."

The independent variables under consideration of this study were (1) grade level, as a surrogate for age, (2) sex, (3) family size and (4) amount of discretionary expenditures, operationally defined as the child's weekly allowance.

Research Hypotheses

The hypotheses generated for this research effort emerged from a combination of previously cited findings and intuition.

- Hypothesis 1: Older children will perceive more participation in retail patronage decisions than will younger children.
- Hypothesis 2: Girls will report more participation than will boys for personal attire (shoes) and birthday gifts; whereas, boys will report more participation in purchase decisions for toys and games.
- Hypothesis 3: Children from smaller families will report more participation than will children from larger families.
- Hypothesis 4: Children with more discretionary income (weekly allowance) will report more participation than will those with less discretionary income.

Methodology

The sample in this study consisted of students in the fifth, sixth, seventh, and eighth grades attending the LSU Laboratory School in Baton Rouge. Although this

type of school typically attracts a disproportionate share of its students from the upper-middle socio-economic group, this particular school's student body did include some students from the lower-middle and upper-lower classes. In spite of this range, the authors make no claim that the sample is representative.

Self-administered questionnaires were completed by 121 students. The number of male and female respondents was approximately equal, as were the number of students from each of the four grades. The questionnaire used in the study consisted of three types of questions: (1) demographic questions about age, sex, number of children in family, grade level, father's job, mother's job, and amount of weekly allowance which were mostly open-ended; (2) behavioral questions which asked for the extent of participation of the mother, father, and the student in each of the four stages of the purchasing process for each of the three products using the following five-point scale: "Never," "Almost Never," "Sometimes," "Most of the Time," "All of the Time;" and (3) store awareness, store patronage, and store media awareness questions relating to each of the three products which asked for open-ended, recall responses. Only the child participation dependent measures were analyzed in this substudy of the larger research endeavor.

Findings

Preliminary analysis addressed the possible presence of multicollinearity in the dependent variables. Pearson product moment correlation coefficients were computed between the 66 pairings of the 12 dependent measures. It was determined that 29 (or approximately 44%) of the correlations were not statistically significant at or below the .10 level. On the other hand, five of the remaining correlation coefficients were found to exceed $\pm .50$. In fact, the highest correlation coefficient was determined to be .60 between selection of a store for a birthday gift and visiting stores for a birthday gift. The results of this analysis led the authors to believe that the multicollinearity problem was present only in a minor sense and that each dependent measure could be analyzed independently.

Analysis then proceeded to tests of research hypotheses. These tests took the forms of significance of differences between means tests. Analysis of variance was used to test for significant differences between grade levels and tests were used to determine differences between boys and girls. For both the family size and weekly allowance independent variables, median splits were approximated based on inspection of the frequencies of responses. For family size, respondents whose families contained three or fewer children constituted the small-family-size group while those with four or more children comprised the large-family-size group. In the instance of weekly allowance, children with an allowance of \$3.00 or less per week constituted the low allowance group while those with an allowance of \$4.00 or more per week defined the high allowance group.

Table 1 contains the grand means for each of the four retail patronage subdecisions for each of three product categories involved. Inspection of these revealed that, in general, the children sampled perceived themselves as having a relatively high degree of participation in the various facets of the decision making process. In fact, these children had the consistent perception of participating in all the decision areas at least "sometimes" or "most of the time." Variance around the means, of course, was evident with an average standard deviation of approximately 1.1.

The investigation of significant differences between

the means for the hypothesized independent variables determined only two instances of significant differences for the postulated weekly allowance variable. In particular, children with more discretionary income perceived themselves somewhat more participative in both the suggestion and selection stages for shoe stores. Similarly, family size was found to designate significant differences in only two instances. Children from smaller families tended to envision themselves as more participative in the selection stage for shoe stores than did children from larger families, and children from larger families saw themselves as somewhat more involved in noticing the need for a birthday gift than did those from smaller families. In essence, neither the discretionary income variable nor the family size variable garnered sufficient support for their respective hypotheses.

A number of significant differences were found, however, for both the sex and grade level independent variables. Table 2 contains a comparative summary of the significant differences in the means between boys and girls, while Table 3 summarizes the Duncan's multiple range tests which were conducted on the instances of significant differences determined by the analysis of variance test by grade levels.

From Table 2 it can be observed, with respect to differences between boys and girls, 6, or 50%, were found. In all but one of these cases, girls perceived themselves as having more participation in various decisions than did boys. The contrary result occurred for recognition of the need to buy toys and games for personal use. Thus, the findings, while lending support to the hypothesis of differences between boys and girls participation, were not sufficiently beyond chance levels across all decision topics.

The findings in Table 3 for grade differences, in contrast, yielded reasonably clear support for the hypothesis of increased participation with increased age, but the support was specific to the shoes purchase alone. Interestingly, the recognition of the need to buy purchase decision results were consistently opposite the hypothesized association. That is, no significant differences were found between grade levels in the recognition of the need to buy shoes, although children in the lower grade levels were found to perceive themselves as having more involvement in the need to recognize both toys and games and friends' birthday gifts than were children in the 8th grade for both instances.

DISCUSSION

Bearing in mind the limitations posed by the sample as outlined in the methodology section, but nonetheless assuming at the moment that the study is sufficiently valid in order to generate conclusions, it seems reasonable to state that child participation in retail store patronage decisions is sex-, age-, product-, and sub-decision-specific. That is, boys tend to be less involved than girls in the various subdecisions for shoe and friends' birthday gift shopping decision, but boys are relatively more participative than girls in the recognition of the need to buy their own toys and games. At the same time, older children tend to be more involved in the store suggestion, store selection and physical shopping for shoes, but younger children tend to be more cognizant of their participation in the recognition of the need to buy toys and games for themselves and birthday gifts for their friends. Neither family size nor amount of discretionary income, as operationalized in this study, possess sufficient predictive power to warrant generalization.

In retrospect, it appears that the decision to isolate

TABLE 1
CHILDREN PARTICIPATION IN RETAIL STORE DECISIONS:
GRAND MEANS*

DECISION TOPIC:	PRODUCT CATEGORY		
	CHILD'S NEW SHOES	CHILD'S TOYS AND GAMES	FRIEND'S BIRTHDAY GIFT
Recognize Need to Buy	4.0	3.8	4.2
Suggests Store(s)	3.8	3.7	3.9
Selects Store(s)	3.8	3.8	3.8
Goes Shopping	4.4	3.9	4.1

* Based on a scale 1 = "Never",...5 = "All of the time"

TABLE 2
SIGNIFICANT DIFFERENCES BETWEEN BOYS' AND GIRLS' PERCEPTIONS OF PARTICIPATION IN DECISIONS*

DECISION TOPIC	BOYS	GIRLS	SIGN. LEVEL
Shoes:			
Recognize Need to Buy	3.9	4.2	n.s.
Suggests Store(s)	3.6	4.1	.01
Selects Store(s)	3.7	3.8	n.s.
Goes Shopping	4.2	4.6	.04
Toys and Games:			
Recognize Need	4.1	3.6	.003
Suggests Store(s)	3.6	3.8	n.s.
Selects Store(s)	3.7	3.8	n.s.
Goes Shopping	3.7	4.0	n.s.
Friend's Gift:			
Recognize Need	3.8	4.6	.0001
Suggests Store(s)	3.7	4.1	.02
Selects Store(s)	3.7	3.9	n.s.
Goes Shopping	3.9	4.3	.10

attention on the "transition years" represented by the grammar school-to-junior high school stage is inappropriate if one wishes to investigate the socialization process in which children learn to become consumers. Hindsight suggests that both the frequency and the importance of various product purchases are functions of the personal and social development of the child. For example, adolescents do tend to become more participative in personal attire purchases, but toys and games, it would seem, appear to decline in relevance. Similarly, friends' birthdays and birthday gift giving are relatively less celebrated in the adolescent years than in the pre-adolescent years. Thus, future studies in this area may be well advised to incorporate both personal relevance and frequency of occurrence factors in the identification of products to be analyzed with regard to the participation, involvement,

or influence of children in retail store patronage decisions.

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TABLE 3
SUMMARY OF DUNCAN'S MULTIPLE RANGE
TEST RESULTS FOR INSTANCES OF
SIGNIFICANT DIFFERENCES BY GRADE LEVEL

DECISION TOPIC	ANOVA/DUNCAN RESULTS
Shoes:	
Recognize Need to Buy	n.s.
Suggests Store(s)	8(4.3): 6(3.4), 5(3.4)*
Selects Store(s)	8(4.3): 6(3.5), 5(3.5)
Goes Shopping	7(4.7): 5(3.9)
Toys and Games:	
Recognize Need to Buy	6(4.3): 8(3.4)
Suggests Store(s)	n.s.
Selects Store(s)	n.s.
Goes Shopping	n.s.
Friends Gift:	
Recognize Need to Buy	7(4.5), 6(4.3): 8(3.8)
Suggests Store(s)	n.s.
Selects Store(s)	n.s.
Goes Shopping	n.s.

*Interpret as grade (mean); ":" designates significant difference at .10 or less between group means; ", " designates no significant difference; grades not indicated are not significantly different from both groups indicated by the ":" divider.

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MALE AND FEMALE HEAVY-USERS OF AN APPAREL PRODUCT CATEGORY:
A COMPARISON OF SEX RELATED SEGMENT PROFILES

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Abstract

Many studies of market segments rely on either heterosexual or female only samples. The research reported in this paper examines male and female usage based segments for an apparel product category in an attempt to determine whether sex-specific profile differences exist. Male and female profiles were developed via multiple discriminant analysis for a variety of life style, shopping behavior, market specific and demographic predictor variables. Although differences were found in the resulting profiles, many useful suggestions are made for further research of sex-specific segments.

Introduction

The evolution of male-female roles in contemporary society is no longer a novel subject. Sparked by various movements whose purposes range from a total change in the culturally prescribed roles for women to staunch preservation of tradition, scholars have provided a steady stream of research results regarding the behavior of females as consumers. Without as much fanfare or attention male consumers have also been permitted to evolve. Noticeably lacking, however, are direct comparisons between market segments moderated by sex. The purpose of this paper is to report one attempt to conduct accepted segmentation analysis with both male and female samples and then compare the resulting profiles. It is the author's contention that male and female consumers of the same product category will present different behavior and life style profiles.

Although demographic variables are commonly used in consumer research, they have given way to more sophisticated profile variables in segmentation studies (Frank, Massey, and Wind 1972; Engel, Fiorillo, and Cayley, ed., 1972). As a result, sex of the respondent is often simply one of a "standard set" of variables included in the analysis of heterosexual segments. Such segmented groups are identified based on product usage, perceived benefits, or some other basis. Research concerning male-female differences can be classified into four general categories. The longest standing category involves the study of husband-wife decisions roles (Engel, Kollat and Blackwell 1978). More recently a great deal of attention has been devoted to differences among working and nonworking women, both single and married (Bartos 1977; Douglas 1975; Joyce and Gultinan 1978; Lazer and Smallwood 1977; McCall 1977). None of this research, however, directly addresses the issue of male-female comparison within market segments.

Another traditional category of research involves masculine-feminine personality traits, as opposed to actual sex of respondent, as a means of identifying groups. Recently revitalized by Tucker, this line of study has not been particularly productive (Tucker 1976; Morris and Cundiff 1971; Gentry and Doering 1977; Burns 1977). In fact, the authors of one paper concluded that "the demographic variable (sex) is a far better predictor variable for differences in attitude or usage than the personality variables," i. e. masculinity-femininity (Gentry and Doering 1977). On the other hand, comparisons of males and females have pro-

duced mixed results where differences were expected. In support of earlier research Schaninger found differences between the sexes in their preferences for colors and words associated with colors (Schaninger 1977). Although their study involved only married adults, Hawes et al noted the "similarity in credit behavior" between female and male consumers (Hawes, Talarzyk, and Blackwell 1976). The latter represents a situation in which expected differences were not revealed. Bellenger et al found differences in general life style segments for patronage behavior among users of certain types of retailers (Bellenger, John, and Bryant 1980). Some of the differences were specifically identified with male or female shoppers.

The study reported in this paper examined a particular segment of the apparel market, heavy-users of slacks and jeans. Usage rate is an established method of identifying meaningful market segments (Twedt 1964; Frank, Massey, and Wind 1972). The practice of segmenting a market by grouping consumers based on behavior and then profiling the groups is known as backward segmentation (Wells 1967). Earlier studies have provided some insight into the profile of general heavy-users of apparel (Baumgarten 1975; Tigert, Ring, and King 1976; Lumpkin, Allen, and Greenberg 1981). They are described as opinion leaders with a high interest in fashion, socioeconomically upscale, credit users, self-confident shoppers who enjoy shopping. These findings help establish expectations for further research efforts involving profiles of apparel heavy-users.

This study differs from previous research in two respects. First, it focuses on purchase behavior within a relatively narrow range of apparel products. Second, segments are identified separately for males and females before the profiling analysis is conducted. If the premise of this study is correct, the resulting male and female heavy-user profiles will differ.

Methodology

Sample

The sample for this study was drawn from the Market Facts Mail Panel in the fall of 1980. With a few exceptions the sample was demographically balanced against the population. Specifically, the sample was slightly upscale on income, urban (SMSA's only) and resided in five of the nine U. S. Census districts. A total of 3,650 households were selected with both male and female heads of household included in married households. Of a total 4,356 sample members 2,854 returned completed questionnaires. Among the returns, 2,390 were usable for this study, 1,404 females and 986 males.

The Questionnaire

A self-administered questionnaire was developed and pretested for the survey of which this study is a part. The questionnaire included shopping orientations, patronage and purchasing behavior for wearing apparel and lifestyle patterns. Socioeconomic and demographic

variables were matched to the responding households from Market Facts Panel files. Among the purchasing behavior questions were items concerning the amount of money spent during the previous twelve months on each of a number of apparel categories. The categories were developed in cooperation with several major apparel retailers and manufacturers in order to ensure meaningful groups of apparel products and identifying phrases.

The psychographic measures included both general and fashion specific items. Some were developed for this study, and others were drawn from previous research (Darden and Reynolds 1971; Darden and Ashton 1974; Wells and Tigert 1971). A pretest inventory was factor analyzed using the Statistical Analysis System (SAS) (Barr et al, 1976) principal axes factor program with varimax rotation. Approximately 165 six-point Likert-type scale items were subsequently reduced to the 132 used in this study. They were designed to measure fashion interest, opinion leadership, problem recognition and a number of general lifestyle characteristics.

Analysis

Further data reduction was accomplished by repeating the factor analysis procedure described above with the lifestyle question responses in the actual survey. A total of 27 factors with minimum factor loadings of .50 were extracted. Cronbach's Alpha coefficient ranged from .52 to .86 for these 27 factors, indicating acceptable scale reliability (Cronbach 1951). The variables in each of the three groupings (demographic/ socio-economic, lifestyles/shopping orientations, and market-related) are available from the authors.

The technique selected for differentiating between heavy- and light-users was discriminant analysis. The Statistical Package for the Social Sciences (SPSS) (Nie et al. 1975) stepwise discriminant analysis routine was used and separate analyses were run for the male and female samples. The discriminant function was validated by using half of each sample as an analysis group and the hold-out half as a validation group (Frank, Massey and Morrison 1965). This procedure allows the analyst to compare classification of the hold-out group results with a chance criterion. The result is an indication of overall significance of the discriminant function.

Respondents reported the total dollar amount spent during the last year for "slacks/jeans." Heavy- and light-user groups were identified as those belonging to the upper and lower quartiles of the frequency distribution of amounts spent. Among males, 379 light-users and 260 heavy-users were identified. There were 429 light-users and 368 heavy-users among female respondents. While the dollar amount spent, as a measure of usage, does not fit the traditional definition, it is considered appropriate in the case of apparel (Lumpkin, Allen, and Greenberg 1981). Nominal scale demographic and socioeconomic variables were converted to dummy variables for use in discriminant analysis.

Findings

Female Heavy-Users of Slacks/Jeans

The discriminant analysis results for both males and females are illustrated in **Table 1**. A total of 20 variables entered the function for the female sample. Of these 20, the difference between group means for heavy- and light-users was significant at the .05 level or less in 12 cases. Two more variables had different means with significance levels of .10 or less. Six variables which entered the function did not exhibit significant differences between group means.

The resulting profile of a female heavy-user of slacks/jeans is a shopping opinion leader who shops early in the season at specialty and department stores. She is below the age of 55, single, a sports enthusiast and has formal education beyond the high school diploma. She is a financial optimist who uses credit. Television is a relatively important source of information when shopping for apparel, but store location is relatively unimportant. She is slightly less able to arrange for time in the day to do what she wants and slightly more inclined to order apparel by phone or mail from department stores.

Male Heavy-Users of Slacks/Jeans

Referring again to **Table 1**, it is evident that the male heavy-user profile contains fewer variables than did the female profile. A total of 8 variables loaded into the discriminant function. Six variables exhibit significant differences between group means at .05 level or below. The group means for one variable are only significant at the .10 level, and not significant at all for the one remaining variable.

The male heavy-user is an innovator who shops early in the season at specialty stores. He is also a financial optimist who is probably earning more than \$15,000 (1979 dollars). The male heavy-user is also a dieter. Finally, he is "style conscious," i. e., he tends to experience problem recognition in the decision process for apparel by changing his desired state of affairs rather than experiencing a change in the actual state of affairs. The latter involves the presence of a developmental scale of consumer problem recognition in this study. The definition of problem recognition to which this finding relates is provided by Engel, Kollat and Blackwell (1968).

The classification results for the male sample are shown in **Table 2a**. Again, the hit ratios of 70.89 percent and 67.80 percent for analysis and holdout groups respectively are significantly better than would be expected by chance alone. Although the function appears to be more stable (i. e., less difference between analysis and hold-out results), it predicts membership in the light-user group with greater stability than the heavy-user group. The latter finding is expected to some degree due to the uneven group sizes (overall 40 percent heavy-users). Nevertheless, the results for the male sample suggest a more stable function.

Male-Female Profile Differences

As noted earlier, the male heavy-user profile contains half the significant variables as does the female profile. In spite of its brevity the male profile predicts as well, if not better, than the female profile. Overlaps occur in four areas. Both male and female heavy-users shop early in the season at specialty stores. That finding is consistent with their being innovators (male) and shopping opinion leaders (female). They are both financial optimists. Since there is probably a high degree of correlation between this trait and the use of credit, the absence of credit usage in the male profile is not unexpected. Beyond this point of comparison, the female profile paints a much richer picture of the heavy user than does the male profile. There is nothing in the findings upon which to further elaborate this difference in results. There are, however, some interesting conclusions to be drawn and recommendations for further research.

Implications

The study reported in this paper was undertaken to determine whether backward profiling of male and female heavy-users of an apparel product category would produce different results. Based on the findings, the authors conclude that the sex-oriented profiles are significantly different in some respects, but also similar in other respects. Overall, it appears likely that further research along these lines would be worthwhile.

Male and female heavy-users of pants/jeans share some basic characteristics as early shoppers who play a role in the diffusion process for seasonal apparel products. Males are innovators and females are shopping opinion leaders. The survey instrument included several multi-item scales for variables which relate to general and fashion specific opinion leadership and clothing interest. While "Shopping Opinion Leader" did not appear in the male profile, the difference between group means for that variable was significant ($p < .005$). The same is true among males for "Generalized Opinion Leader", "Shopping Enthusiast", "Fashion Opinion Leader", and "Clothing Interest." In terms of the characteristics of heavy-users these findings suggest that multicollinearity among scores for similar constructs reduces the number of variables entering the discriminant analysis.

Other explanations exist, however, to account for the differences in the profiles. Multicollinearity may be more common for males than females because males are more homogeneous as clothing shoppers. The instruments from which the questionnaire was derived tend to arise from shopper studies with predominantly female samples. When validated with heterosexual samples, the scales work well, and any female bias is unnoticed. Thus, it is possible for these various scales to yield high internal consistency and good discrimination scores with heterosexual samples, but in fact discriminate better among females than among males. Whether the cause is a function of instrumentation or homogeneous male traits, further research is needed to clarify the profile differences.

If the findings of this study are accurate, further research will be needed to develop richer profiles of the male shopper. The prospect of aggressive market development for male apparel products would be greatly enhanced if research techniques were developed uniquely for that purpose. The traditional female bias in shopping behavior studies has left the male shopper cloaked in a pale of anonymity.

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TABLE 1
RESULTS OF DISCRIMINANT ANALYSIS

Variable	Females Step	Males Step
Shops At Beginning of Season	1*	1*
Age Is 55 Yrs. Or More***	2*	
Shopping Opinion Leader	3*	
Importance of Store Location	4*	
Specialty Store Shopper	5*	3*
Fine Arts Enthusiast	6*	
Single***	7*	
Credit User	8*	
Importance of Credit Availability	9	
High School Graduate or Less***	10*	
Importance of TV	11*	
Self-Confident Shopper	12	
Financial Optimist	13*	2*
Importance of Store Personnel	14	
Department Store Shopper	15*	
"My Time" Orientation	16**	
Sports Enthusiast	17*	
Importance of Newspaper	18	
Orders from Dept. Stores	19**	
Increased Use of Mail Order	20	
Dieter		4*
Fashion Innovator		5*
Apparel Conformist		6
Style Conscious (Desirest)		7*
Income Between 12K and 15K***		8**

* Univariate F-test of difference between group means significant with $p < .05$

** Univariate F-test of difference between group means significant with $p < .10$

*** Zero-one dummy variable

TABLE 2
DISCRIMINANT FUNCTION CLASSIFICATION RESULTS

2a

Male Heavy-and Light-Users of Slacks/Jeans

Analysis Sample		Predicted Group Membership	
Actual Group	No. (Pct.) of Cases	Heavy-Users	Light-Users
Heavy-Users	173 (56.0)	137 (77.4)	40 (22.6)
Light-Users	139 (44.0)	52 (37.4)	87 (62.6)
Total	312 (100.0)	189 (59.8)	127 (40.2)
Percent Correctly Classified: 70.89			
Hold-Out Sample		Predicted Group Membership	
Actual Group	No. (Pct.) of Cases	Heavy-Users	Light-Users
Heavy-Users	202 (62.5)	155 (76.7)	47 (23.3)
Light-Users	121 (37.5)	57 (47.1)	64 (52.9)
Total		212 (65.6)	111 (34.4)
Percent Correctly Classified: 67.80			

2b

Female Heavy-and Light-Users of Slacks/Jeans

Analysis Sample		Predicted Group Membership	
Actual Group	No. (Pct.) of Cases	Heavy -Users	Light-Users
Heavy-Users	219 (55.9)	166 (75.8)	53 (24.2)
Light-Users	173 (44.1)	56 (32.4)	117 (67.6)
Total	392 (100.0)	222 (56.6)	170 (43.4)
Percent Correctly Classified: 72.19			
Hold-Out Sample		Predicted Group Membership	
Actual Group	No. (Pct.) of Cases	Heavy-Users	Light-Users
Heavy-Users	210 (51.9)	159 (75.7)	51 (24.3)
Light-Users	195 (48.1)	91 (46.7)	104 (53.3)
Total	405 (100.0)	250 (61.7)	155 (38.3)
Percent Correctly Classified: 64.94			

LEISURE AND CONSUMER BEHAVIOR:
A "SOCIAL INDICATORS" UPDATE

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BACKGROUND

It is reported that Americans have revised the traditional definition of success. According to that view, wasteful materialism is increasingly being rejected along with a lifelong competition for wealth and privilege. Instead, nonmaterial standards of personal growth and development are favored. Along with such a development, there is a growing skepticism of big governmental and private organizations. There is a growing recognition that social values, attitudes and beliefs will have a decisive influence on economic growth. Growth is no longer a dominant value and increasingly the public is concerned with the price tag of growth in terms of other values that are considered important. (Conrad Tauber, 1981: viii)

Two years ago in a paper in the Journal of the Academy of Marketing Science entitled, "Leisure and Consumer Behavior" this author attempted to outline the study of leisure, and synthesize some of the many facets and implications of this heretofore relatively little-studied (in marketing) aspect of human social (and consumption) behavior. The article (Hawes, 1979: 391-403) pointed out that, while leisure is typically contrasted with work, in fact it should be viewed as discretionary time instead. Paid work time, non-discretionary time and discretionary time are probably the fewest meaningful divisions into which total time may be divided. A prevalent synonym for discretionary time is "free-time"-- "the time not devoted to paid work, household and family maintenance, personal care, or sleep." (Peterson, 1981: 170)

While conceptually, leisure is a state of mind, most people (77 percent in one large study) view it in terms of discretionary time (Neulinger, 1974: 24) i.e., leisure-time. For nearly a decade now, it has been recognized that, in advanced industrialized and post-industrial nations, leisure-related values are increasingly dominating and dictating work-related values, rather than the traditional reverse relationship. (Dumazedier, 1974: 122-125)

In terms of marketing implications, this earlier paper pointed out the need to understand the make-up and type of perceptions of the leisure-time (or recreation) experience; the role of demographic and personality factors in both the choice of, and satisfaction with, leisure-time or recreational pursuits; and the characteristics of one's "orientation toward leisure." More directly in a product/service context, the relative roles of time-producing and time-consuming goods and services need to be understood; as well as the bases for trading-off money and energy for either more leisure-time or a more highly valued subjective experience for the time investment in a leisure-time pursuit.

This paper summarizes some recently published evidence for the changing values and attitudes toward work and leisure, and trends in the involvement in leisure-time pursuits. It is a reporting/synthesis of related material in several recent publications, including in particular, Social Indicators III (Bureau of the Census, 1980), The Third Nationwide Outdoor Recreation Plan (Heritage Conservation and Recreation Service, 1979), and Exchanging Earnings for Leisure: Findings of an Exploratory National Survey on Work Time Preferences (Employment and Training Administration, 1980). The

thrust of the paper is to suggest the possibilities, for both marketing management and consumer behavior researchers, in the anticipated growth and changes in leisure-time availability and uses during the 1980's.

SOCIAL INDICATORS, MARKETING AND LEISURE

Back in 1972, 1973 and 1974 the American Marketing Association held three Social Indicators Conferences (Clewett and Olson, 1974). Great promise was foretold for the utility of social indicators to the marketing process. In retrospect, one wonders whether this was just another example of the discipline's penchant for "fads." A review of AMA and AMS literature for the last five years revealed only one article dealing with the topic of social indicators (Gross and Wolpert, 1978).

What are Social Indicators?

Contemporary interest in social indicators (SI) as a supplement to the nation's economic indicators apparently dates from about 1962 (Hamburger, 1974: 45). There seems to be general agreement that SI are (or should be) longitudinal measures of social output in relation to defined social goals, i.e., measures of the "quality of life;" "indices to socially important conditions of the society" in the words of one mainstream researcher (Hamburger, 1974: 64). A current definition of SI is "a subset of social measurements and other forms of evidence that inform us about current conditions and emerging trends with respect to those aspects that relate to human well-being or to major areas of social concern" (Johnston and Corley, 1981: 237). These authors go on to state that "... social indicators may be described as filtering devices which aid our comprehension of the broad significance of changing social conditions and trends" (ibid, p. 238).

Current thinking seems to be that the greatest utility in social indicators lies in providing public policy makers with policy-relevant information that can be longitudinally monitored for change. This may be one reason why they have not "caught on" in a major way with very many marketers; they are both after-the-fact and quite macro in their summary nature.

While the first Federal Social Indicators volume (1973) contained statistics on eight areas of life in this country, the third volume in the series (1980), had expanded that coverage to eleven areas. These areas are:

Population & the Family	Work
Health & Nutrition	Social Security & Welfare
Housing & the Environment	Income & Productivity
Transportation	Social Participation
Public Safety	Culture, Leisure & Use of Time
Education & Training	

Certainly these are all areas with which marketing researchers should be familiar. This paper will be restricted to consideration of the last category, however.

Suggested Utility of Social Indicators in Marketing

Essentially, SI should be viewed in the same context as traditional economic indicators such as the CPI, employment, and money supply. Biderman (1974: 29) suggests that there are at least three legitimate interests of marketers in SI: (1) the relationship between the styles and patterns of life and the current and prospective

demands for marketable goods and services that fit them; (2) the fact that public programs are increasingly affecting the shape of the consumer markets; and (3) the increasing demands of the public sector for information about society--information which market researchers can supply.

Yankelovich has developed a thriving business based on the merchandising of social trends information. In referring to the utility of SI, he states:

The changing values, life styles, and social trends of the public bear directly on the products and services people buy, and on where and how they buy them. The changing mood of the country and the impact of social movements such as the consumer protection movement, affect marketing both directly and indirectly --directly in terms of people's responses to advertising, packaging, pricing and product quality; indirectly, via the impact on legislation and the regulatory agencies. (Yankelovich, 1974: 65)

Finally, Kohut (1974: 67-72) suggests that the major utility of social indicators to marketers lies in helping to explain consumer behavior in light of the multiplicity of other roles which consumers play. He goes on to caution that without an understanding of the "reasons why," trend indicator information can be misleading.

Social Indicators and Leisure-Time Behavior

As one prominent researcher in the area summarizes, "As individual experience or as behavior of large numbers of people, it (leisure) is more diverse, more resistant to secure definition and measurement than most other aspects of social life." (Ennis, 1968: 525). He goes on to state that, "...leisure involves activities, carried out through time involving direct or indirect expenditures of money on the part of some numbers of people. Thus, any social accounting of leisure has to involve one or more of these four things--time, dollars, activities, and numbers of people" (Ibid, p. 526). Since, according to Ennis (Ibid, p. 528), leisure can fulfill a variety of functions for the individual, i.e., tension release, creative expression, self-improvement, social integration, symbolic status defense or enhancement, etc.--marketers have an immensely complex task in understanding, for example, the "most" appropriate context in which to picture a particular leisure-time good or service. The indeterminate and volatile leisure habits of the American public can, and have, play(ed) havoc with many commercial leisure interests, i.e., contrast the rapid decline of bowling in the 1960's with the explosive growth of racquetball in the late 1970's.

From the public sector standpoint, the establishment of public agencies, at all levels of government, with responsibilities in the field of culture, the arts, recreation, and leisure highlights the need for more and better leisure-related statistics organized within a comprehensive framework (Peterson, 1981: 169). The major utility to marketers of existing leisure-related social indicators lies in showing (1) how Americans use their "free" time, (2) the amounts of money spent on various leisure-time goods and services, and (3) the overall public perceptions of satisfaction with work and non-work activities.

TRENDS IN LEISURE, CULTURE AND USE OF TIME

Personal consumption expenditures have been stable at about 64 percent of the GNP over the last 20 years. Expenditures for leisure and cultural activities as a percent of personal consumption expenditures have grown from 5.5 percent to 6.8 percent over this same period

(Peterson, 1981: 175). This represents nearly a 24 percent increase.

A recent issue of U.S. News and World Report (August 10, 1981: 62 ff) reports that American outlays for sports, recreation and entertainment are up 321 percent in the last 16 years (1965-1981) to \$244 billion. In real dollar terms, this represents a 47 percent increase. This article quotes one source as stating "People have come to view vacations and spare time as a necessity rather than a luxury," (Ibid, p. 61)

To illustrate the difficulty in comparing statistics in the area of leisure and recreation, Social Indicators III reports that total personal consumption expenditures (PCE) on leisure and cultural activities in 1978 were \$91 billion (Table 1), in constant 1978 dollars. The USN&WR 1978 figure is approximately \$180 billion. The percentage increases 1965-1978 are of the same order of magnitude, however; +352 percent for the SI III figures and +310 percent for the USN&WR figures.

Table 1 shows the trend in the distribution of PCE for certain leisure and cultural activities between 1960 and 1978. The most notable changes are the large increases in expenditures for accoutrements for participant sports and indoor/outdoor "greenery;" and the large decreases in expenditures for group and outside-the-home spectator/sedentary activities.

Table 2 suggests that home/family/friends centered, "other-directed" sedentary activities are on the decline while more individual, home-centered ("inner-directed") sedentary pursuits are on the increase. The often-reported increase in time spent viewing television is supported by data from the Roper Organization (Social Indicators III, Table 11/16, p. 561). Between November 1964 and December 1978 time spent watching television by "all persons" increased 19 percent from a median of 158 minutes per day to a median of 188 minutes per day. "Persons in the upper economic levels" increased their median television watching time by 28 percent, from 134 minutes per day to 172 minutes per day.

Social Indicators III indicates through several tables the basic theme of the "public's increasing reliance upon television over other forms of news media as a key source of entertainment and information" (p. 526). Television viewing was the overwhelming choice among people who were asked to identify their favorite way to spend an evening. The proportion so indicating dropped between 1974 and 1977--from 46 percent to 30 percent, however. The suggestion is that this represents a "growing disenchantment with the content of television programs rather than a shift toward other evening pastimes" (Social Indicators III, p. 527).

Table 3 vividly indicates the increase in average hours per week spent in "leisure time" between 1965 and 1975 for selected segments of the population. This information was collected by the Survey Research Center of the University of Michigan by the time diary approach. The growth in "leisure time" is a characteristic of both employed men and women, whether married or single. The increases were more pronounced for single employed men who increased their "leisure time" by more than one hour each day, on average. All age and race groups also reported increases in "leisure time" over this decade. Blacks and other races, employees in the 18-25 age group, and those over 55 showed the largest increase.

People seem to be maintaining their overall level of satisfaction with their leisure activities. Between 1973 and 1978, "the proportion of the population reporting that they receive a great or very great deal of pleasure ("satisfaction") from this area of their life varied from 55 percent to 58 percent" Social Indicators

Table 1

Personal Consumption Expenditures for Leisure
and Cultural Activities in 1960 and 1978

	1960	1978	Percent Change
Total Dollar Expenditures (millions)	\$17,855	91,244	+511
Distribution of Expenditures (by percent)			
Nondurable toys and sport supplies	13.9%	12.8%	-7
Wheel goods, durable toys, sports equipment, boats, pleasure a/c	11.1	15.9	+43
Commercial participant amusements	6.7	5.0	-25
Spectator sports	2.0	2.0	0
Books and maps	6.4	5.9	-7
Magazines, newspapers, sheet music	12.1	10.9	-10
Legitimate theatre and opera and entertainments of nonprofit institutions	1.9	1.4	-26
Clubs and fraternal organizations	4.1	2.0	-51
Radio and TV receivers, records and musical instruments, radio and TV repair	21.1	23.3	+10
Motion Picture theatres	5.4	4.7	-13
Flowers, seeds and potted plants	3.9	5.5	+41
Paramutual net receipts	3.0	2.2	-27
Other (various recreational goods and services N.E.C.)	8.4	8.3	+1

Source: Social Indicators III, Table 11/4, p. 553

Table 2

The Gallup Poll's Reported Favorite
Leisure Activities in 1960 and 1977

Activity	1960	1977	Percent Change
Reading	10% ¹	15%	+33
Movies and theater	6	6	0
Watching Television	28	30	+7
Dancing	3	(<1%)	N/A
Listening to radio/records	(<1%)	4	N/A
Playing cards and games	6	4	-33
Staying home with family	17	11	-35
Visiting friends	10	4	-60

¹Percent reporting the activity as a "favorite"

Source: Social Indicators III, Table 11/8, p. 556

Table 3

Average Hours Per Week Spent in Work-For-Pay and Leisure Time
by Selected Demographic/Economic Characteristics, 1965 and 1975

	Employed Men		Employed Women		Married Hswvs	Race		Age				
	M	S	M	S		White	Other	18-25	26-35	36-45	46-55	56-65
<u>Work-For-Pay</u>												
1965	51.3	51.4	38.4	39.8	.5	31.9	36.9	32.6	29.2	33.1	33.4	35.9
1975	47.4	40.4	30.1	38.8	1.1	30.0	30.0	37.0	33.4	34.4	31.0	20.4
% Change	-8	-22	-22	-3	+120	-6	-18	-17	+14	+4	-7	-43
<u>Leisure Time</u>												
1965	33.7	36.1	26.7	33.3	41.0	34.9	36.9	39.1	35.6	33.8	33.4	37.1
1975	36.1	44.9	31.7	36.4	44.0	40.3	44.6	50.0	38.4	37.3	35.2	41.8
% Change	+7	+24	+19	+9	+7	+15	+21	+28	+8	+10	+5	+13

Source: Social Indicators III, Table 11/13, p. 559.
M = Married, S = Single.

III, p. 526). Approximately 30 percent of the respondents reported a moderate amount ("quite a bit" or "a fair amount") of satisfaction from non-work activities.

A detailed analysis of the trends noted thus far would require a data set unavailable at this time. Certainly where people live is an important factor in their participation in recreation activities, and so the widely publicized shift in population growth to the Sun Belt States is a factor (The Third Nationwide Outdoor Recreation Plan, p. 25). The "Sun Belt States" obviously feature a favorable year-round mild climate as well as open space and dispersed settlement patterns.

Numerous studies have shown that recreation preferences are linked to age, with age consistently negatively correlated with recreation participation (Ibid, p. 29). At least one researcher believes that family life cycle is an even better predictor variable than age alone (Ibid, p. 32). The long range shift to an older population and one with fewer children at home should significantly alter current patterns of recreation. Manufacturers of team athletic equipment report a leveling of sales, due in part to the decline of school age children (Ibid, p. 28).

The recent upsurge in participation in "high-risk" recreational pursuits has been noted by several sources (Ibid, p. 30; USN&WR, p. 64-65). Factors mentioned as possible facilitating variables include increased leisure time, growing affluence, need for psychic renewal and challenge to relieve boredom, technological advances in the related hardware, and television programs that feature record-breaking feats. It is suggested that as people increase their physical fitness, they are inclined to want to try out that fitness, endurance and skills in nonvicarious sources of excitement and novel experiences (USN&WR, p. 65).

The increase in the cost of transportation and the growth in home entertainment electronic technology have been suggested as factors behind the growth in recreational activities which can be practiced close to home. (The Third...., p. 42; USN&WR, p. 63-64). Some of the fastest growing (in 1977) and/or highest potential growth recreational activities (in 1977) include skiing (all forms), tennis, golf, sailing, canoeing/kayaking, and snowmobiling (The Third...., p. 42). All of these can be engaged in relatively close to home by a substantial portion of the population.

FUTURE POSSIBILITIES AND LATENT PRESSURES

A nationally representative study conducted by Louis Harris and Associates for the Employment and Training Administration (ETA) of the U. S. Department of Labor in mid-1978 found a substantial interest in more free time in all subcategories of employed respondents. The author of the final report on the study, Dr. Fred Best, states that "there are indications that American values may be moving in some measure away from materialistic goods in favor of greater concern with 'quality of life'" (ETA, 1980: 2). He continues:

In broad overview, the results of this study indicate that prevailing work time conditions are at variance with the preferences of today's workers. An overwhelming majority of American workers state a willingness to forego most of future pay raises for more time away from work if some choice is allowed concerning the specific form of potential free time. A solid majority of workers would give up at least 2 percent of current earnings for their choice among five different forms of free time, and about one-fourth claimed a desire to forego 10 percent or more of their income for time....

Specifically, extended periods away from work, such as vacations and sabbaticals, elicited considerably greater desire to exchange income for leisure than did shorter-range gains of time, such as reduced workweeks and workdays. (Ibid, p. 2-3)

Since 1950, the average workweek has leveled off at around 40 hours, and the growth of free time has come in significant gains in paid holidays and vacations (Ibid, p. 13). Since many traditional male workers work much more than 40 hours per week, the leveling is believed to result from the entrance into the labor force of increasing proportions of women, youth, and young persons who tend to prefer less than full-time work.

One might expect that in a time of "stagflation" and "tax-bracket-creep," workers would have less interest in exchanging income for time. A 1977 Louis Harris poll "found that 79 percent thought it better to learn to live with basic essentials rather than reach for higher standards of living, and 76 percent found it preferable to put more emphasis on non-material experiences than on material concerns (Ibid, p. 22). The author hypothesizes that (1) the rising educational level of the population coupled with underutilization of this educational attainment (in relation to occupational expectations) in many jobs, (2) the increasing numbers of older workers, (3) the growth in dual-earner families, and (4) fewer children at home are all factors affecting this expressed preference for exchanging earnings for time. The key to this willingness is in the form of free time gains. Marginal reduction of the workday or workweek produce much less exchange preference than extended and flexibly scheduled blocks of free time. This preference is particularly notable among those in mid-life where sabbaticals and large vacations hold high appeal (Ibid, pp. 26-45).

This same general pattern of interest in work vis-a-vis interest in leisure is confirmed in a September 1977 Psychology Today survey of 23,000 of its readers (Renwick and Lawler, 1978). A strong emphasis on personal growth, psychological satisfaction and accomplishing something worthwhile was found in this study. While more than half the respondents agreed that "hard work makes you a better person," a strong undercurrent of self-orientation suggests that if people can't develop themselves through hard work in the workplace they will do so through hard work in their non-work time. Roughly one-fourth of the respondents complained specifically about excessive work hours, work time scheduling or work interference with family life (Ibid, p. 60).

Daniel Yankelovich (1978, p. 46-47) suggests that one key value of the New Breed of American ("born out of the social movements of the 60s and grown into a majority in the 70s"), is "the increasing importance of leisure." For these people, family and work have grown less important, with only one out of five people stating that work means more to them than leisure; and some 60 percent "indicating that while they enjoy their work, it is not their major source of satisfaction" (Ibid, p. 49). Self-fulfillment, individuality, and for New Breed women, the symbolic meaning of a paid job are hallmarks of this segment of the population.

MEANING FOR MARKETERS

The potential utility of social indicators to marketers, in the views of three authors, was noted earlier. Essentially, social indicator data has potential value in any situation where the more traditional economic indicators have been used--as well as in some macro-marketing situations where more varied "quality of life" indicators are needed. The key to the real utility of

social indicator data is the commitment and perseverance to collect the data (in the "same") form over an extended period of time. Trend identification is critical.

One must take note of three major characteristics of a trend. The size of the trend (whether it operates on a small or large scale as to the numbers of people affected), the form of the trend (the "shape" in a graphical depiction), and the rate of change of the trend are important to consider. Only prolonged data collection will allow such analysis. The three Social Indicators volumes provide a rudimentary model as well as being a useful secondary data source.

Current social indicator data collection efforts (Bureau of the Census, and Yankelovich, Skelly and White), as well as other indicator series which might be developed, may prove to be useful sources of macromarketing data (on effectiveness of the "system," for example). This type of information may be subsequently useful in macromarketing management or the optimization of the overall social benefit (or satisfactions gained from) the entire marketing process. It seems entirely reasonable to predict that situation-specific either composite or discrete indicators will be needed to monitor the effectiveness of the entire marketing process.

With regard to the data presented on discretionary time use and preferences, this information portends numerous market opportunities in the years ahead. The preference of workers for more leisure time in extended and flexibly scheduled blocks of non-work time is bound to come about over time. Union negotiation is one likely method. Recent media accounts have carried statements of union leaders indicating a desire to spread the work available around over more individuals.

Having one's discretionary time increase in the form of larger blocks permits consideration of a much greater variety of alternative ways to utilize that time. The discerning marketer will be quick to capitalize on these alternatives. The growth in "high risk" recreational pursuits noted earlier is one example. While the emphasis has been on the marketing of time-producing ("time-saving") goods and services, this effort may be asymptotically approaching a limit, since interest in micro increments of discretionary time is apparently on a secular decline. With larger blocks of discretionary time to work with, time-consuming goods and services assume a proportionately larger role.

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THE SALIENCE OF LOW PRICE IN THE MARKETING OF REMANUFACTURED CONSUMER DURABLE GOODS*

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Abstract

This paper reports the results of research conducted to determine the salience of low price in the marketing of remanufactured products. Members of the Arkansas Household Research Panel were surveyed, and the results are presented. Implications for marketing and suggestions for future research are discussed.

Introduction

All physical products, including consumer durable goods, have a finite period of useful operation. When a product reaches the end of its useful life, it is typically discarded or otherwise disposed of by its owner. When this divestiture occurs, the fate of the discarded product often involves one of the following:

1. Smaller consumer durable goods frequently end up in a public landfill or in an incinerator.
2. Other discarded products, especially large consumer durable goods, may accumulate in salvage yards.
3. The goods may be traded at yard sales.
4. Some consumer durables may be effectively recycled by undergoing a remanufacturing process.

When the first alternative occurs, the discarded product becomes a liability to society. The cost of the disposal and the aesthetic unattractiveness of disposal sites combine to minimize the advantages of this method of divestiture. If the second alternative occurs, certain parts from the consumer durable good may be salvaged and some of the raw materials may be recycled. The transfer of ownership through marketing exchanges at yard sales may extend the (useful?) life of the product by transferring the item to an owner who has a greater desire for the possession of the product. When the fourth alternative occurs, however, the product continues to provide benefits to society. The raw materials are almost fully reclaimed, and significant portions of the investment of energy, labor, and capital which were provided for the original production of the product continue to pay dividends after the remanufacturing process.

Specifically, what is a "remanufactured product"? Remanufactured products can be defined as products which, through a mass production process, have been repaired, rebuilt, or restored to "like-new condition". Efficient remanufacturing necessitates that a large number of essentially homogenous products be accumulated by the remanufacturing firm. Each product is then carefully deassembled, cleaned, and inspected. Broken or worn parts are replaced, and each product is then reassembled. The product is then repainted or refinished so that it looks essentially the way it did when it was new.

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Venta and Wolsky (1978) conducted an indepth study of the cost structure of remanufacturing automobile engines. Compared to the cost of producing new engines, Venta and Wolsky found that remanufacturing used automobile engines provided a 33 percent savings for labor costs and a 50 percent savings in energy costs. While Venta and Wolsky did not investigate the specific savings relating to raw materials and capital, there would surely be significant cost advantages offered by the remanufacturing alternative.

The savings in energy and labor, as well as the savings in raw materials and capital, are often reflected in the prices charged for remanufactured products. Indeed, remanufactured products usually cost much less than respective new items. In many cases, remanufactured consumer durables sell for as much as 40 to 50 percent less than the prices of respective new products. Table I presents some representative comparisons of the prices for new and remanufactured goods.

TABLE I
Price Comparisons of
New and Remanufactured Products*

Product	Price		Percent Saved
	New	Remanufactured	
Chevrolet Distributor	\$101.50	\$ 30.95	70
Chevrolet Carburetor	139.95	56.93	59
Chevrolet Water Pump	59.00	12.45	79
Chevrolet Alternator	120.00	29.95	75
Chevrolet Starter	162.00	22.45	86
Toastmaster Oven Broiler (#5242)	62.87	44.99	28
Toastmaster Toaster (#B701)	13.99	12.99	7
General Electric Coffeematic (#DCM10)	25.97	23.99	8
General Electric Iron (#F63)	12.99	10.99	15
Westbend Slow Cooker (#84104)	23.47	19.99	15
Rival Electric Slicer	45.99	39.99	13
Sears Circular Saw (#1096)	89.99	44.88	40
Sears Dual Action Sander (#1165)	59.99	30.88	49
Sears Scroller Saw (#1072)	59.99	29.93	50
Sears Rechargeable Grass Shear (#8576)	29.99	16.51	45
Sears Sander-Polisher (#1152)	74.99	37.62	50
Tire (H78-14)	42.58	28.50	33
Rerefined Motor Oil	.69	.67	3

* Source: Primary data collected by the authors.

In order for marketers to gain the profit potential offered by remanufactured products and for society to benefit from the ecological advantages of these goods,

a better understanding of consumer attitudes is necessary. An excellent analysis of consumer patronage of a used merchandise outlet was recently published by Yavas and Riecken (1981), but the marketing literature offers few insights into the specific marketing problems inherent in the offering of remanufactured consumer durables. This paper begins to fill this void by analyzing the salience of low price in the marketing of remanufactured consumer durables.

Methodology

A questionnaire was developed, pretested, and submitted to members of the Arkansas Household Research Panel. This panel consists of over 600 households, randomly selected from the Arkansas population. The composition of the panel has been shown to be representative of Arkansas consumers for several important dimensions (Darden, Darden and Kiser 1981). Thus, while the results of this study may not reflect the attitudes of all consumers, the researchers believe that it presents a reasonably accurate description of the attitudes of Arkansas consumers for remanufactured consumer durable goods.

Of the 600 questionnaires distributed to panel members, 529 usable responses were received. Thus, the response rate was over 88 percent. This was considered adequate for the present research purpose, and no follow-ups were conducted.

Several Likert-type statements were included in the questionnaire. These statements were designed to collect data about several aspects of consumer attitudes toward remanufactured products in general, and about specific attitudes toward particular product areas, types, and characteristics. For all the Likert-type statements in the questionnaire, a seven-point scale was utilized to enable respondents the opportunity to express a wide range of attitudes toward any of the particular statements.

Results

The following statement was used to classify respondents in terms of their rate of purchase of remanufactured goods:

I buy remanufactured products when they are available.

From the response to this statement, three purchase categories were determined. "Nonusers", representing 43.2 percent of all respondents were identified. "Light users", which accounted for 12.4 percent of all respondents were also identified. The third category, which represented the remaining 44.4 percent of the respondents was described as "Moderate Users".

It had been hypothesized that low price was an important factor in the purchase decision for remanufactured products. Consumer attitudes toward low price were measured by responses to the Likert-type statement:

Remanufactured products really don't save money in the long run.

Only 23.55 percent of the respondents indicated low levels of agreement to this statement. Slightly more than 10 percent were undecided, and almost two-thirds of the respondents expressed high levels of agreement to the statement.

In order to evaluate the salience of low price in the marketing of remanufactured products, the following hypothesis was developed:

There is a relationship between consumer concern with saving money and consumer interest in remanufactured products.

TABLE 2

Crosstabulation of Purchase Patterns and Perception of Savings for Remanufactured Products

Perceptions of Savings		Purchase Patterns			Total
		Non-Users	Light Users	Mod. Users	
Remanufactured Products Do Not Save Money	Responses	95	7	20	122
	Total Pct.	18.34	1.35	3.86	23.55
	Row Pct.	77.87	5.74	16.39	
	Col Pct.	42.41	10.77	8.73	
Undecided	Responses	25	17	11	53
	Total Pct.	4.83	3.28	2.12	10.23
	Row Pct.	47.17	32.08	20.75	
	Col Pct.	11.16	26.15	4.80	
Remanufactured Products Save Money	Responses	104	41	198	343
	Total Pct.	20.08	7.92	38.22	66.22
	Row Pct.	30.32	11.95	57.73	
	Col Pct.	46.43	63.08	86.46	
Total	Responses	224	65	229	518
	Percent	43.24	12.55	44.21	100.00

Chi-Square: 110.094

Probability \leq 0.0001

This hypothesis suggests an intuitive relation; specifically that consumers interested in saving money buy remanufactured products more often than consumers less concerned with saving money. But is the relation as strong as one might suspect?

In order to test this hypothesis, the responses to the two Likert-type statements previously described in this paper were cross-tabulated and Chi square tests of statistical independence were conducted. The results, shown in **Table 2**, indicate a strong relationship between the purchase of remanufactured products and the belief that the products offer important price savings. Of those consumers who had little or no interest in remanufactured products (column one), 42.41 percent indicated that remanufactured products do not save money in the long run. Only 23.55 percent, however, of the total sample expressed the belief that remanufactured products do not save money.

On the other hand, 86.46 percent of those consumers who were "moderate users" of remanufactured products also indicated that the items saved money in the long run. This compares to 66.22 percent of the total sample who expressed the same attitude concerning the cost savings.

Both of these factors suggest that the relationship between low price and purchase patterns is quite strong. The strength of the relationship is verified by the Chi square test of statistical independence which yielded a probability of less than .001 that the exhibited relationships could have occurred due to chance alone.

Conclusions and Discussion

Three important conclusions can be drawn from this research.

1. While there are a number of factors considered in the purchase decision for a remanufactured product, an important factor is simply that remanufactured products cost less than new products.
2. The results suggest that, for some consumers, however, the potential savings (alone) is not a sufficient justification for the purchase of a remanufactured product.
3. There are undoubtedly other influences that impact on consumer attitudes toward remanufactured products. Such factors might include: confidence in the product, store selection, product warranty, pride of ownership, environmental consciousness, mechanical aptitude, do-it-yourself ability; and demographics such as sex, education, and age. While it might be hypothesized that these factors would be correlated with interest in remanufactured products, in most cases it appears that low price is the primary source of interest.

As was previously mentioned, very little exists in the marketing literature that is specifically related to remanufactured products. This study of the influence of savings on consumer attitudes toward these products should provide marketing management in the remanufactured products industry with information helpful in planning marketing strategy. For example, this study points out that interest in remanufactured products is closely related to cost savings. A campaign to inform consumers about the potential savings would be expected to stimulate the sales of remanufactured products.

Additional research specifically related to the lifestyle of consumers with significant interest in remanufactured products is needed. Both psychographic and

demographic variables would warrant investigation. The impact of other factors influencing the decision of whether or not to purchase a remanufactured product, with the objective of effective segmentation for purposes of promotion, could also be a productive research area.

Another important study in this area would be research directed at determining what marketers of remanufactured products perceive as the attitudes of consumers toward these products. A comparison of the results from such a study with the results of this study could aid the marketing effort.

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BLACK MARKET SEGMENTATION BASED ON BLACK AS WELL AS WHITE SYMBOLS

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Abstract

During the latter sixties and early seventies, there was a proliferation of data amassed on the black consumer. These studies either used homogeneous observations for white equivalent comparisons or the black consumer was segmented according to income and symbolic meanings. Although the black consumer was viewed as striving for symbols representative of the white middle-class, a dichotomized black symbol was never considered. Since that time, data has not been collected on the changes in black attitudes, values and interests which reflect the socioeconomic acquisitions of blacks during the sixties and seventies. Because black culture was accepted also as a sub-culture during this period, the author used both black and white product symbols to measure the attitudes of a stratified sample of black consumers. ANOVA results indicate that younger, better educated blacks are more responsive to black symbols than white symbols.

Black Market Segmentation Based on Black as well as White Symbols

Although market segmentation surged forth during the latter 30's, these methodologies that use descriptive and behavior variables for grouping consumers into target markets have never been applied totally to blacks. When studying black consumers, the norm for market researchers has been to analyze the black consumer from a homogeneous rather than from a heterogeneous stratum. Frequently, these studies make generalizations about black consumers' behaviors for comparisons with those of whites (Alexis, 1972; Gibson, 1978; Soloman, Bush and Hair, 1976). Noting prevalent differences between blacks and whites, however, do not indicate divergencies within the black market. Yet every marketer is acutely aware of the economic benefits of market segmentation and the profitable application of the marketing concept to a clearly identified and well-defined target market. Perhaps, the uniqueness within the black community indicates untapped target markets that could possibly lend themselves to more profitable strategies rather than strategies designed for the black consumer market as a whole.

If researchers noted the heterogeneity within the black community, income was the only descriptive variable employed to stratify consumptive behaviors (Barban and Cundiff, 1964; Barry and Harvey, 1974; Sexton, 1972). The commonly exploited behavioral variables involved non-product symbolism (Barry and Harvey, 1974; Bullock, 1961a) embracing values (Bauer, Cunningham and Wortzel, 1965), and brands (Bauer, Cunningham and Wortzel, 1965; Bullock 1961b), and product symbolism (Akers, 1968; Bullock 1961a).

White Symbols for Behavior Variables

Symbols are thought to influence consumer choices to the extent that an object is symbolically harmonious to the buyers goals, feelings and self-definitions

*Paper was prepared while a Visiting Associate Professor at California State College, Bakersville.

(Boone, 1977). Researchers analyzing black consumers usually assume that the black community is only influenced by white symbols. As an example, Bullock (1961a) theorized that in many instances, blacks have developed an inferiority complex since they are clearly distinguishable and are cut off from the main stream of American society. He contended that the desire to be "identified with the American society and all its people," tended to make blacks cross the "boundary line both as to the kinds of goods they buy and the places where they buy them" (Bullock, 1961b). Sexton (1972) supported Bullock's premise by suggesting that blacks' preference for name brands reflected "a need for higher status." It was suggested that the closer an object is to what was perceived to be white, the higher in status that object was thought to be. Blacks, striving to become middle-class, were thought to intentionally align their consumer behavior with that of the white middle class. This is often demonstrated by their concern with brands, shopping places, and how their behavior is perceived by others - especially whites (Bauer, Cunningham and Wortzel, 1965; Bullock, 1961b).

Black Symbols for Behavior Variables

The proliferation of data on black consumers was amassed during the late sixties and early seventies. Since then, almost no data has been reported reflecting changes in blacks' attitudes, values or interests. This issue gains in importance when it is recognized that blacks gained greater socioeconomic growth during the sixties and seventies than during any other period (The Social and Economic Status of the Black Population in the United States; An Historical View 1890-1978).

For the purpose of segmentation, the aforementioned symbolic behavioral variables of social class should be applied to black consumers only when these variables do not conflict with racial or cultural variables. With the socioeconomic acquisitions of the last two decades, blacks have gained recognition for racial identity and cultural attributes which has led to a social latitude that embraces the expressions of racial pride. Before the recognition of black culture as an American subculture, white symbolized behavior variables would have been appropriate because blacks intentionally subdued attributes of their culture for fear they would have been perceived negatively by whites. However, it is likely that black identity may even be observed in consumer choices.

Blacks have been found to support brands, products, or shopping places just because they were associated with the black culture. Larson and Wales (1973) concluded that brand loyalty was displaced by black loyalty. It was further asserted that "blacks are extremely race conscious and will switch brands if it can be demonstrated it is in the interest of the black community" (Sexton, 1972). This seems valid since many companies, in their attempt to attract the black market, successfully utilized "special" public relations projects to improve their image in the black community. Gensch and Staelin (1972) also concluded that "...attitudes on the importance of price, quality and service were not useful in dis-

criminating between those who use the local black owned shopping area and those who did not." Rather, the discriminating appeals were "buying black," location and credit.

Nevertheless, since the majority of market researchers, assumed that blacks did not like to be singled out as a specialized group, marketers infrequently direct specific appeals to blacks. Hence, by attempting to segment the black market by using behavioral variables, researchers, while employing white symbolic importance, have never considered the logical dichotomized black symbolic importance.

White or Black Behavior Variables and Social Class Descriptive Variables for Segmentation?

If blacks are influenced by white symbols -- and sufficient evidence exists to justify this conclusion -- it is only rational to assume that blacks are also influenced by black symbols. Black symbols as well as white symbols should be used to segment the black consumer. Social class, as defined by the descriptive variables of education and income can be used to further cluster those consumers most likely to respond to black symbols. However, any proposition using social class variables applicable to black consumers must consider age as an intervening variable. Black class mobility has changed so drastically over the last two decades that younger blacks just because they are younger, are greater recipients of higher income and higher learning that resulted from new social freedoms. Since newly gained social accessibility also reinforce a positive recognition of black culture, younger blacks, perhaps, may be more expressive of racial pride. Thus, they may be more likely to express black symbolic influence than are older blacks. Even blacks in the upper classes, especially if they are younger, could possibly have a stronger orientation to black symbols. In other words, black symbols may be just as strong a motivator as are white symbols. There is, however, limited research to support this proposition. In view of the limits of present knowledge, it is prudent to measure the extent of this influence on black selection behaviors.

Research Hypotheses

Consideration of the above prompted formulation and testing of the following hypotheses:

- H A Lower age blacks rather than upper age blacks will rank black symbolized product inducements over white symbolized product inducements.
- H B Higher income blacks rather than lower income blacks will rank black symbolized product inducements over white symbolized product inducements.
- H C Upper educated blacks rather than lower educated blacks will rank black symbolized product inducements over white symbolized product inducements.

Procedure

The Sample

One hundred and forty-eight black male and female residents were selected from three very populous black sections in Pittsburgh. These sections were defined by census tract numbers 504, 1202, and 1805. Every resident on randomly selected streets within the above tract numbers was included in the sample. The head of household was interviewed, or in his or her absence, a consenting adult -- if the person met

the criteria discussed below. If no one was home, one callback was attempted.

The stratification of income, education and age was derived as follows:

Age

Younger blacks were defined between the ages of twenty-two and thirty-nine. These age limits were defined because of the social, economic and educational impact that the events from The sixties through the seventies had on the black community (The Social and Economic Status of the Black Population in the United States: An Historical View 1890-1978). It was deduced that a larger proportion of blacks, thirty-nine or younger, was likely to have experienced at least some and probably most of their schooling during these decades.

Older blacks were defined as fifty-three years old or older. In order for older blacks to be advanced a generation over younger blacks, they had to be old enough to be parents of the younger sample. The exact figure of 31 was used as the mid-point between 22 and 39. According to vital statistics (Vital Statistics, 1944), black mothers between the ages of twenty and twenty-five had the highest birth rate for the year of birth of all thirty-one-year-olds. The father's age was not listed. The exact number of 22 was used as mid-point between twenty and twenty-five. This number was added to 31, which derived the older age of fifty-three.

Income

The rationale for income figures was based on median family incomes for blacks according to the 1970 census plus a ration adjustment to current income levels. The adjusted, median family income for blacks in the United States and Pittsburgh were averaged. This derived score was averaged with the adjusted highest median family income among Pittsburgh's black census tracts yielding the upper income. A similar process was used to obtain the lower income, except of course, averages were with the lowest, adjusted median family income among all Pittsburgh's black census tracts.

Education

Initially, the educational boundaries were to be defined by using the same methodology as used with income. Upon pretesting it was found that most of the subjects who were interviewed, regardless of income or their educational level -- as perceived by the experimenters -- alleged that they had completed high school. When the issue was probed, very few respondents in the pretest expounded by indicating a particular point or grade-level of school completion. Rather, it was avowed again that one had or had not completed high school.

The completion or incompleteness of high school seemed to indicate some special value to the respondents. Realizing that the respondents had a preconceived concept that defined an educational demarcation, it was decided that this would be a better divider since it represented an unaided perception of education on the part of the subjects.

The determinant of upper education and lower education was based on the respondent's perception of education. The upper educated group were those who claimed to have completed high school, while the lower educated group were those who claimed they had not completed high school.

The Instrument

Respondents were personally interviewed in their homes with the aid of a questionnaire and task-card instrument. Responding to questions concerning purchase, usage and quality, sample members were asked to rank-order a series of four cards for preference. Four sets of four-card series were used, but with the respondent ranking one card of each series only against the other three within that series. All four card sets were ranked in response to each query on the questionnaire. Two white symbols and two black symbols were in each card set. The symbols were created by using commercial slicks supplied by the respective manufacturers. Only the pictured product as designed by the manufacturer for commercial layout was used. Each product was clipped at its borders and affixed on the 6' by 10" cards. They were matched as nearly as possible, but there were slight variations due to differences in the manufacturer's layout styles. This may have introduced some uncontrollable bias which could have been avoided with exact duplications. However, commercial slicks, just as products, are designed by manufacturers and any differences may be equated to differences in the real world.

Since hair is a uniquely distinguishing characteristic between blacks and whites, all symbols were hair-care products. Black and white polarizations for hair products were established through preliminary field tests involving black consumers. As a check, distributors of each brand confirmed the accuracy of the polarizations by indicating purchase frequencies of retailers by store location. Black symbols are defined as brands specifically oriented to the black market or products that have a higher purchase rate by the black market than by the white market. White symbols are defined as brands marketed to white segments without any reference to blacks but with medium to occasional purchase rates in the black market.

It is noted that both direct and indirect marketing certified some products as black symbols. The distinction between direct and indirect marketing is according to message content and not according to whether black actors or black oriented media were used to portray meanings. The distinctions were borne out in signs and artifacts that stressed black attributes such as "tangle-free" or "manageability." All of the products used in the study were distributed in retail outlets frequented by the black community. Table 1 displays the products used in the study. It should be noted that Product Group 4 contains grooming utensils. The group was included for control.

TABLE 1
Product Symbols

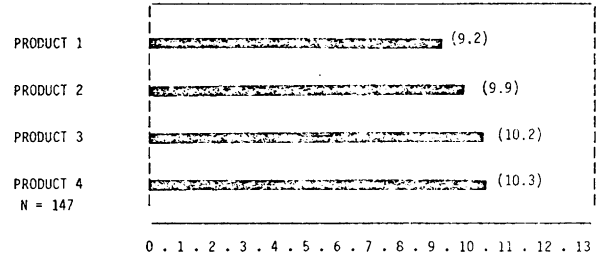
PRODUCT 1	PRODUCT 2
Shampoo Sulfur 8 - b Esig Tangle Free - b Clairol Herbal Essence - w Earth Born - w	Shampoo Ultra Sheen - b Johnson's baby - b Breck - w Prel - w
PRODUCT 3	PRODUCT 4
Solid conditioners Esig Hair Food - b Ultra Sheen - b White Rose - w Queen Erogenant - w	Grooming Utensils Pick - b Afro comb - b Brush - w Smaller Comb - w

b = Black Symbolized Product w = White Symbolized Product

Findings

A total score for blacks symbolic preference was calculated for each product set. As can be seen in the figure, there is only a slight difference in the mean scores for the product sets.

FIGURE
Mean Scores for Black Symbolic Preference



There is greater difference among the mean scores of the stratified factorial levels (see Table 2). Income seems to have exerted the strongest influence for black symbolic preference. Judging from the total product scores, it can be seen that lower age subjects have a greater preference for black products. Both income and schooling have a lesser impact. Generally, it seems that younger blacks and perhaps higher educated and lower income blacks prefer black symbolized products.

TABLE 2
2 x 2 x 2 Factorial Design
(Mean Scores)

	Upper Income				Lower Income			
	Upper Age		Lower Age		Upper Age		Lower Age	
	Upper Education	Lower Education	Upper Education	Lower Education	Upper Education	Lower Education	Upper Education	Lower Education
Product 1	9.5	8.6	9.0	7.9	10.2	9.8	9.9	8.4
Product 2	9.4	9.3	11.0	10.0	9.9	8.1	11.2	10.3
Product 3	10.1	10.1	10.9	11.6	9.8	8.2	10.9	10.8
Product 4	7.8	9.0	11.9	12.4	7.7	7.0	11.5	13.3
TOTAL	36.8	37.2	42.8	41.9	37.6	33.1	43.5	42.8
N	(20)	(16)	(21)	(14)	(13)	(20)	(22)	(21)

ANOVA was used to investigate, (1) whether the findings observed were due to chance or were large enough to be statistically significant; (2) whether there was any significant interaction among any two factors and (3) whether there was any interaction among all of the factors.

Table 3 indicates the results of the observed variance for the product groups.

TABLE 3
Analysis of Variance

Source of Variation	DF	Product 1 by Income, Age & Education		Product 2 by Income, Age & Education		Product 3 by Income, Age & Education		Product 4 by Income, Age & Education	
		Mean Square	F	Mean Square	F	Mean Square	F	Mean Square	F
Main Effect	3	22.9	1.8 ^b	44.5	4.4 ^b	35.0	4.8 ^b	245.7	22.9 ^a
Income	1	26	2.0 ^b	1	0.6	24.1	3.3 ^a	6.2	.5
Age	1	20.3	1.6	87.7	8.5 ^b	82.1	11.3 ^a	731.9	68.4 ^a
Education	1	35.7	2.8 ^b	33.8	3.3 ^a	1.1	.1	20.6	1.9
Two-Way Interactions	3	1.5	.1	2.8	.2	10.4	1.4	8.7	.8
Income x Age	1	.4	.0	2.9	.2	5.1	.7	13.8	1.2
Income x Education	1	.0	.0	4.7	.4	15.5	2.1 ^f	.3	.0
Age x Education	1	3.5	.2	.0	.0	8.7	1.2	8.5	.7
Income x Age x Education	1	1.6	.1	7.9	.7	2.8	.3	21.7	2.0 ^f
Explained	7	10.7	.8	21.4	2.1 ^d	19.9	2.7 ^c	112.1	10.4 ^a
Residual	139	12.6		10.0		7.2		10.6	

^aSignificant at the .001 level or lower ^dSignificant at the .05 level or lower
^bSignificant at the .005 level or lower ^eSignificant at the .10 level or lower
^cSignificant at the .01 level or lower ^fSignificant at the .15 level or lower

Product 1

Both income and education are significant as can be seen in Table 3. The significance is due to lower income, higher educated black's preference for black symbols. Both factors' significance is independent of the other factors. Age is not significant and this is the only product set where it is not. Hypothesis A is rejected but hypothesis C is accepted. Although income is significant, hypothesis B is rejected because it was hypothesized that upper income subjects rather than lower income subjects would prefer black symbols.

Product 2

Hypothesis A and C are accepted while hypothesis B is rejected. Again, as can be seen in Table 3, age and education are independent of income. The significant difference obtained is due to the lower age subject's and upper educated subject's larger mean score for black symbols. The factors are explained at the p.05 level of significance.

Product 3

Consistent with product 2, hypothesis A is accepted. Hypothesis B is also accepted while hypothesis C is rejected. As can be seen again in Table 3, although education by itself is not significant, there is an interaction between income and schooling due to upper educated blacks with higher income greater preference for black products. These explanations are significant at the p.01 level.

Product 4

Hypothesis A is accepted at the p.001 significant level because of lower age subject's greater preference for black symbols. Hypothesis B and C are rejected. The three-way interaction noted in Table 3 is due to lower age and blacks with lesser education -- though the mean scores are close for the upper and lower groups -- greater preference for black symbols. The mean scores are equivalent for income. These explanations are significant at the p.001 level.

Follow-up T-tests were carried out to compare the differences between all product sets. Products 1 and 2 differed at the p.06 significance level, while Products 1 and 4 differed at the p.03 significance level. The greatest difference is between Products 1 and 3 with a significance level of p.005. There is not a significant difference between Products 2 and 4, Products 2 and 3 nor Products 4 and 3.

Discussion and Implications

Age is the most discriminating variable for black symbolized preference as evidenced by the data. As speculated, this difference is due to lower age subject's greater preference for black product brands. This speculation was based on the aforementioned social and economic benefits experienced by the black community during the decades of the 60's and 70's. Younger blacks, still in a formative stage, and having less established foundations than older blacks were privileged to a reinforcement of black identity behaviors. Additionally, younger blacks, because they are younger are greater beneficiaries of educational and income opportunities than are older blacks. It was logically reasoned then that upper educated and high income blacks would respond more to black identity. Surprisingly, this study does not support the hypotheses that younger, better formally educated

blacks with higher incomes have greater preference for black products. Rather, both income groups responded to black products depending upon the items they were reacting to. Two reasons are suggested for upper and lower income respondents -- association and non-association with black symbols.

(1) Some items used within the measuring instrument generated a bias--possibly price. Although no items pictured a price, it is conceivable that the respondents had a preconceived value for price even though the items were comparably priced in the retail outlets.

(2) To achieve status some well-salaried blacks may have shed ethnic wares in order to assimilate. Alternately, other upper as well as lower income blacks may or may not have resisted ethnic traditions which may or may not have caused them to relinquish the economic rewards.

The educational factor was much more consistent and revealed as speculated that upper education subjects would be more responsive to black symbols. As pointed out earlier, the intervals separating the schooling factors were to have greater magnitude. Upon pretesting, as also noted earlier, it was discovered that "high school completion" marked a significant value in the black community. Upper schooling and lower schooling were divided by a very small interval while the levels for both income and age were divided by wide intervals.

Yet, this study indicates that the educational influence is greater and more consistent than that of income. If educational intervals could have been maintained as were the intervals for age and income, education may have yielded a stronger influence. It is suggested that further research is needed to explore this possibility. It is obvious also that the special emphasis placed on "high school completion" needs further investigation.

As seen in Table 1, there are different brands within each product group. Although the product groups were pretested, the black versus white brands may not have been an exact polarization within the sets. For that matter, black and white polarizations across the sets may not have been perceived as equal. Observing the slight difference between mean scores does not lead to this conclusion. However, T-tests indicated that Product 1 was significantly different from the other product sets. The author has no explanation except that it is possible that an item within the Product group could have biased respondent's preference. This seems likely since Product 2, which is also composed of shampoos, is not significantly different from Products 3 and 4. This would explain some of the inconsistencies noted for the factors, especially those for income.

It also seems unlikely that respondents replied from a biological, rather than a psychological, point of view. That is the respondents, when analyzing their preferences, based their selections on their hair types rather than on a symbolic scale. This is not supported because of the consistencies noted for age and in most instances education, across the product sets. It is concluded that any inconsistencies noted are due to biases attributed to items within the products sets.

Conclusion

There is strong evidence supporting the need for a segmented approach when marketing to the black commu-

ity. Age is the most reliable description variable for segmenting only if one remembers the educational factor, although limited in this study, appears to be highly influential. It is quite possible that education is an even stronger variable than is supported here. According to this research, younger and better educated blacks seem to be most influenced by black symbols, thereby resisting white symbols. Especially for this group, it is suggested that black appeals, rather than white appeals, will be more persuasive yielding greater response. Further research focusing on black market targets, rather than on a heterogeneous market, is indicated. More behavior and descriptive variables are warranted to further index black consumers more influenced by black symbols.

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PRODUCT INVOLVEMENT, COGNITIVE DISSONANCE AND PRODUCT SATISFACTION: AN EXPERIMENTAL STUDY

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Abstract

The understanding of consumers' satisfaction with a product/service has become an important topic in consumer behavior research. Past experimental research in this area is based on explanations offered by cognitive dissonance theory. This experimental study points out methodological problems in the past experimental research. Theoretical and managerial implications are discussed.

Introduction

In the last 10 years substantial research has been applied to understand the psychological mechanisms underlying consumers' post-decisional product satisfaction. Based on the results of a laboratory study by Cardozo (1965) further experiments and field studies (Cohen and Goldberg 1970; Olshavsky and Miller 1972; Woodside 1972; Anderson 1973; Oliver 1979; Olson and Dover 1979) have attempted to investigate the effects of prior expectations and actual product performance on consumers' post-trial product satisfaction. The main exploratory variables of interest to researchers have been (a) prior expectations of the consumers about the product performance, and (b) the subsequent (dis)confirmation effects (performance--the same as, better or poorer than expected).

In understanding the effects of prior expectations and actual product performance on perceived satisfaction, the psychological theories of cognitive dissonance (assimilation) and contrast have been used. Dissonance theory (Festinger 1957, 1964) states that any discrepancy between prior expectations and actual product performance will be assimilated by the consumer through the adjustment of his satisfaction of the product congruent with his prior expectations. A competing explanation of the product satisfaction process is put forth by contrast theory (Sherif and Hovland 1961). According to contrast theory, the consumer will magnify the difference between prior expectations and actual performance, in the opposite direction of prior expectations. Thus, according to contrast theory a consumer with high expectations of a product's performance will be less satisfied with the product than a consumer with low expectations towards the same product. Contrast is thus the opposite of cognitive dissonance theory. Support for each theory would suggest different marketing policies. Past studies have been published with contradictory results.

Purpose

The past experimental studies in the literature provide conflicting evidence in support of assimilation/contrast effects (Cardozo, 1965; Cohen and Goldberg, 1970; Anderson, 1973; Olson and Dover, 1979). Cardozo (1965) manipulated expectations toward a ballpoint pen at low and high levels, keeping the performance constant. The results of the experiment supported contrast theory. Cohen and Goldberg (1970) found that subjects who received an unaltered cup of coffee rated it higher than subjects tasting the same brand with poor-tasting additives. The results confirmed Cardozo's earlier find-

ings that negative disconfirmation of expectations resulted in lower product ratings than were obtained under accurate expectations of a tape recorder in a 2 x 2 experimental design. Their study provided support for assimilation effect. In their study, the researchers manipulated subjects' expectations that an unknown coffee brand would not be bitter and administered a very bitter coffee to both the experimental group and a control group receiving no information. The results showed that the control group rated the coffee as more bitter than rated by the experimental group. In an experimental study by Anderson (1973) expectations were found to be curvilinearly related to perceived satisfaction. His study suggests that assimilation theory may operate for low levels of expectations while contrast theory may operate for very high levels of expectations.

A field study by Oliver (1979) suggested that expectations and disconfirmation of expectations may be two unrelated constructs and may have independent effects on performance evaluations. Although these studies have made inroads in understanding satisfaction process, the studies suffer from common methodological problems.

Although the aforementioned studies have contributed to the understanding of product satisfaction process, in none of these studies cognitive dissonance (assimilation) theory was actually incorporated in the research design. The cognitive dissonance mechanism was inferred without validating its presence or absence. Also the conditions necessary for presence of cognitive dissonance, discussed below, have been ignored.

There are certain conditions under which one would expect cognitive dissonance to operate (Abelson, et. al. 1968; Brehm and Cohen 1962; Feldman 1966; Freedman 1964; Greenwald 1968).

- (1) Cognitive dissonance is a post-decisional state, different from cognitive conflict which is pre-decisional uncertainty; thus, dissonance is likely to be present after the decision has been made.
- (2) Cognitive dissonance is a rationalization process for justifying the decision one has already made and which is not easily reversible.
- (3) Cognitive dissonance is likely to occur when a person is exposed to information inconsistent with the decision already made.
- (4) Cognitive dissonance is likely to be present when one is personally involved (cares about) in his decision.

The prior studies have failed to include these conditions in the research design. In these experiments the subjects were exposed to two pieces of contrasting information (prior expectations, actual product performance) and were asked to indicate their satisfactions with product performance. However, prior to indicating their satisfaction, the subjects were not required to make a decision. Similarly, the conditions of irreversibility of decision and involvement in the decision were not met. As Cummings and Venkatesan (1976) state, the methods used for testing cognitive dissonance in

these experimnts were really testing pre-decisional conflict. This study attempts to test the theory of cognitive dissonance as it may relate to post-decisional product performance satisfaction. In addition to methodological improvements, empirical and theoretical rationale for the specific hypotheses is detailed in the next section.

Hypotheses

Despite discrepant findings and criticisms, dissonance theory offers a succinct explanation for many disconnected observations (Kassarjian and Cohen 1965). Past research in psychology, consumer behavior, and communication areas indicate that the usefulness of the theory may be limited only to "highly involving issues". For example, the studies in psychology suggest that high involvement on the part of an individual exerts a powerful force to reconcile the inconsistency between the behavior and the prior beliefs that the individual may hold (Festinger 1957, 1964). Studies in marketing provide support for the cognitive dissonance theory in the instances of major purchases, though major purchases need not be highly involving (Engel 1963; Donnelly and Ivancevich 1970; Hunt 1970). Finally, recent writings in communication area suggest that for highly involving issues attitude precedes and influences behavior because of cognitive dissonance mechanism (Krugman 1965, 1970; Ray 1973; Robertson 1976).

However, for "low involving issues" the individual may not feel the pressure to justify one's decision that has already made. According to Krugman (1965, p. 354), for low involvement issues, one need not expect to find rationalization processes at work. A study by Sherif and Hovland (1961) supports this argument. A recent study on product satisfaction indicates that correlates of satisfaction vary by product (Westbrook 1980). Hence, it is hypothesized that:

- H₁: High dissonance is more likely to be present in the case of product of high involvement to the subjects than product of low involvement.
- H₂: Dissonance is related to post-decisional product satisfaction only for a product of high involvement to the subjects than a product of low involvement to the subjects.

To test these hypotheses an experiment was conducted incorporating the four conditions mentioned earlier. During the experiment, the subjects were exposed to high expectation message, low (poor) performance condition of two products of differential involvement. The details of the experiment are provided in the next section.

Methodology

Prior to the main experiment pretest studies were carried out to (a) select two products of high and low involvement, (b) validate high and low expectation message descriptions, (c) validate low and high performances of the two products.

Selection of Products

Past research on product involvement concept indicated four possible domains of the construct: product differentiation, familiarity, commitment, and importance (Bowen and Chaffee 1974; Lastovicka and Gardner 1978). Accordingly previously validated nine item scale to measure the four domains were constructed. Twelve products of various levels of involvement were included.

Five products out of the twelve were chosen because of the ease in manipulating their performance. The other seven were used in previously published studies of product involvement (Brown and Chaffee 1974; Korgaonkar 1980) and hence were included for external validity purposes.

One hundred and thirty undergraduate students enrolled in an introductory business course at a large urban university were asked to rate the twelve products on each of the nine item, five-point scale. The reliability coefficient alpha of the total scale was 0.65. The alpha coefficient for the two products used in the study were 0.63 for portable TV and .61 for soft drinks. The coefficients were within the range suggested adequate for initial stages of research (Nunnally 1964). Internal validation was performed using factor analysis of the twelve products on the nine-item summated index. The results of the principle component analysis with varimax rotation are shown in Table 1. The first factor captures products of high involvement and the second factor captures products of low involvement (Bowen and Chaffee 1974; Korgaonkar 1980) and also have a face validity (Robertson 1976). Based on these results a portable black and white TV (high involvement) and soft drink (low involvement) were selected to manipulate involvement condition.

The performance of TV was manipulated by using two: good and malfunctioning television sets. Though both TV sets were new, one of the sets was "fixed" temporarily to create a malfunctioning performance. The performance of soft drink was manipulated by using two undiluted and diluted soft drinks. The pretest results showed significant differences between the high and low performance conditions ($p < .01$) in both cases, i.e., TV and soft drink. The pretests of messages designed to create high and low expectation towards the performance of the two products were significant ($p < .01$) for each of the two products.

Cognitive dissonance was measured using a two-point four item scale. Based on the prior work in the area (Kassarjian and Cohen 1965; Cohen and Goldberg 1970; Hunt 1970) the questions were designed to measure (a) uncertainty of decision, (b) tendency to avoid negative information about the choice made, (c) tendency to collect positive information about the decision made, (d) tendency to defend the decision by discussing it with other individuals who have made the same decision. The coefficient alpha reliability of the scale was 0.73.

Satisfaction for both products was measured with the following question: How satisfied are you with the performance of the test (products)? (Please give your answer in percentages on the scale below. You may circle a number or write in your own number.)

100%	90%	80%	70%	60%	50%	40%	30%	20%	10%	0%
Completely										
Satisfied									Not At All	Satisfied

The reliability and validity of this single item satisfaction scale is shown to be adequate (Westbrook 1980).

Main Experiment

Forty-one undergraduate students in an introductory business course participated in the study. The experimental steps are shown in Table 2. The experimental procedure included the following conditions:

- (a) a cover up of the nature of the study;
- (b) random assignment of the subjects into two groups;
- (c) expectation creation and commitment of the subjects to an irreversible decision;

(d) exposure to actual product performance after making a decision.

In order to disguise the nature of the study, the students were told that they were participating in a study sponsored by a consumer magazine similar to Consumer Reports. They were told that their task was to evaluate the performance of two new products (1) TV and (2) Soft Drink. In order to aid them in evaluating the performance of the new products they would be given the results of the past studies. They were also told that for their cooperation the sponsor of the study would donate two products, to one of the participants. The recipient of the gifts will be chosen through a random lottery. The subjects were told that the gift products were different from the test products.

After this announcement, the class was divided randomly into two groups of twenty and twenty-one each. One of the groups was asked to leave the classroom. The group remaining in the classroom was handed out pretested descriptions of the TV and soft drink designed to create high expectations. The total value of the two products in the description was \$165.00. The subjects were also shown the pictures of the two gift products (TV, soft drink). [The total value of the two gift products was \$100.00]. They were asked to indicate which products (Test vs. Gift) they would like to have, in case they won the lottery. The subjects were told also that they would not be allowed to change their decision later on. The purpose of this was to commit the subjects to the high expectations towards the two test products. The subjects' decisions along with their social security numbers were collected. Next the subjects were administered ten ounces of diluted soft drink. They were given five minutes to taste and evaluate the soft drink. After five minutes the subjects were administered the cognitive dissonance instrument for soft drink. In the next phase, the subjects were exposed to "poor" performance television for five minutes. During the five minute exposure, three major and one UHF stations were shown. After five minutes, the cognitive dissonance for television was administered to the subjects. During the entire experiment the brand names of both products were concealed. Next the group was asked to leave the classroom and the other group was asked to enter. Precautions were taken to prevent communication between the two groups. The entire experiment was repeated with the second group of twenty-one subjects.

In line with prior research in cognitive dissonance area all the subjects were administered product satisfaction questionnaires a week after the main experiment (Hunt 1976; Bell 1965).

Results

In order to ensure that conditions 2 and 3 specified earlier were met the subjects' decisions (test vs. gift products) were analyzed. The analysis showed that all the subjects had indicated preference for the test products. To test the relationship between product involvement and cognitive dissonance a chi-square test was utilized. Since chi-square statistics requires two independent samples, the comparisons were made by combining the cognitive dissonance scores of soft drink of group one (n=20) with cognitive dissonance score of television of group two (n=21) and vice versa. The results indicate that there was a significant relationship between cognitive dissonance and product involvement.

In order to test the second hypothesis, the relationship between cognitive dissonance and product satisfaction was tested separately for the two products via

chi-square tests. The results are shown in Tables 5 and 6. The results support the second research hypothesis that cognitive dissonance is related to product satisfaction only in case of TV (high involvement).

Conclusion And Discussion

Past research in CS/D area has been based on the psychological theories of cognitive dissonance and contrast effects. However, methodological and conceptual problems in previous research seem to preclude meaningful generalizations. The purpose of this study was to improve upon these shortcomings and thus contribute to better understanding of the psychological processes of consumer satisfaction.

Past research in the area has placed little emphasis upon the subject's involvement with either product or service. This study shows that cognitive dissonance does play an influencing role in post-decisional satisfaction with highly involving product. The findings suggest that creation of high expectations of product performance may be an appropriate strategy only if the product is highly involving. In such a case, consumers will tend to rationalize their decision by evaluating the product performance in line with their prior expectations rather than the actual product performance.

The fact that prior expectations play a central role in perceived product satisfaction of highly involving products is also reflected in a recent statement of the Ford Motor Co. executive (Wall Street Journal March 1980):

"Philip E. Benton, a Ford vice president and general manager of the Ford division complains that 65% of the reason people buy Japanese is that they have a certain perception."

The results of the soft drink suggest that for products of low involvement cognitive dissonance does not play a significant role in influencing consumers' post-decisional product satisfaction. Thus promotional messages aimed at creating high expectations may not be beneficial to the advertisers of low involving products.

This study has incorporated several procedures to improve upon the methodological problems of the previously published experimental studies. Additionally, it suggests that the difficulties in generalizing the results of the past studies may be alleviated by considering the role of "product involvement" variable.

TABLE 1
FACTOR ANALYSIS OF THE TWELVE PRODUCTS ON PRODUCT INVOLVEMENT

VARIABLES	FACTOR I	FACTOR II
Filter cigarettes	0.13	.54
Radios	.52	-.09
Black & White 12" TV	.59	.12
Suntan Lotions	.09	.61
Diamond Rings	.50	.14
Soft Drinks	.21	.59
Automobiles	.61	-.12
Hand Lotions	.19	.63
Tape Recorders	.63	.08
Camera Flash Cubes	-.05	.42
Designer Jeans	.51	.19
Costume Jewelry	.04	.48
Eigenvalue	1.94	1.50

TABLE 2
EXPERIMENTAL PROCEDURE

Stage	Predecision		Decision	Post Decision			
	Stage 1	Stage 2		Stage 3	Stage 4	Stage 5	Stage 6
	Disguise Announcement and Randomization.	Divide the class in 2 groups.	Subjects read the message (form high expectations).	Subjects made their decisions (test vs. gift products) based on their expectations, and descriptions of gift products.	Subjects were exposed to the low performance products.	Subjects indicated their cognitive dissonance.	A week later subjects indicated their product satisfaction.

TABLE 3
RELATIONSHIP BETWEEN PRODUCT INVOLVEMENT AND COGNITIVE DISSONANCE

Product Involvement	COGNITIVE DISSONANCE ^a		
	High	Low	Total
Black & White TV (High)	14	7	21
Soft Drink (Low)	6	14	20
TOTAL	20	21	41

^aChi-square equal to 5.8 with 1 degree of freedom. Significant at 0.025 level.

TABLE 5
RELATIONSHIP BETWEEN COGNITIVE DISSONANCE AND PRODUCT SATISFACTION: TV

Satisfaction	Cognitive Dissonance ^a		
	High	Low	Total
HIGH	21	5	26
LOW	6	9	15
TOTAL	27	14	41

^aChi-square statistics 6.1 with 1 degree of freedom. Significant at 0.025 level.

TABLE 4
RELATIONSHIP BETWEEN PRODUCT INVOLVEMENT AND COGNITIVE DISSONANCE

Product Involvement	COGNITIVE DISSONANCE ^a		
	High	Low	Total
Black & White TV (High)	13	7	20
Soft Drink (Low)	5	16	21
TOTAL	18	23	41

^aChi-square statistics 7.1 with 1 degree of freedom. Significant at 0.01 level.

TABLE 6
RELATIONSHIP BETWEEN COGNITIVE DISSONANCE AND PRODUCT SATISFACTION: SOFT DRINK

Satisfaction	Cognitive Dissonance ^a		
	High	Low	Total
HIGH	6	8	14
LOW	5	22	27
TOTAL	11	30	41

^aChi-square statistics 2.40 with 1 degree of freedom. Significant at 0.13 level.

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THE RELATIONSHIP BETWEEN STORE IMAGE AND CUSTOMER
DEVIANT BEHAVIOR: AN EXPLORATORY STUDY

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Abstract

This exploratory research paper reports an experiment, which was conducted to establish the relationship between store image and customer deviant behavior. The experiment in which 807 university students were studied provided some evidence indicating a positive correlation. Further research is recommended.

Introduction

The rise in consumer activism in recent years has prompted many retailers to adopt policies and practices which should more nearly meet the needs--and demands--of their customers. But if customers are better satisfied with the manner in which their goods and services are being delivered, it is not evident to many merchants. There actually seems to be an increase in the degree of deviant behavior exhibited by customers directed at business (Faria, 1977; Ryan, 1974; Wilker, 1978). Shoplifting, price tag switching, abusing return privileges, and willful destruction of store property are some of the more noticeable ways in which customers seem to be striking out at the retail establishment. This type of behavior results in huge losses to the stores and to the consumers who must pay higher prices to compensate for the losses. According to a Retail Merchants Association estimate, inventory shortages--the unexplained absence of merchandise--now costs American consumers about 15 cents of every one dollar spent for retail purchases and the figure will likely be even higher in the future. Other sources estimate that shoplifting alone costs merchants in excess of \$5 billion annually.

Most retailers are painfully aware of the problem and have initiated attempts to stop or at least reduce its impact to a more tolerable level (Faria, 1977; Housel, 1977). Unfortunately, the problem seems to be getting worse. Traditional explanations of why this is happening suggest that more people are stealing, switching price tags, etc., to support drug habits or to supplement income in periods of acute inflation and high unemployment. These reasons are tied closely to faltering economic and social conditions and a declining national morality. However, acceptance of these traditional reasons leaves some interesting questions unanswered. Why, for example, do people willfully destroy store property and/or merchandise when such acts produce no monetary gain? Why are they unwilling to help curb deviant behavior on the part of others when they must know that such behavior increases the cost of goods they must buy? Why are instances of deviant behavior greater in some stores than in others even when physical security measures are basically the same in both stores? Is it not possible that acts of deviant behavior are motivated by reasons other than just a desire for monetary gain?

Frustrated retailers usually feel that their only defense against this rising tide is to initiate new and better forms of physical constraints. But while in-store security may reduce some acts of deviant behavior, it cannot alter the person's willingness to engage in these acts if given an opportunity. There is also the question of just how far the various forms of physical constraints can go without alienating the paying customers.

Cost constraints are another factor--at what point does the cost of increased security outweigh the losses sustained without it?

Some potentially rewarding insights into this problem may come from an examination of existing store policies, procedures, practices, and attitudes. By looking at the company instead of at the customer, emphasis switches from why customers engage in deviant behavior to why the acts are directed at the store. Perhaps a store's lack of positive customer orientation manifests itself in acts of deviant behavior. Store policies relating to such things as cleanliness, service, helpful and qualified employees, merchandise quality, fair prices, and favorable credit and refund policies may well impact positively on customer behavior. Samli and Sirgy (1981) suggest that ". . .when a store's symbolic image is congruent with the customers' self-image, they may develop favorable attitudes toward the store."

It is not suggested that the merchant can completely alter a person's basic value system; but an individual's willingness to engage in deviant behavior in a given situation can be altered. A person's willingness to carry out these acts will differ under different environmental circumstances. There must be a reason why someone is more inclined to shoplift in Store A than in Store B, assuming equal physical constraint. If the reasons for deviant behavior toward specific stores are isolated, perhaps ways can be found to lower the level of this type behavior on a store-by-store, company-by-company basis. If "good business" policies and practices help create a positive customer attitude which leads to positive behavior (purchase), is it not reasonable that "bad" policies and practices create negative attitudes which encourage and justify deviant behavior? A negative attitude may lead the customer to feel that the business deserves to be punished and the act is merely a means of getting even. One normally treats a friend with more respect than someone held in low esteem, so it seems logical that this same relationship would exist between an individual and a business.

In an effort to examine the validity of the hypothesis that there is a correlation between customer attitudes toward a store and the level of deviant behavior at the store, an exploratory study was conducted.

Research Methodology

For the study, an experiment was designed which involved a sample of approximately ten percent of the student body of Stephen F. Austin State University. Randomly selected classes were surveyed in four campus buildings to help assure a broad range of student participation. Questionnaires were distributed during only one class period to eliminate duplication of responses. Eight hundred seven (807) students completed one of six questionnaires, each depicting a different hypothetical situation.

Situation one involved an individual who had been found guilty of shoplifting. Situation two described an incident in which an individual had purchased general mer-

chandise valued at \$60 but had been charged only \$30 by the salesclerk. Situation three described an instance where the respondent observed a 30-year old woman slipping a \$10 item into her purse.

For each of the situations, specific actions were suggested which the respondent might take. The individual convicted of shoplifting could be fined \$100, given a one-year probated sentence, fined \$100 and given a one-year probated sentence, or given a jail term of six months. The alternatives for the person who was undercharged \$30 were to go back and pay the additional \$30, go home and think about it, or keep the \$30. Possible actions of the person who witnessed the lady slipping the \$10 item into her purse were to tell her to put it back, report the incident to store personnel, or overlook it.

The independent variable in all instances was store image. To test the effect of store image on responses to each situation, two store descriptions were developed. The "good" store was designated ABC, and the "bad" store XYZ. The good store was described as being an established store which carried medium quality merchandise at popular prices. Merchandise returns and customer complaints were handled quickly and courteously. Store personnel were friendly, helpful, and polite. The store was kept clean and neat and merchandise was attractively displayed and easy to find. The store's credit policies seemed well suited for its clientele and were accepted favorably by most customers.

The bad store, XYZ, also was described as being a store well known to most people in the city. It carried somewhat lower quality merchandise than ABC, but at prices slightly above average for the quality. Faulty merchandise was occasionally left on the shelves, the store was not kept clean, and merchandise displays were generally cluttered and untidy. Store personnel were few and usually lacked adequate product knowledge. Customers frequently found it difficult to make exchanges or return unwanted merchandise. The store's credit policy was not particularly favorable to, nor well suited for, the majority of people who patronized the store (See Exhibits I and II for specific details.).

One half of the respondents were given questionnaires depicting store ABC, and the other half were provided with a description of store XYZ. Both groups were then asked to pass judgement on the individuals involved in the three situations described in Exhibit II.

Findings

Individual responses to each specific situation are summarized in Exhibit III. As shown on Exhibit III, the most frequently imposed penalty for the shoplifter in both cases (ABC and XYZ) was a \$100 fine and probation. However, a smaller percent of individuals chose the more harsh penalty when given a description of store XYZ. The figures show how attitudes generally tended to be more tolerant toward the shoplifter when the store involved had a negative image.

Where the undercharged customer had made the purchase at ABC, 81 percent of the respondents indicated that the customer should return and pay the additional \$30. This compared with 59 percent where the purchase was made at XYZ. Similarly, only 16 percent of the good store customers said they would keep the money, compared with 32 percent for the bad store.

When asked what response they would make if they saw a lady drop a \$10 item into her purse, 58 percent of the good store customers would report the lady to store

EXHIBIT I ORGANIZATIONAL FEATURES AND PRACTICES

ABC Store - Positive/Good Image

The ABC Store is well known to most people in the city. The store tries to carry merchandise of acceptable quality at a reasonable price. Faulty merchandise is either quickly replaced or the amount of purchase easily refunded. The store personnel is friendly, helpful, and courteous, and the store is kept clean with merchandise easy to find. The store also has a credit policy well suited and favorable to most customers.

XYZ Store - Negative/Bad Image

The XYZ Store is well known to most people in the city. The store usually carries merchandise that is average or slightly below average at higher than normal prices. Occasionally, faulty merchandise is left out on the shelves and customers find refunds hard to get. The store personnel are few and do not have good knowledge of the merchandise or how to help the customers. The XYZ Store is usually dirty and merchandise is hard to find. Their credit policy is not favorable to most customers.

EXHIBIT II

DEVIANT CONSUMER BEHAVIORS

I

John Doe has been apprehended and been found guilty of shoplifting a \$25 pocket camera at the Store. You are on the jury at the trial and must decide the sentence. What sentence would you give him? (Please answer only one.)

1. Fine of \$100
2. Probated sentence of one year
3. Fine of \$100 and a probated sentence of 1 yr.
4. Jail term of 6 months

II

John Doe purchased \$60 of general merchandise at the Store. When he got out to his car, he noticed the cashier had made an error and charged him only \$30. Which of the following should he do? (Please answer only one.)

1. Go back in and pay the remaining \$30 to the cashier.
2. Go home and think about it.
3. Forget about it. (Overlook the mistake)

III

You are in the Store and have just noticed a 30-year old woman pick up a \$10 item and put it in her purse. You suspect that she is shoplifting. Which of the following would you do? (Please answer only one)

1. Tell the woman to put it back.
2. Report the incident to the store personnel.
3. Overlook it.

EXHIBIT III

RESPONSES BY STORE IMAGE & DEVIANT BEHAVIOR

I

ABC Store (Positive/Good)				XYZ Store (Negative/Bad)	
N	%			N	%
<u>28</u>	<u>21</u>	1.	Fine of \$100.	1.	<u>44</u> <u>32</u>
<u>22</u>	<u>16</u>	2.	Probated sentence of one year.	2.	<u>41</u> <u>30</u>
<u>78</u>	<u>58</u>	3.	Fine of \$100 and a probated sentence of one year.	3.	<u>47</u> <u>34</u>
<u>7</u>	<u>5</u>	4.	Jail term of six months.	4.	<u>6</u> <u>4</u>
<u>135</u>	<u>100%</u>		TOTAL	<u>138</u>	<u>100%</u>

II

ABC Store (Positive/Good)				XYZ Store (Negative/Bad)	
N	%			N	%
<u>94</u>	<u>81</u>	1.	Go back in and pay the remaining \$30.	1.	<u>81</u> <u>59</u>
<u>3</u>	<u>3</u>	2.	Go home and think about it.	2.	<u>13</u> <u>9</u>
<u>19</u>	<u>16</u>	3.	Forget about it.	3.	<u>44</u> <u>32</u>
<u>116</u>	<u>100%</u>		TOTAL	<u>138</u>	<u>100%</u>

III

ABC Store (Positive/Good)				XYZ Store (Negative/Bad)	
N	%			N	%
<u>11</u>	<u>8</u>	1.	Tell the woman to put it back.	1.	<u>11</u> <u>8</u>
<u>82</u>	<u>58</u>	2.	Report the incident to the store personnel.	2.	<u>54</u> <u>40</u>
<u>49</u>	<u>34</u>	3.	Overlook it.	3.	<u>70</u> <u>52</u>
<u>142</u>	<u>100%</u>		TOTAL	<u>135</u>	<u>100%</u>

personnel compared with 40 percent of those who witnessed the theft in the bad store. There is a striking difference in terms of the number of people who would ignore the incident.

Chi square analyses were performed to study the responses further on the basis of sex, race, and religion. These factors had no statistically significant effect on the respondents' answers.

Conclusion

In conclusion, the findings of this study tend to support the hypothesis that there is a positive correlation between store image and customer deviant behavior.

Since the only difference between the questionnaires administered to the matched pairs of respondents was the description of the store, response variation can be considered to result from differences in store image.

Because of the nature of the sample (college students) and the fact that only two store images were involved, the conclusion may not be appropriate for all types of stores and all classification of customers. It does, however, suggest a need for a broader-based study to more conclusively establish the relationship between store image and customer deviant behavior.

Prior research has shown that customers tend to buy more in stores with images they view as favorable. Little is known, however, about why customers chose to shoplift where they do. If people tend to shoplift or engage in other forms of deviant behavior more often in stores they perceive as bad, management should continuously strive to develop a store image consistent with that desired by their customers. While this certainly would not eliminate all deviant acts, it should curtail them to some extent while improving customer relations and increasing sales. This combination of reduced costs and increased sales should improve the overall profit position of the store.

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ALTERNATIVE ACTION OPPORTUNITIES FOR THE FOOD
INDUSTRY TO BETTER SERVE THE HOUSEHOLDS OF
THE AGED AND AGING

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Introduction

In the search for ways to improve the quality of life for the elderly, one area receiving increasing attention has been the activities of the elderly in the marketplace--especially their purchase of food items. Although food expenditures account for a significant portion of the elderly's monthly outlay of money and time, very little is known about their specific shopping activities and problems.

There are many unanswered questions regarding the interaction of the elderly and the food marketplace. Do they encounter unique problems in food stores because of their age? How satisfied are they with products and services, package sizes and store facilities? What changes would they like to see take place? The research described in this report addresses these and many other questions and provides insight into ways in which the food industry can better meet the elderly's identified needs in order to prolong their independence in the marketplace.

Purpose and Concept

Two major purposes for the past research dealing with the food shopping problems of the elderly can best be summarized as follows:

First, there is a desire to assist in prolonging the independence of the over 65 year group in the marketplace by knowing more about the barriers to independence.

Second, there is a desire to contribute to the development and facilitation of a dynamic marketing strategy of the retail food industry in its efforts to more effectively implement the National Nutritional Delivery System.

To contribute, prolong, assist and facilitate means the development of action opportunities for the food industry. These opportunities, though, should be based on knowledge through research and in this case a knowledge of food shopping problems.

Research Objectives

The overall goal of this research project was to enhance the quality of life for the elderly by improving their food shopping and food consumption experiences.

More specifically, this project pursued the following objectives:

1. To develop an understanding of the causes of difficulties and problems experienced by the elderly as a result of their grocery store food purchasing.
2. To develop an understanding of some of the grocery product modifications and service adjustments required to minimize shopping and food preparation difficulties and problems of the elderly.

3. To determine the justifying circumstances for product modifications and service additions and/or adjustments needed by the elderly.
4. To develop the specific priority actions the retail industry should consider relative to new or improved products and services in order to prolong the period of real and perceived independence of the elderly household members.

Methodology

The research carried out to accomplish these objectives was divided into four phases.

Phase One - Focus Group Interviews

A series of 13 focus group interviewing sessions was conducted in Denver, Colorado; Phoenix, Arizona; and Fort Collins, Colorado. Over 100 elderly people (age 65 and over) participated in the 13 sessions. The purpose of the group interviews was to:

1. Identify the shopping problems faced by the elderly when purchasing grocery items, and the factors and conditions creating these problems.
2. Identify ways in which these problems could be eliminated, or their impact reduced in order to make grocery purchasing a more enjoyable experience for the elderly.
3. Provide background information for the development of an extensive questionnaire to be used in a series of in-depth personal interviews in Phase Two.

Phase Two - In-Depth Personal Interviews

Based on the findings of the focus group sessions, a survey instrument was developed and personal interviews were conducted among a total of 420 elderly people residing in Fort Collins, Denver, and Phoenix. In addition to questions related to their shopping problems, demographic information about the participants was obtained along with information on their food purchasing and food consuming activities. This information was then incorporated into a series of bi-variate analyses for the purpose of uncovering any associations that existed between selected characteristics of the elderly and the problems they encountered.

These comparisons (cross tabulations) were made using the "Statistical Package for the Social Sciences" (SPSS) computer software package. Chi-square analysis was employed with a .05 significance used to identify associations that were "significant."

Phase Three - In-Store Observations

Upon completion of the personal interviews, in-store observations of 224 elderly shoppers were conducted in eleven grocery stores; three in Phoenix, four in Denver, and four in Fort Collins. These observations provided additional information on the shopping

patterns and problems of the elderly and verified the data obtained through the personal interviews.

Phase Four - Laboratory Observations

Twenty elderly Fort Collins residents were observed in simulated food preparation activities. These observations took place in the Food Preparation Laboratory of the College of Home Economics at Colorado State University. This laboratory exercise was used to generate a reasonably accurate depiction of problems and situations faced by the elderly once they had food products in their residences.

Summary of Results

Focus Group Interviews (13 sessions involving over 100 elderly people)

The major findings emerging from the focus group interviews were:

1. The elderly took great pride in being able to live independent lives.
2. Attitudes towards grocery shopping were closely related to sex and marital status. The vast majority of females viewed grocery shopping as an enjoyable experience. Males living by themselves viewed shopping as a task that must be performed and attempted to complete it as rapidly as possible.
3. The elderly apparently have not made changes in their grocery purchases in spite of the recent inflationary conditions.
4. Most female participants enjoyed cooking but dislike preparing meals just for themselves.
5. Many of the elderly were on some type of restrictive diet (either self-imposed or under doctor's order). Salt and sugar intake was generally restricted. Their concern about product ingredients was generally affected by the types of educational programs to which they have been exposed.
6. Key factors in store selection were proximity of the store and breadth of offerings. A vast majority did not feel their selection of a store was greatly inhibited by transportation problems. Most shopped at the store that would be their named first choice.

The problems identified in the group sessions were:

1. Lack of storage space for their personal cart while in the store.
2. Difficulty in separating store shopping carts.
3. Identification terminology of product contents should be in bigger print on labels.
4. Depth of carts made it difficult for elderly to place items in or take them out.
5. Scales in the produce department should provide more accurate readings.

Special privileges for the elderly desired by the focus group participants were:

1. Senior citizen discounts.
2. Rest area in store.

3. More accessible restrooms.

4. Central location in store for information on store specials.

224 In-Store Observations

Description of Observed Shopping Activities

Elderly shoppers tended to shop alone. They used the store's shopping cart for gathering their purchases. Elderly shoppers with a mobility problem used the cart as a support while walking.

They conversed with store employees and fellow shoppers as they progressed through the store. They frequently requested help from store personnel, usually directions for locating a particular grocery product.

Problems

The elderly shoppers were not aware that they are being observed and no attempt was made to converse with them at the end of their shopping trip. The problems summarized below were subjective judgments on the observers' part in that if a difficulty was observed it was recorded as a problem.

Major Problems (Noted in at least 20 percent of observations)

Locating Items. A large number had difficulty in locating products. They frequently asked employees for directions. They often pursued a rather haphazard shopping pattern.

Reaching Products. Many of the elderly had difficulty in reaching products, especially on top shelves.

Reading Labels. Many of the elderly seemed to have trouble reading package information and store signs.

Shopping Fatigue. A significant number of the elderly appeared to be more tired at the end of their shopping trip and were moving slower.

Moderate Problems (Observed in 10 to 20 percent of observations)

Cart Handling. Difficulties included separating the carts and pushing the cart.

Product Lifting. Elderly had difficulty lifting products, especially detergents and pet foods.

Store Temperature. There were comments that parts of the store were uncomfortably cold, especially the frozen food section.

Minor Problems (Noted in 5 to 10 percent of the observations)

Produce Scales. The scale was too high, or difficult to read for some of the elderly.

Large Shopping Bags. A few of the elderly requested their items be repackaged into a smaller, more manageable shopping bag by the checker.

Cart Unloading. Some of the elderly had difficulties in lifting products out of their carts.

Laboratory Observations (n - 20)

The elderly persons observed rarely read package labels for information on either product content or directions for opening the package or for preparing

the food. They assumed that the preparation was similar for all comparable products (that is, all concentrated frozen orange juice requires the same amount of water, all fast cooking rice requires the same amount of water). An exception was when a totally new product (boil in the bag) was involved.

Bottled products posed a major problem for those observed. They had difficulty in opening glass containers and relied either on some utensil or a special action (putting under hot water). They did not rely on their own hand strength to open bottles.

Stiff cardboard packages such as milk cartons were difficult to open and the elderly often used some utensil, frequently puncturing the pour spout.

Bags were the preferred package for frozen food. They can buy these products in large sizes, separate the contents into the desired sized portions and easily restore the unused portion. They were suspicious of products in boxes (especially cereals) because they felt they received more box than product.

Canned goods posed a problem since the storage of unused portions was difficult. They often purchased the smallest can size which usually was more expensive on a per ounce basis.

Freshly baked products were seldom purchased, because of their perishability and high cost.

Very little would have been thrown out since the elderly usually prepared only the amount they expected to consume. When storage was necessary, they used plastic containers with lids in order to save the leftovers for two or three days.

Food Consumption Activity Profile

The food consumption activities of the "typical" elderly interviewee can be depicted as the following:

- Although less active, ate three meals a day.
- An equal number ate the main meal at noon and at evening time.
- Ate about 86 percent of their meals in their own residence, and about 8 percent at some meal preparation sight for the elderly.
- Enjoyed cooking (70 percent) and over 60 percent frequently bake bread/pastries.
- About 3 out of 10 elderly households still did some canning.
- Most felt their food preparation facilities adequately met their cooking needs, as did their food storage facilities.

Personal Interviews (n = 420)

Food Shopping Profile

- Had no regular shopping day, but did prefer to shop Wednesday through Friday.
- Had weekly grocery expenditures of about \$25.00.
- Shopped slightly less than one hour per food shopping trip.
- Used a shopping list.
- Shopped a chain store.
- Had shopped the same store for over 10 years because of convenience of location, prices, and familiarity with store.
- Drove own car to the store.
- Had no problems getting groceries home.
- Did not need home delivery service.
- Was free to choose the grocery store shopped.

Problem Areas Identified

- High shelves
- Item location
- Crowded stores
- Slow checkouts
- No rest area in store

Summary of Shopping Problems

The following table summarizes the various shopping problems reported by the elderly grocery shoppers. The percentage numbers under the shopping problem column represent a composite of all the times each shopping problem area was mentioned throughout the questionnaire. This column should be construed as a problem intensity indicator only and does not represent an absolute number of responses to the questions in the questionnaire.

Priority Actions

There are a number of actions that could reduce food shopping problems for the elderly.

Attitude and Awareness

The first action recommended is attitude adjustment of both store personnel and the elderly shopper.

An attitude of service, assistance and helpfulness on the part of store employees will accomplish two things. First, employees will develop a greater understanding of the elderly shopper leading to empathy and actions for creating a more favorable shopping experience. Second, the improvements resulting from an empathetic attitude should contribute toward a more favorable consumer attitude and greater tolerance of shopping problems by the elderly shopper.

A second action concerning attitude is the development of greater store management awareness of little problems which may be very annoying to individual elderly shoppers. Many of these problems can be corrected through employee training, awareness, as well as through policy decisions by management.

Package Language

The medical profession and food industry professionals need to consider common label terminology for packaging. When a physician prescribes a diet restriction, are consumers able to translate it into food package and label information? When a "low salt" diet is prescribed, how many salts are applicable and how many of those are included in the contents of the package under different names? A third action is recommended that seriously considers increasing communication efficiencies between medical requirements and label information.

Senior Citizen Shopping Advisory Council

A Senior Citizen Shopping Advisory Council should reduce shopping problems faced by the elderly shopper. The Council could be comprised of elderly shoppers in the community and could be assembled periodically to discuss areas within the store that could be improved. This Council could reinforce the attitude adjustment described in the first priority action.

General Conclusions

In analyzing the problems of the elderly in this project, it became clear that many of their problems are also applicable to other food shoppers. Thus if the

SUMMARY TABLE

The various shopping problems reported during the focus group sessions, the personal interviews and observed in the grocery stores; a recap of the total project findings, as reported by the elderly grocery shoppers, Spring 1980.

Food Shopping Problem Area	Focus Group Sessions	Method of Data Collection		
		Personal Interviews		
		Shopping Problems	Store Selection Reasons	In-Store Observations
		Percent	Percent	
Economic/Income/Prices	*	18	15	
Variety (meals and products)	*	6	10	
Shelving	*	1		*
Restrooms/rest areas	*	3		*
Item location/relocation	*	2	4	*
Package size (waste)	*	3		
Label print size (small)	*	1		*
Dietary; salt and sugar	*	5		
Personal cart storage	*			
Store cart separation	*			*
Scales, location and accuracy	*			*
Legible price marks	*			
Transportation	*	3	1	
Package opening		-		
Physical/Medical (taste)		5		
Nutrition education		2		
Adverse Cooking Attitude		5		
In-home storage facilities		1		
General Health		6		
Inconvenience of Location		5	23	
Services in general		4	3	
Store environment (Cleanliness, Layout)		1	2	
Parking		1	1	*
Carrying groceries		2		*
Cluttered aisles		1		*
Store/aisle temperature				
Crowded conditions		1		
Miscellaneous		1	2	

food industry effectively responds to these problems, they will be improving shopping conditions for the majority of their customers.

Some of the identified problems (such as store temperature) might appear to be petty ones, but in the minds of those people who identified them, they are conditions that detract from their food shopping experiences. Many firms are now promoting the concept "We care about you." However, unless they respond to customer complaints, such promotional themes and the dollars spent on them are wasted.

The high incidence of responses such as "no problem," or "no change desired" emphasizes that the elderly do not want to be overtly considered a disadvantaged market segment. Products must be integrated into the regular merchandise mix and services should not be conspicuously offered only to the elderly.

The elderly shoppers interviewed and observed in this project exhibited a significant amount of loyalty in their shopping behaviors. They patronized the same stores for many years and often reported a reluctance to switch brands or try new products. Perceptions of price and convenience appear to be the most effective motivators for change. However, even these considerations frequently cannot override long established loyalties.

It is hypothesized that these combined loyalties explain a great deal of the behavior of the elderly grocery shopper. The shopper's ability to recognize and report problems and their willingness to accept changes may be overshadowed by their existing loyalties and habits. The effect of these combined loyalties and the reluctance to accept change should be carefully assessed before specific product modifications or service adjustments are instituted.

Most grocery stores recognize that the elderly segment is not the most profitable customer segment to serve. They buy less groceries per capita. They buy fewer of the stores' higher margin, "frill" items. They probably require a disproportionate amount of store employees' time by asking product locations, requesting smaller cuts of meat or slowing down the checkout line. But these considerations should not lessen the food industry's desire to satisfy the needs of elderly shoppers. The food industry should take the attitude that they, like all businesses, have a strong obligation to this group of people whose work and purchases over the years were primarily responsible for our present advanced state of economic development.

AN INVESTIGATION OF PRICE-, QUALITY-, AND
DEAL-ORIENTED RETAIL MARKET SEGMENTS

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Abstract

This study investigated the existence and nature of retail market segments based on shoppers' emphasis on price, quality, and deals benefits. Five groups were found: Deal Seekers, Price Watchers, Quality Selectors, Quality Users, and Price-Quality Selectors. In general, those who seek mainly quality benefits depend on national brands and brand loyalty as selection criteria. Those who emphasize price and deal benefits are willing to take a chance with different products to reach their shopping goals. Those who want to maximize both price and quality benefits show greater concern about making the right decision than those who concentrate on price comparison when selecting products.

Introduction

A considerable amount of research has investigated the nature of market segments defined in terms of purchaser interest in either price, quality, or deal aspects of retail offerings. However, these research efforts have failed to determine the extent to which these three basic benefits act separately or in combination to attract viable market segments. For example, while studies involving price perception have cited the purchaser's use of price to impute quality of a product (Leavitt, 1954; Tull, Boring, and Consior, 1964; McConnell, 1968; Riesz, 1978), the extent of a unique or interactive appeal of each benefit has been ignored.

Whether two basic appeals, such as price and quality, act individually or in combination with one another will influence the difficulty of identifying the particular market segment being served. If the appeals act individually, then a viable segment may be fairly easily defined in terms of its response to this "pure" dimension of retail strategy. If the appeals act in concert, then the definition of the segment in question becomes more difficult, as does the formulation of a strategy to serve this "hybrid" segment.

The research question investigated by this study is: Can relatively clearly defined retail segments based on price-, quality-, and deal-orientation be identified, and, if so, characterized in terms of variables useful to the formulation of retail marketing strategy? Further, are the salient segments based on the pure dimensions of price, quality, and deal interest, or is there one (or more) segment(s) that seeks to trade-off the basic benefits investigated in this research? Can these segments, if they exist, be characterized by predictor variables suggestive of marketing strategy?

Thus, the purpose of this study is to investigate the existence and nature of retail market segments based on customer emphasis on price, quality, and deal elements of market offerings. It is expected that both pure and hybrid segments can be so identified. It is hypothesized the segments that emerge can be characterized in terms of predictor variables found useful in other studies of retail market patrons.

Conceptualization

Researchers have variously conceptualized price-orientation as an influence on purchase behavior (Leavitt, 1954; Monroe, 1973; Berkowitz and Walton, 1980). Two elements of price-orientation are explicitly recognized in the present study: price proneness and price sensitivity. Price proneness is the propensity to use price as a primary decision criterion in product or brand selection. Price sensitivity is the ability and the willingness to perceive differences in price level among competing alternatives.

The possibility of either or both price proneness and price sensitivity is predicated on a shopper's being conscious of price differences and their meaning in terms of the cost of food purchase. That is, price cues must enter the awareness of a purchaser before she can be either price prone or price sensitive. Price consciousness involves such issues as the ability of a consumer to perceive relative price changes and critical price ranges. For example, a shopper's demand has been shown to be reduced when her perceptual price expectations are exceeded (Gabor and Granger, 1964; Monroe, 1973).

The conceptualization of quality-orientation follows directly from that of price-orientation. Quality proneness indicates the propensity to use quality as a primary criterion in product choice, and quality sensitivity relates to the ability of the consumer to judge quality differences.

The conceptualization of a joint consideration or trade-off between price and quality is more complex in that it involves interaction between two basic elements of market strategy. This trade-off is perhaps best recognized as a form of deal. Webster (1965) defines a deal as "a reduction in the standard retail price of the product or an increase in value to the consumer." A price reduction for a given item means a more favorable ratio of product benefits to price. An increase in value may also stem from either an increase in such benefits as quality for a given price, or any change in both price and quality that gives a more favorable quality-price ratio. The concept of a deal thus reflects a continuum of favorable quality/price ratios.

Given the ability to identify segments distinguished by their emphasis on price, quality, and deals, the next step is to determine whether membership in these segments can be predicted by other variables useful to the formulation of marketing strategy. Four sets of potential predictors were selected: (1) store, product, and brand preference; (2) information source usage; (3) behavioral characteristics; and (4) demographics.

Store, product, and brand variables reflect the extent to which the shopper relies on a certain type of store, product, and brand to serve her needs for price, quality and deals. We would expect the price shopper to favor a discount store, to prefer her favorite store because of the nature of the store (e.g. offering a price appeal) rather than the products it carries, to emphasize private brands over national brands because of their price

advantage, and to be relatively lacking in brand loyalty so she can retain the freedom to respond to a price appeal. The quality shopper would be expected to provide an opposing profile. The characteristics of the deal shopper should lie between those of the other two types of shoppers, because the conceptualization of a deal suggests a trade-off of price and quality considerations. However, to the extent deal shoppers seek a price advantage, they will appear similar to price-oriented purchasers.

With respect to her use of various sources of information, the price shopper would be expected to use those sources that provide current information on prices so she can make store and product choices that will effect savings. She should therefore favor label readership, electronic and print media, and use of the package. She should be less likely to disapprove of advertising. The quality shopper should be more reliant on friends, given the greater efficiency of this medium for communicating information concerning quality. The deal shopper should be least likely to perceive an overload of information on the package and also unlikely to disapprove of advertising, given the usefulness of package and mass media information for finding a deal.

Her behavioral characteristics should indicate the price shopper to be generally aggressive in trying to reach her savings goals. Because a greater variety of shopping alternatives should mean an increased opportunity of finding a price advantage--the "wheel of retailing" hypothesis--she should be more venturesome and innovative, and more supportive of change in the world around her. She should be least concerned about making just the right product choice, given that a variety of alternatives may adequately serve her savings needs. The quality shopper should lie at the opposite end of the four continua, with the deal shopper positioned somewhere between the extremes.

With respect to demographics, the price shopper is hypothesized to be characterized by those measures that reflect a relatively deprived household situation and/or one where she has greater need to save. She also should possess the means to engage in comparison shopping. She should thus be more likely to shop after evening meal, to have her own transportation, to rent her dwelling, to be married and to have a larger household with a pre-school child, to make larger expenditures for food, and to be younger, less educated, and poorer. Again, the quality shopper would be expected to reflect the opposite sense of these measures; e.g., to own her house. The deal shopper should lie between the other segments.

Method

Data came from an in-person survey of 202 adult female residents of a major western metropolitan area. To ensure broad representation of the population, a quota sample matched the number of respondents to their reported incidence in six age groups from the most recent census; and interviewers were assigned to all sections of the urban area to effect proper socioeconomic representation.

Shoppers were asked about their favorite foodstore to provide a point of focus. All variables, other than demographics, were measured using six-point scales of two types. The majority of the items were of the type wherein, for example, respondents were offered response choices ranging from "Not at all important" to "Extremely important" for the question "How important is it to you to make just the right choice when you select a particular brand?" Other items featured a range of percentages: "For how many of your foodstore purchases do

you loyally stay with the same brand you purchased last time?" The six percentage choices ranged from 0, through 20, 40, 60, 80, to 100. The response choices given for the demographic items are indicated in **Table 1**.

The first step in analysis was use of a hierarchical grouping algorithm (Veldman, 1967) to cluster the 202 shoppers into relatively homogeneous groups. The number of groups was selected by: (1) use of the error term (Ward, 1963); (2) examination of the size of the resulting groups; and (3) consideration that the purpose of this study was to find groups that correspond to market segments meaningful to retail store managers.

The hypotheses introduced in the preceding section were tested by means of both univariate and multivariate analyses. For each of the 27 predictor variables, one-way analysis-of-variance was used to test the univariate hypothesis that group membership was related to the predictor in question. For each of the four sets of predictors, multiple discriminant analysis was used to test the hypothesis that group membership was related to, alternatively, the sets of store, product and brand variables, information source usage, behavioral characteristics, and demographics. The canonical discriminant functions were used to give a more compact portrayal of the relationships between group membership and predictors variables.

Results

The cluster analysis produced five groups of shoppers, thus reflecting their interest in price, quality, and deals aspects of foodstore shopping. **Table 1** presents a description of the five groups in terms of the five criterion measures. Because these price, quality, and deal measures were used as the basis for clustering, the information in **Table 1** serves only to portray these characteristics of the sample, rather than allow for statistical inference. Because all four canonical discriminant functions were "significant," the four functions were rotated toward simple structure. In interpreting this description of the criterion groupings, it must be remembered the clustering algorithm recognized both negative and positive aspects of the respondents' shopping emphases; that is, disinterest in quality can be as powerful a contributor to group formation as interest.

Table 1 also gives the F-ratios and probabilities of a Type I error for the univariate tests of hypotheses and the canonical loadings for each significant discriminant function. These loadings are the correlation between each variable and the linear combination of the variables in a set that is expressed by the discriminant function. The footnotes to the table give the centroids for the standardized functions and the probabilities of a Type I error for significant roots.

The discriminant loadings given in **Table 1** fall fairly neatly into four basic types of foodstore emphasis, and the four canonical functions may easily be named quality proneness, price proneness, price sensitivity, and deal proneness. With the exception of the third root, which has .72 as its highest primary loading, the functions reflect remarkably pure factors of foodstore interest, given the maximum possible loading of 1.00.

Figure 1 presents a supplementary, graphical portrayal of these results of the cluster analysis. This figure shows a plot of the centroids for each of the five groups on the four canonical axes that were derived in the descriptive discriminant analysis of the criterion measures. These profiles represent shoppers' propensities to both seek and avoid the benefits at issue in

this study. Therefore, they reflect five basic market segments of foodstore shoppers.

TABLE 1
CHARACTERISTICS OF FIVE GROUPS OF RETAIL STORE PATRONS

Characteristics	Group Means					F Ratio	p	Discriminant Loadings			
	A (n=79)	B (n=28)	C (n=49)	D (n=17)	E (n=29)			I	II	III	IV
Price, Quality, Deal Variables ^a											
Price proneness	5.92	5.07	4.18	4.65	6.00	41.96	.000	.02	.97	-.27	-.16
Price sensitivity	4.09	3.71	3.02	0.88	2.59	45.55	.000	.27	-.11	.72	.53
Quality proneness	5.34	2.61	5.63	5.88	5.69	101.00	.000	.99	.11	.10	-.01
Quality sensitivity	3.41	2.86	3.55	5.35	3.76	14.80	.000	.29	.05	-.39	.15
Deal proneness	3.18	2.54	2.41	2.59	1.28	19.83	.000	-.10	-.16	-.01	.97
Store, Product, Brand Variables ^b											
Discount store preference	2.49	2.86	2.39	1.59	2.31	1.61	.171	-.42			
Product (vs.store)emphasis	3.96	4.07	4.08	3.82	4.90	1.77	.136	-.02			
National (vs. private)											
brand proneness	2.75	2.68	3.27	4.00	3.07	5.39	.001	.86			
Brand loyalty	2.94	3.00	3.67	4.00	3.17	5.57	.001	.86			
Information Source Usage ^c											
Label readership	3.51	3.61	3.71	3.18	3.55	0.44	.784	---			
Information overload	2.99	3.29	3.76	3.00	2.83	1.09	.364	---			
Electronic media usage	2.34	3.07	2.55	2.88	2.79	1.58	.182	---			
Print media usage	3.11	3.25	3.10	3.47	3.24	0.25	.913	---			
Personal source usage	4.65	4.43	4.57	3.65	4.55	2.31	.059	---			
Package usage	4.18	4.14	4.49	4.06	3.59	1.68	.157	---			
Disapproval of advertising	4.35	4.29	4.20	3.88	4.00	0.86	.491	---			
Behavioral Characteristics ^d											
Concern about choice	4.29	3.57	4.55	5.00	4.62	4.36	.003	-.49	.87		
Venturesomeness	4.06	4.04	3.90	2.59	4.41	6.03	.000	.90	.24		
Innovativeness	3.63	3.29	3.12	2.59	3.55	3.28	.012	.63	.09		
General change proneness	4.82	4.75	4.88	4.00	3.83	0.10	.981	.11	-.08		
Demographics ^e											
Shops after evening meal											
(0=no; 1=yes)	.25	.07	.24	.12	.34	1.95	.104	-.26			
Furnishes own transportation											
(0=no; 1=yes)	.85	.75	.82	.71	.79	0.65	.630	-.20			
Owns house (0=no; 1=yes)	.67	.61	.61	.71	.66	0.22	.924	.03			
Rents house(0=no; 1=yes)	.06	.07	.04	.06	.10	0.30	.878	-.04			
Rents apartment (0=no; 1=yes)	.18	.25	.24	.24	.17	0.36	.838	.10			
Marital status (0=single; 1=married)	.75	.57	.57	.71	.72	1.51	.202	-.09			
Household size (no. of persons)	3.23	2.75	3.02	3.00	3.10	0.41	.801	-.09			
Preschool-aged child in home (0=no; 1=yes)	.25	.25	.20	.12	.28	0.50	.738	-.19			
Weekly foodstore expenditures (dollars)	42.95	38.29	47.18	69.18	47.34	3.43	.010	.46			
Income (8-point scale)	5.11	4.50	4.86	4.71	5.24	0.89	.468	-.18			
Age (years)	39.03	42.89	39.86	47.82	37.90	5.39	.000	.66			
Education (years)	14.10	13.68	13.45	13.53	13.62	1.00	.411	-.15			

^aNo statistical inference can be drawn from the price, quality, deal variables because this set was the basis for clustering that produced the groups. Statistics are presented for descriptive purposes.

Group centroids for the first rotated, standardized function are: A, .36; B, -3.51; C, .63; D, .75; E, .90. Centroids for the second function are: A, .82; B, -.66; C, -1.28; D, -.80; E, 1.03.

Centroids for the third function are: A, .54; B, .63; C, .01; D, -2.90; E, -.39.

Centroids for the fourth function are: A, .68; B, .22; C, -.23; D, -.41; E, -1.43.

^bFirst canonical discriminant function significant at p=.001.

Group centroids are: A, -.29; B, -.34; C, .33; D, .93; E, .01.

^cNone of the canonical discriminant functions was significant at p=.050; therefore, no loadings are given.

^dFirst canonical discriminant function significant at p=.001; second function significant at p=.016.

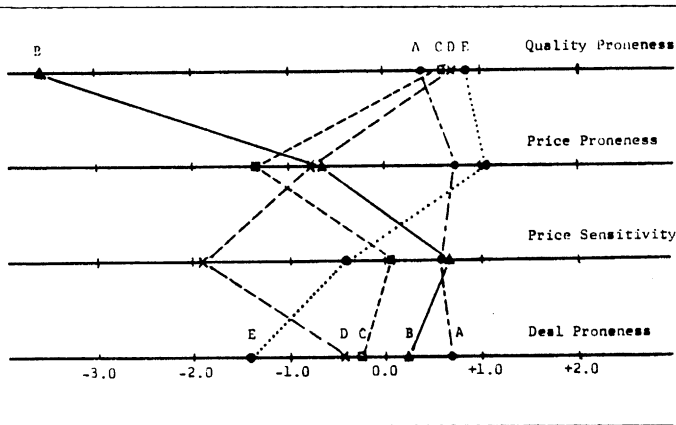
Group centroids for the first standardized function are: A, -.17; B, -.17; C, .14; D, 1.14; E, -.27.

Group centroids for the second standardized function are: A, .03; B, .55; C, -.13; D, .04; E, -.41.

^eFirst canonical discriminant function significant at p=.000.

Group centroids for the first standardized function are: A, -.31; B, .15; C, .04; D, 1.59; E, -.30.

FIGURE 1
CENTROIDS OF FIVE SHOPPER GROUPS
ON FOUR CANONICAL DIMENSIONS



Group A comprises the largest number of shoppers, 79. These foodstore patrons report a relatively high interest in all four basic benefits, but stand highest of the groups in their search for deals. Hence, Group A will be referred to as the Deal Seekers. Group B, consisting of 28 persons, is best characterized by its very low interest in quality, a negative property. In the positive sense, these shoppers express the highest interest in price comparison and the second highest emphasis on deals. They will be called the Price Watchers.

Group C, comprising 49 persons, stands lowest in price proneness, but near the top in quality proneness. These persons seem to be Quality Selectors, as quality is their dominant emphasis. Group D, the smallest with 17 shoppers, stands high in quality proneness as measured by the canonical function. The univariate results indicate these respondents claim the highest scores in both quality proneness and quality sensitivity, but the lowest score in price sensitivity. This group contains the Quality Users. Finally, Group E with 29 patrons gains the highest canonical (and univariate) scores in both quality proneness and price proneness, and the lowest score in deal proneness. These shoppers are apparently not swayed by the appearance of special deals, but feel they are able to manage the difficult task of selecting products that provide both price and quality benefits simultaneously. These are the Price-Quality Selectors.

Turning to the inferential analyses involving the predictor variables, two of the store, product, and brand variables reached significance at the .05 level by univariate test: national brand proneness and brand loyalty. The single significant function is dominated by these variables to reflect a (predominantly national) brand loyal emphasis. Group D, The Quality Users, leads in brand loyal emphasis, while Groups B and A, the Price Watchers and Deal Seekers, trail in emphasizing brands in foodstore selection.

None of the information source usage variables reached significance in univariate analysis; nor was there a significant discriminant function.

Three measures from the set of behavioral characteristics were found related to group membership by ANOVA: concern about choice, venturesomeness, and innovativeness. The canonical analysis derived two significant functions. The first function reflects a willingness to take a chance and to try new and different things, as it is dominated by venturesomeness and innovativeness. These findings show Groups E, A, and B, those most oriented toward deals and price, to be most will-

ing to make foodstore trials. Group D, whose primary interest lies in finding quality, offers contrast as the most cautious group. The second function connotes a concern for making the right choice in the foodstore. Group E, those expressing a dual price-quality interest, lead in concern. Group B, the shoppers with a notably low interest in quality, show the least shopping concern.

From the demographics set, age and weekly foodstore expenditures reached significance through ANOVA. These variables also define the canonical axis, with age taking the leading influence. Group D, the Quality Users, contains the older, higher spending persons. Groups A and E, the two groups with the highest canonical price proneness scores, represent youth and low foodstore expenditures.

Because significant results were found, the danger of search bias from stepwise analysis receded, and a stepwise discriminant analysis was conducted to summarize the above findings. Two functions were significant at the .05 level. As the first three significant discriminant analyses provide a highly consistent ordering of the five groups on their respective canonical axes, it is not surprising that the first, most significant stepwise function serves to reinforce these findings with a more compact portrayal. (See Table 2).

TABLE 2
A SUMMARY PORTRAYAL OF THE
FOODSTORE MARKET

Variables ^a	Canonical Loadings	
	I	II
Venturesomeness	-.60	-.08
Age	.56	.18
Brand loyalty	.51	-.35
Weekly foodstore expenditures	.42	-.28
Concern about choice	-.28	.66
Shops after evening meal	-.19	-.45
Marital status	-.10	-.11

^aFirst canonical discriminant function significant at p=.000.

Second function significant at p=.001.

Group centroids for first standardized function are:

A, -.38; B, -.03; C, .25; D, 1.80; E, -.42.

Centroids for the second function are: A, .06; B, .83; C, -.26; D, -.03; E, .51.

The first stepwise function portrays a tendency on the part of older shoppers to spend more on food, emphasizing brands as they avoid taking a chance on unfamiliar products. The Quality Users stand highest on this cautiousness dimension, while the three groups that emphasize price and deals have the lowest score.

The second stepwise function portrays the tendency of the woman who shops before evening meal to be concerned about making the right product choice, switching brands as necessary to meet her shopping goals. The Price-Quality Users stand highest on this careful shopping dimension, while the Price Watchers stand lowest.

Discussion

The purpose of this study was to identify the existence

and nature of foodstore market segments based on price-, quality-, and deal-orientations. Five segments were found. None seems to represent an unmistakably pure form in terms of the three basic orientations. Nonetheless, three groups, D, B, and C, appear relatively monolithic in their emphases. The other two groups, A and E may be termed hybrid segments.

Perhaps the purest group is the Quality Users, who reflect both quality sensitivity and quality proneness, as well as a disinterest in deal and price related benefits. Next, the Quality Selectors primarily emphasize quality as a decision criterion, but they appear less involved in shopping, given their relatively low scores for the entire set of criterion variables. The Price Watchers report a combination of high interest in price differences and a low interest in quality differences as they compare foodstore alternatives.

Deal Seekers represent something of a hybrid interest, even though they stand highest on emphasis on deals. They also report high interest in price benefits, and are not notably low in quality concerns. These shoppers seem to represent the Involved Shopper identified by other research (Williams, Painter and Nicholas, 1978; Painter and Granzin, 1980). The Price-Quality Users represent the best example of a hybrid group, as they claim high interest in both price and quality benefits. Given the possible paradox inherent in obtaining both price and quality benefits for many foodstore items, it would be interesting to explore the decision processes of these shoppers who report a low interest in obtaining deals.

The predictor variables elaborate the portrayals of the five groups. In general, the groups that primarily emphasize quality exercise caution in foodstore purchase, using national brand loyalty as a means of finding this quality. Conversely, the Price-Quality Users, the Deal Seekers, and the Price Watchers are more willing to try different products, and show the lowest brand loyalty. The latter three groups are themselves distinguished by their level of concern with making the right selection. On this dimension, the Price-Quality Users express the most concern and the Price Watchers indicate the least concern of the five groups.

In general, the Deal Seekers stand close to the price-oriented groups in their characteristics. Thus, foodstore deals seem to stem from a price appeal for the most part, the earlier conceptualization notwithstanding. Perhaps research into other retail markets, such as clothing or appliances, would provide differing results.

Summary and Conclusions

This study has identified five relatively homogeneous groupings of foodstore shoppers. These groups reflect both pure and hybrid emphases on price, quality, and deals in making product selections. The five market segments can be further characterized in terms of their emphases on store, product, and brand, their behavioral characteristics, and their demographics. Apparently, these segments do not differ in their use of various sources of product information. The findings also indicate that marketers may have to recognize that market segments are characterized by their disinterest in certain foodstore benefits, as well as by their interest.

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THE HISPANIC CONSUMER SEGMENT

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Abstract

The Hispanic subculture is a significant component of the United States economy. Although the market offers a large opportunity for development by businesses, it has been largely ignored by consumer goods companies. This paper describes the nature of the Hispanic consumer segment and discusses marketing strategies for this group.

Introduction

Hispanics are this nation's second largest and fastest growing minority. In fact, projections indicate that by 1985 the Hispanic population will be the largest minority in the United States (Providence Sunday Journal, August 19, 1979). Further, the Hispanic population in the United States makes this country the fifth largest Spanish-speaking country in the world (Mack, 1980).

Clearly, then, the Hispanic subculture is an important part of the economy of the United States and represents an extremely important market for development by businesses. However, the market has been largely ignored by consumer goods companies. It is a market that generally has not been effectively appealed to. The purpose of this paper, therefore, is to bring this market more clearly into focus for the marketer by describing some of its features and suggesting viable marketing strategies to attract this group. First, the importance of the Hispanic market will be brought into perspective by presenting its significant features. Second, the need for greater research on Hispanics will be discussed. Third, research findings concerning marketing strategy elements will be addressed. Finally, the need for market segmentation will be stressed.

Demographic Characteristics

The Hispanic market differs radically from other ethnic segments and from mainstream America in that it is continually infused with new immigrants from various parts of the Spanish-speaking world. The old country is never very far away, either symbolically or geographically. This group clings tenaciously to the Spanish language, the Catholic church and the family unit. Indications also are that Hispanics are not assimilating into the mainstream of America as have other ethnic groups in the past (Time, October 16, 1978).

In 1980 the size of this market was approximately 14.6 million people. Between 1970 and 1980, this segment increased by 61 percent (partially due to a more complete count of all Hispanics, including the very large number of illegal Hispanic aliens in the U.S.). During this period the Hispanic's proportion of the U.S. population grew from 4.7 to 6.4 percent (U.S. News & World Report, May 4, 1981).

The largest segments within the Hispanic market are Mexicans, Puerto Ricans, and Cubans. Central and South Americans as well as the "other" segments are growing and cannot be ignored as a part of the Hispanic market.

The Spanish subculture is largely an urban population group. For example, in 1979, 85.1 percent of all Spanish-Americans lived in metropolitan areas compared to 65.8 percent of the non-Hispanic population.

The income level of Hispanic families is significantly lower than families of non-Hispanic origin. The median income for Hispanic families in 1978 was \$12,600 compared to \$17,900 for non-Hispanic families.

Occupations of men of Hispanic origin are predominantly blue-collar in nature. Approximately 58 percent of Hispanic men are blue-collar workers, while only 24 percent work at white-collar occupations.

Hispanics, generally attain a lower level of education than do non-Hispanics. Among people 25 to 29 years of age approximately 57 percent have completed high school as compared to over 87 percent of persons of non-Hispanic origin. Only about 7 percent of Hispanics complete college as compared to 17 percent for the non-Hispanic population.

Hispanics believe saber es poder (knowledge is power) and younger Hispanics are rapidly closing the educational gap. This belief is indicated by the fact that in 1970 only about 48 percent of persons 25 to 29 had completed high school as compared to the 57 percent in 1979.

Hispanic families are, on the average, larger than non-Hispanic families with the mean number of persons in the Spanish origin family being 3.85 as compared to 3.28 for non-Spanish origin families.

The Hispanic market is a much younger market than is the non-Hispanic market. Approximately 41 percent of the Hispanic market is less than 18 years of age as compared to 28 percent for the non-Spanish origin population. The median age for Hispanics is 22 years and for non-Hispanics it is 30 years.

Consumer Behavior and Marketing Implications

An increasing number of businesses are realizing the significance of the Hispanic market and are moving to sell products within this segment. However, this change in orientation has been slow to occur. The marketer must give special attention to questions that relate to the product, promotion, pricing and channel of distribution strategies that the business traditionally has used to sell in other market segments. Specifically, will the same marketing strategies that work among non-Hispanics work in the Hispanic market segment? This section will address some of the changes in strategies and tactics which may become necessary in attracting this group.

The marketer should be aware that the Hispanic market is highly individualistic in its product and brand preferences. This individualism is often reflective of cultural differences. In some product categories the Hispanic segment is very significant. For example, Hispanics spend approximately twice as much per week on food purchases than do non-Hispanics, in part because of larger family size (Media Decisions, May 1977). In addition, a larger number of Spanish households are

frequent visitors of fast-food restaurants. For example, 20 percent of Spanish homes visit such outlets more than once a week, versus 9 percent of the non-Spanish homes (Aguayo, 1977). Hispanics are also heavier consumers of beverages. For example, the Schaefer Brewing Company estimates beer consumption among Hispanics to be 1.5 times greater than the national average.

Hispanics evidence a high degree of brand loyalty which has evolved from their trust of well known or familiar brands (Media Decisions, May 1977). Such strong Hispanic brand loyalty can be a significant resource for a company. For example, a market research study within the Los Angeles market shows that Hispanics prefer U.S. autos over imports by a 9 percent margin. Thus, they have a greater likelihood of purchasing U.S. cars than do Anglo new car buyers. This finding should be of much interest to U.S. car manufacturers such as Chrysler in their battles with foreign imports. Despite this favorable Hispanic predisposition toward domestic cars, however, Chrysler has only recently begun to advertise specifically to this group via Spanish-language ads (Advertising Age, November 24, 1980).

A strong perceived risk exists among Hispanics attached to trying a new or different product. While low incomes are a constraint to trying new products, there are other factors such as their conservative shopping habits and the inability to read and understand English that may also inhibit new product purchases among a large portion of this group. Finally, because of value differences between this group and mainstream America, new product benefits often seem superficial and nonsensical to Hispanics (Marketing Insights, January 12, 1970). Thus, introducing a new brand to this market may be difficult. However, a marketing program carefully tailored to the Latin's self-image and interests can be effective in gaining successful entry into this market.

When developing new-product plans the marketer should investigate this group carefully to determine its receptivity to the innovation being considered. Packaging of products being offered to the Hispanic market must be carefully adapted to their needs. For example, Campbell's Soups once had little success in the Hispanic market because many consumers were unaware of the product. Hispanics lacked familiarity with the concept of condensed soup and labels offered no clarification by providing pictures illustrating the use of the soup. In addition, many people misread soup labels, purchasing "Cream of Celery" soup thinking it was cereal (Rothmyer, 1975). Hispanics also misperceived Campbell's "Manhandler's" soups as being made by the hands of men. Through careful and effective advertising in Hispanic media, however, Campbell's was able to successfully change these misinterpretations and has built a lucrative Hispanic clientele.

Generally, very little product adjustments to the demands of the Hispanic market have been made. Adjustments which have been made are primarily in the area of food products; specifically in packaging, where instructions and promotions are often printed in English as well as in Spanish. Certainly, a business that is interested in the Hispanic market, should at least consider minor expenditures to adjust the product's package to include Spanish language instructions and promotional messages.

Many companies are beginning to take greater note of the Hispanic market and are increasing their promotion expenditures accordingly. For example, catalog retailers such as J.C. Penney have begun to include

Spanish language indexes and other information in catalogs it distributes (Green, 1980). When making promotion decisions, several factors must be considered: media, language, and appeals.

The Hispanic market, although concentrated geographically in urban areas, is sometimes difficult to reach because of the language barrier. One survey found that approximately 72 percent of the Puerto Ricans, 87 percent of the Cubans, and 47 percent of the Mexicans living in the United States speak mostly Spanish at home. Even among Hispanic teenagers such as those in Dade County, Florida (Miami) 60 percent speak Spanish most frequently (Cooper, 1975). Therefore, to effectively reach this market Spanish language media must be used (Garzes, 1981; Rothmyer, 1975). The major Hispanic media vehicles consist of television, radio and print.

Television has developed into an important medium for Spanish advertising with thirteen stations in the United States and five more just across the border. One study found that 64 percent of the Spanish households in the New York City area were tuned in to a Spanish television station during one weekday evening at prime time (Rothmyer, 1975). With Spanish television ownership at approximately the same level as the general population, the increase in UHF television penetration, and the addition of Mexican stations to cable networks, the marketer is increasingly able to reach the Hispanic segment by using this medium. Although television may cost more than radio, Spanish television generally costs much less per thousand viewers reached than general market television. The medium is excellent because of its color impact, its ability to show products and how they perform, its immediacy, memorability and its effectiveness in reaching Hispanic children (Davis, 1979).

Radio is also an important medium for the Spanish-American market (Mack, 1980). There are at least 180 United States radio stations that present Spanish language programming on a full- or part-time basis. Radio ownership in this market is comparable to that for all U.S. radio households. Moreover, Hispanics are heavier listeners than non-Hispanics (Roslow and Roslow, 1980). A survey of New York Spanish-speaking households showed median daily listening of more than four hours per day, compared to average adult listening of 2.5 hours per day for all United States radio households. In addition to being heavy listeners, about 60 to 80 percent of their listening is to Spanish-language programming (Jones, 1967). Spanish teens, however, devote 61 percent of their listening time to contemporary music stations versus only 14 percent for Spanish stations, and almost as much time listening to black radio (Sales and Marketing Magazine, 1977).

Radio is a very effective medium for several reasons: It is inexpensive and flexible; it is accessible when Spanish television may not be on the air (such as mornings); it reaches Hispanics as they engage in day-to-day mobility; and it is often played in the small stores where many Hispanics shop (Media Decisions, May 1977).

Print media, including magazines and newspapers, are also used to reach the Spanish-American market. These media, however, tend to have much less value than other media because of lower literacy rates. However, this medium cannot be overlooked for the richer, better educated Hispanic.

For advertising to the Spanish-American market to be successful, the communication must fit the people's subculture. Unfavorable stereotypes--such as always picturing Mexicans as people who have colorful clothes, eat tacos, and live in quaint adobe houses--will tend

to be rejected by Hispanics. Ads that are likely to be most meaningful should be authentically Latin in setting and language, and highly personal in approach (Meyer, 1979).

Numerous companies have been criticized for taking the language factor too lightly in advertising to Hispanics. Instead of producing a Spanish language commercial, for example, some firms will take a commercial made for the English-speaking market and dub over the soundtrack in Spanish. More companies are recognizing the need for tailored Hispanic advertising. However, as Procter and Gamble has found, there are some limited instances where dubbing may be necessary--such as when there's an unexpected chance to obtain a prime Spanish-media commercial slot and preparation time is limited. Similarly, Sears dubs some ads because different merchandise is being advertised all the time (Green, 1980).

If the marketer does resort to dubbing with a Spanish voice-over, equal attention must be given to the appropriateness of the video portion of the ad. An Anglo face or setting with a Spanish voice will tend to be less credible among Hispanics. However, a well-known Anglo advertising personality may sometimes be effectively used in this market. For example, the late Colonel Sanders successfully appeared in Kentucky Fried Chicken ads speaking Spanish.

Because of the diverse dialects among Puerto Ricans, Cubans, and Mexicans in the U.S. some marketers have sought to avoid the language difficulty by utilizing an accentless, non-idiomatic Spanish understandable by all. Ads for Sears Die-Hard batteries and Cross Pens use such neutral Spanish. Print and outdoor ads often keep the language simple so that changes from one area dialect to another are eliminated. Budweiser outdoor advertising is a good example of this approach.

Companies are increasingly turning away from mere translations toward complete ad campaigns tailored to Latin consumers. Coca-Cola learned this when its slogan "It's the real thing" and "Coke adds life" were found to have an off-color meaning in Spanish. Instead, the latter slogan became "Coke adds that little extra." Numerous other bloopers have been made by firms in advertising to Hispanics. For example, a Spanish language television commercial for an adhesive bandage recommended for helping "conquitos" on a child's injured knee encountered translation difficulties. While the word correctly meant "little scratches" to Cubans, to Mexicans it meant "little coconuts"--not exactly what was intended (Green, 1980).

As tailored promotions appear, advertising agencies must keep cultural differences in mind to attain credibility with their Hispanic audiences (Aguayo, 1977).

The following example illustrates such an acculturated approach:

--Budweiser radio advertising has been subsegmented into four styles of music to correspond with the different ethnic types of Hispanics around the country. The music running in Los Angeles has a mariachi sound that appeals to Mexicans living there, in Texas a polka Nortena is a familiar sound to Texas Hispanics, in Florida the Cubans listen to a version of their charanga, and in New York there is a Puerto Rican salsa. The accent used throughout is broadcast Spanish, a sound with no regional ties (Dawson, 1981).

A family tie-in can often be appealing because of the large family size among Hispanics and their high

regard for strong family bonds. Colgate made effective use of this appeal in one commercial in which a child's birthday party was shown with the whole family in attendance. Borden has also been successful in this market with the slogan "We'd like your family to meet our family at La Casa Borden."

The marketer should conduct research to find out what appeals are best for this segment. Appeals used in the general market may not be successful. For example, although Colgate stresses a cavity-fighting theme in the general market, it promotes "Happy Smiles" in the Spanish segment because the Hispanic consumer wants to know what the product will do for his or her appearance. Kent cigarettes advertises taste rather than low tar content, and Mazola corn oil ads don't mention cholesterol, but stress how the oil tastes.

With regard to store selection research has shown that many Spanish-speaking housewives feel lost in giant supermarkets where they are surrounded by many unfamiliar products and are inhibited about asking questions. Because such uneasiness exists with regard to large stores, Hispanics do a large amount of their shopping in bodegas, which are small neighborhood stores where only Spanish may be spoken. For example, in New York, bodegas account for 30 percent of grocery volume among Spanish-speaking residents.

The bodega, therefore, can be a useful proving ground for brands. It is a neighborhood institution that provides such services as check cashing, credit extensions, loans, the translation of documents into English and vice-versa, and phone calls of a legal nature in English for Spanish customers who can't use the phone in English on their own. Because brand depth in the bodega is not great, there is keen and growing competition for shelf space, particularly as more marketers become aware of the important role these stores play among Hispanic shoppers in New York and other markets. Bodega owners expect brands to be pre-sold; consequently, will be more favorably predisposed toward carrying brands that are effectively advertised in Spanish media. The language barrier not only affects advertising but also pricing policies. For example, one of the most frequent complaints of Spanish-speaking supermarket customers is concern with pricing techniques such as multiple pricing, the presence of preprinted and stamped prices and cents-off labels.

The use of cents-off coupons has been considered to be less effective in the Hispanic market than in the non-Hispanic market (Media Decisions, May, 1977). Many of reasons for non-use are similar to those given by Anglos who do not redeem coupons. Other reasons are as follows: (1) Hispanics may be treated poorly at the checkout counter when they present coupons for redemption; (2) an ethnic pride prevents them from using coupons (many view them in the same way as food stamps --and they do not want to be thought of as a charity case by their friends and neighbors when shopping in the small bodegas); (3) they have had less exposure to them because direct mailings have not often been made into Hispanic neighborhoods; and (4) this is largely a cash market of limited means without the available funds to purchase many couponed products. Some of these barriers to greater coupon use are being overcome, however. New direct mailing programs into Hispanic areas are being developed, with more appropriate appeals tailored to their needs.

Samples of new or unfamiliar products are also a useful way to increase trial among Hispanics. Better means of sampling products are being tried ranging from packing free samples along with a compatible brand, to product demonstrations, giveaways, and the

design of special events at which free samples may be offered. As a result of such activities, couponing and sampling are gaining in importance as more firms use these techniques and increase their level of sophistication concerning their use (Marketing News, February 20, 1981; Mack, 1980).

Segmenting the Hispanic Market

A final and important question concerning the nature of this market must be addressed at this point: "Is the Hispanic market a homogeneous market segment?" The answer is, no.

Although Hispanics are united by a common language and religion there exist numerous subdivisions--for example, Cuban attitudes, interests, and opinions differ from those of Mexican-Americans, as well as all other origins within the Hispanic market. The marketer should recognize that a significant opportunity exists to take advantage of these differences. As already noted, for example, Budweiser has adapted its slogans and the music for its commercials to reflect the musical preferences of various subsegments within the total Hispanic market (Gage, 1980).

A natural segment occurs within the Hispanic market based on income. Poorer Hispanics spend more of their disposable income on food than do wealthier Hispanics. Further, the low-income Hispanic reads less than does the wealthier Hispanic. This is evidenced, to a degree, in the new magazine supplements that are appearing in Mexican newspapers and other slick Hispanic magazines that are specifically aimed at the wealthier Spanish-speaking person (Bayer, 1980).

A study of Mexican-Americans by Fernando Cervantes suggests that market segmentation may be based on the Hispanic's social class and life style. Cervantes identifies four heterogeneous groups as follows (Marketing News, August 22, 1980):

- (1) Recent entrants and illegal immigrants
- (2) Radical chicanos
- (3) Conservative chicanos
- (4) "The New Rich"

Certainly, there are more and perhaps better ways of segmenting the Hispanic market. The important implication is that the marketer should seek to segment the market on an appropriate basis and develop tailored marketing strategies to satisfy the chosen segments. At present, however, very little research has been done in this area; but there are some indications of what research needs exist (Adams, 1979; Dominguez, 1979).

Conclusion

This paper has presented several fundamental concepts regarding the Hispanic market. It serves as a foundation to acquaint the marketer with some of the more important considerations in planning marketing strategies. There are several significant conclusions to keep in mind in venturing into the Hispanic market. First, the marketer should be aware of the tremendous potential of the Hispanic market; it is much too large to slight or ignore. Second, the Hispanic market is one of great variation. This heterogeneity forces recognition on some basis. Differing ages, nationality orientations, levels of assimilation, incomes, and so forth offer useful possibilities in this regard. Third, the marketer must be culturally sensitive to the marketing needs of this group. This segment may perhaps best be viewed by the marketer as a separate culture and approached as if it were another country. In doing so, the marketer must carefully avoid the

self-reference criterion (SRC) by placing himself in the Hispanic frame of reference in making strategy decisions. In doing so, adaptation will often be seen as the key to success in the Hispanic market. Here the marketer must evaluate this market's desired product benefits, watch for needed product/package adaptations, understand any differing patterns for channel of distribution approaches, and be aware of possible pricing implications such as with the use of coupons. Fourth, strategic planning is necessary in the Hispanic market. Such planning should be based on solid marketing research utilizing sound techniques appropriate to this segment. Finally, and of great importance to successful cultivation of Hispanics is the need for top management commitment to the idea. Moreover, this attitude must clearly filter down to brand managers and others if the company is to succeed in this market.

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CONSUMER SATISFACTION AND CONSUMER BEHAVIOR:
EVIDENCE ON THE "SO WHAT" QUESTION

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Abstract

Direct measures of consumer satisfaction have been proposed and studied in recent years. To date, evidence that satisfaction is related to behavior, a necessary condition for wider adoption of satisfaction monitoring, is lacking. In this article it is shown that measured satisfaction is strongly associated with product use and store loyalty.

As a result, the practical implications of satisfaction measures have been questioned. Some take the position that these assessments are too general and vague to be of use to marketing managers. Others argue that simpler, more traditional mechanisms, such as complaint monitoring meet the information needs of individual firms (Diener 1979).

Introduction

Sales, market share and profits have traditionally been taken as indicators of the level of consumer satisfaction. Recently, proposals for more direct subjective assessments have been advanced (Hunt 1977). Scholars argue that measures of this sort ought to be developed in the consumer's interest. Since it is commonly assumed that satisfaction influences behavior --- repeat purchase, brand and store loyalty, monitoring and influencing satisfaction should also serve management's ends (McNeal 1977). Yet, in spite of a growing body of research on definitions, components correlates and measurement of satisfaction, studies of the satisfaction-behavior relationship are notably lacking. Czepiel and Rosenberg's "So What?" question remains unanswered (Czepiel and Rosenberg 1977). Satisfaction monitoring will not become accepted business practice until these relationships have been documented, i.e., until it has been shown that it serves the firm as well as consumers.

Two questions must be answered if satisfaction measures are to be adopted more widely by business. First, is measured satisfaction related to behavioral outcomes of interest to managers, e.g., repeat purchase or customer loyalty? Second, can the level of satisfaction be affected by actions under the firm's control? From management's point of view, the questions should be addressed sequentially, since the second is of little importance unless the first is answered in the affirmative.

Evidence from two studies of satisfaction-behavior relationships is presented below. The first dealt with consumer products, the second with supermarkets.

Studies of consumer satisfaction have been prompted by a variety of motives. Two perspectives, the societal and the managerial, will serve to illustrate the diversity of viewpoints. According to those motivated by societal (macromarketing) concerns, people simply ought to be satisfied with their goods and services. Satisfying consumers is a worthy goal, in and of itself. Creating customer satisfaction is numbered among management's social responsibilities. Satisfaction measurements can help identify those warranting regulatory attention for failure to meet this charge (Hunt 1976).

The managerial view reflects the marketing concept, the notion that the key to profitability is satisfying consumer needs. The level of satisfaction should be monitored because it is directly related to sales, market share and profit (Maddox 1976). Satisfying customers is in the manager's own self-interest.

Are satisfied consumers more loyal? More profitable? Should management monitor and attempt to affect the level of customer satisfaction? One intuitively answers "yes" to both questions. Yet, if we were to search for support, our faith might be shaken. There is little empirical evidence bearing on the relationship between measures of satisfaction and variables of more direct interest to management. Examination of a seemingly similar concept, job satisfaction, might further undermine our confidence. Industrial psychologists have repeatedly failed to show that more satisfied workers are more productive (Smith et al 1969).

PRODUCT SATISFACTION

Maddox investigated the performance of various measures of product satisfaction, using 373 Ohio State University students as subjects (Maddox 1976). Product categories and generic products meeting the joint requirements of a) being relevant to the population studied, b) ranging significantly in durability and psychosocial importance and c) being neutral (neither extremely satisfying nor extremely dissatisfying) in overall satisfaction, were chosen during pretesting as follows. (Table 4)

Candidate products were identified using various unstructured instruments inquiring as to product satisfaction. Paired comparison ratings of overall satisfaction with the most frequently mentioned products were gathered from pretest subjects. Thurstone Case III scaling was applied to these data. Products falling near the midpoint of the resulting interval scale were chosen for the final study. Respondents were randomly assigned the task of rating one of these products.

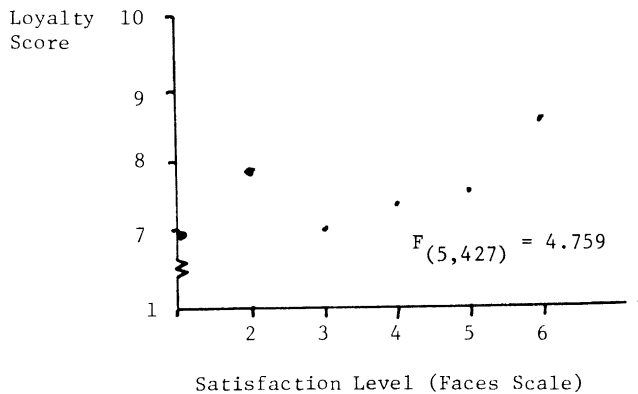
TABLE 1
PRODUCT CATEGORIES AND PRODUCTS STUDIES

		Durability	
		Low	High
Psychosocial Importance	Low	Foods and Snack Foods	Small Appliances
		<u>Bread</u>	<u>Electric Toasters</u>
	High	Health and Beauty Aids	Clothing
		<u>Spray Deodorant</u>	<u>Tennis Shoes</u>

$$\text{Loyalty} = 100 \times \frac{\text{Trips to Own Store}}{\text{Total Supermarket Trips}}$$

The loyalty measure was given an arcsine transformation and correlated with overall satisfaction as assessed with the faces scale (Table 2). The correlation, 0.23, was highly significant, but substantially smaller than that found for products. Details of the relationship are shown in Figure 3.

FIGURE 3
STORE SATISFACTION AND STORE LOYALTY



The peak at satisfaction level two was difficult to interpret. Though few (16) in number, these shoppers have the second highest loyalty value, despite a low level of satisfaction. Were levels one and two on the satisfaction scale combined, the curve would appear U-shaped. This would have disturbing, counterintuitive implications. A store with a middling level of satisfaction could improve its lot by either raising or lowering customers' satisfaction. A number of explanations for this apparent anomaly were explored.

First, the possibility this group chanced to share a unique characteristic affecting both satisfaction and store choice was examined. Demographic variables were cross-tabulated against the rest of the sample. The uniqueness hypothesis was not supported. The only common characteristic was that they ranged widely on age, race, income, education, occupation and other descriptors. The group was almost too normal.

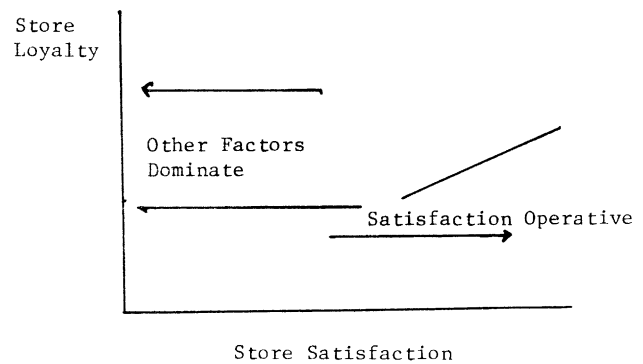
Attention turned to their appraisals of the stores at which they shopped. Those with satisfaction level of two rated their store lower on "adequacy of product guarantee" and higher on "prestige" and "convenience of location." They also indicated location to be more important in their choice of stores.

Raw and weighted (attribute x importance) store ratings were tested as covariates. While several were significant and affected the relative magnitudes of the between point distances, the general shape of the curve in Figure 2 was always apparent. Entering the AIO items as covariates yielded similar results.

Taken together, this series of analyses suggested another explanation: a threshold effect (Figure 4). Until satisfaction reaches some level --- corresponding to three or four on the faces scale --- it is not a strong determinant of shopping decisions. The values in the left hand portion of Figure 3 would be, for all practical purposes, independent of satisfaction; other factors dominate. As satisfaction rises above the threshold, it has the expected impact.

As a post hoc check of the threshold notion, respon-

FIGURE 4
HYPOTHETICAL RELATIONSHIP BETWEEN STORE SATISFACTION AND STORE LOYALTY



dents were split into two subsamples: those scoring three or below on the faces scale and those with higher values. Loyalty was correlated with satisfaction, store ratings and demographic variables for each group. For the more satisfied, satisfaction was the strongest correlate of loyalty. For the less satisfied respondents, the correlation with satisfaction was not significant; demographics --- age, education of respondent and spouse, and income --- dominated. Radically different patterns of correlation were found for the two groups.

CONCLUSION

It is easy to argue that the consumer is well served by efforts to monitor and increase the level of consumer satisfaction (Leavitt 1976). Yet, despite McNeal's position that such assessments are "The Measure of Marketing Effectiveness," (McNeal 1969) widespread adoption is unlikely, unless measured satisfaction is shown to relate to outcomes important to managers. It is in the consumer's interest to show that such measurements are in management's own self-interest.

In this article, it has been shown that satisfaction is related to use of products and loyalty to retail grocery outlets. According to a measure common to both, the faces scale, the relationships were of a different form. A threshold effect seemed likely in the supermarket study, but the data for products appeared to fit a linear model.

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DETERMINANTS OF CONSUMER DEVIANCE

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Abstract

Previous psychological research in the consumer deviance area has been largely of the "trait" variety. This study tested the predictive importance of both individually and situationally based measures on the incidence of deviant consumer behavior. The results show that while both types of variables are important, situationally determined factors offer the most vitality as predictive tools.

Introduction

Deviant consumer behavior may be defined as behavior in a marketing context that society considers inappropriate, illegal or in conflict with previously accepted societal norms. Some examples include shoplifting and other pilferage, price altering, destroying or damaging merchandise, marring in-store fixtures or restrooms, writing of "bad" checks, consumer fraud and the like. Such behavior is rampant and is on the increase. Indeed, one observer argues that the Gross National Dishonesty Quotient is rising steadily (Moneysworth, July 24, 1972).

Previous psychological research on consumer deviance has largely taken a "trait" approach to the problem (e.g. Beck, 1974; Gelfand, 1974; Segal, 1976; Todd, 1976; Bockner, 1976; Russell, 1974). However, in addition to the general problems of a "trait" orientation (Mischel, 1968), it is clear that a trait approach is not particularly actionable from the point of view of corrective retailer action or predictive vitality (Mills, 1979). Thus, the current study (a pilot investigation) tested the predictive power of trait versus state measures as these relate to the incidence of consumer deviance. Specifically, it was hypothesized, based on the generally low predictive ability of personality measures, that:

H₁: The investigated social-personality and demographic variables will be less important predictors of deviant acts occurring in retail stores than will situationally-derived measures.

Methodology

Retail shoppers were intercepted at mall locations in and around the Greater Pittsburgh SMSA. A total of 153 shoppers responded to the written survey instrument which asked shoppers about the retail image attributes (atmospherics) of seven major retail stores, about the perceived power of the store with respect to the consumer, about their own self-reported incidence of five deviant acts in those stores (shoplifting, destroying/damaging merchandise, fraudulent consumer complaints, fraudulent merchandise returns, vandalism and malicious mischief), as well as about their degree of shopping experience and the enjoyment they got from shopping. Additionally, all subjects were asked to complete a full demographic profile, as well as several social-personality measures. The demographic profile included the

traditional measures of age, sex, race, family earnings, years of school completed, marital status and occupation. The social-personality measures used were those of locus of control and interpersonal trust (Rotter 1967, 1971) as well as Scott's (1965) Personal Value Scale on honesty. Thus, the instrument utilized both variables relating to the individual (demographic and social personality scales) and those which related quite specifically to the situation or environment (perceived store power, retail image dimensions, incidence of deviance and so on). The mix of variables was suggested from the results of previous studies on deviance. For example, the inclusion of store power was based on the findings of previous consumer deviance studies of juvenile offenders (e.g. Pedrini, 1972) which pointed to the possible importance of power differences as a motivating factor in the incidence of deviant acts; the I-E measure has been shown to be important in several types of deviant behaviors (Seeman, 1962; Williams and Vantress, 1969) and so on.

Data Analysis

The data so gathered was input into a series of six overall regression analyses utilizing the variables relating to the incidence of deviant acts as dependent measures. That is, one overall regression analysis was made where the unit of analysis was total incidence of deviant consumer behavior considering all store contexts. Thus, the dependent variable in this case measured total deviance in (any and) all store contexts. Five overall regressions were also made (one for each deviant act) in which the dependent variable in each case was the total incidence of that act over all contexts. To meet the aggregation requirements of the data cube given the unit of analysis, subjects were, for all six of these equations, considered as replicates, (making the number of cases now seven times that previous, or 1071 cases). Situationally based variables were recorded for each context and then aggregated together. For example, seven contextual variables measuring store atmosphere were input as raw data, but were considered as one generalized atmosphere variable for the regression analysis.

Results

Table 1 shows the sample characteristics. As shown in **Table 1**, the sample was quite representative of the area from which it was drawn. Specifically, the sample showed nonsignificant differences with published Census data for the area with respect to sex, race, income, and marital status, but was slightly upscale with respect to education, and more professional/technical occupations; the sample was also somewhat on the lower side with respect to age.

Regression Results: Overall Regression Analysis

The results of the first overall regression analysis are shown in **Table 2**. Examination of **Table 2** shows there were eight variables entered into this regression equation. In order of entrance, these were

store power, race of the subjects, sex of the subjects, subject's scores on the honesty measure, education of the subjects, store atmosphere, subject shopping experience, and salesclerks. Thus, there were three situationally based variables and five individual social-personality/demographic measures in the analysis. A review of the correlation matrix revealed no evidence of multicollinearity between the variables. A plot of the residuals revealed no outlying points.

The computed F-ratio, for the equation as a whole, of 55.53271 for 8,1062 degrees of freedom was significant at the .05 level. Each of the individual variables was also significant, having each exceeded the critical value of F of 1,1062 degrees of freedom of 3.84. The regression equation, as shown by the R^2 value adjusted for degrees of freedom, accounted for about 29 percent of explained variance in the dependent variable.

Confirmation of the hypothesized relationship would require that the standardized beta weights for the three situationally based variables of store power, store atmosphere, and salesclerks all exceed those of the individual social-personality/demographic measures. Examination of the magnitudes of the standardized beta weights reveal that is not generally the case. Perceived store power was the most important variable in the equation with a beta weight of .28093. However, the values of the beta weights for other situational variables are exceeded by several of the individual social-personality variables. Therefore, the evidence for the first overall regression was mixed. Situational variables, while important (especially as regards store power) were not in all cases more important predictors of consumer deviance taken as a whole than were personality and demographic measures.

Regression Results: Destroying or Damaging Merchandise

The results of the overall regression for destroying or damaging merchandise are shown in **Table 3**. The Table shows that there were five predictor variables in the equation that made significant contributions to explained variance. In order of entrance, these were race, store power, sex, education and honesty. As shown in **Table 3**, each of the individual variables and the equation as a whole was significant at the .05 level. The equation accounted for approximately 27 percent of explained variance. An examination of the standardized beta weights confirmed the hypothesis, as the one situationally based power variable exceeded all the individually based variables in importance.

Regression Results: Fraudulent Returns

The results for this equation are shown in **Table 4**. There were four variables in the equation. The equation and each of these variables as revealed in **Table 4**, was significant at the .01 level. The adjusted R^2 value for the equation was .19. As is evident from **Table 4**, hypothesis one was confirmed.

Regression Results: Shoplifting

Table 5 shows the overall regression equation for shoplifting. Five variables contributed significantly to explained variance. Examination of **Table 5** for each of the standardized beta weights showed that the evidence again confirmed the hypothesis.

Regression Results: Vandalism

Table 6 shows the overall regression run for this offense. Five variables were utilized as predictors in the equation. In order of entrance these were the variables of race, store power, subject honesty, sex, and education; there was no significant multicollinearity between these variables. As shown in **Table 6**, the equation as a whole and each of the individual variables were significant at the .05 level, and accounted for approximately 20 percent of variance explained. The stated hypothesis was, however, not confirmed here.

Regression Results: Fraudulent Complaints

As shown in **Table 7**, these were three variables in this equation, which accounted for only about 13 percent of explained variance in the incidence of fraudulent acts. **Table 7** shows that hypothesis one was confirmed as store power--a situationally derived measure--was far and away the most important predictor of fraudulent complaints.

Implications and Conclusions

For the overall regressions predicting the total incidence of deviance for each of the five investigated deviant acts, and for deviant consumer behavior as a whole, situationally based variables were shown to be more important predictors of consumer deviance than individually based variables in four of the six regression equations. The specific situational dimensions which were shown in the analysis to be the most important situational predictors of deviant consumer behavior considering all contexts were, in addition to store power, the variables of store atmosphere, merchandise assortment, and salesclerks. The specific individually based variables which most frequently were found in the regression equations included sex of the respondent (males dominant), race of the respondent, and the subjects' general level of honesty. Thus, the analysis has yielded additional information concerning several of the elements that impact on consumer deviance.

The implications for further research and later management attention seem clear. Additional study must and should be paid to the situational context in which deviant consumer acts occur. This is particularly true given the importance of the store power variable evidenced in the study. Future research should undoubtedly also be paid to the interaction of social-personality variables and the specifics of the situation. Only in this way will a further understanding of consumer deviance evolve and future predictive viability improve.

TABLE 1

Overall Sample Frequencies (Demographics)

Sample Size: 153	
<u>Sex:</u>	Males 80 (52.3%) Females 73 (47.7%)
	<u>Education:</u> Range 7 years to 18 years
<u>Age:</u>	Range 10-65 years Mean = between 25-34 years
	Mean: 14 years Mode: 12 years Median: 14 Years
<u>Race:</u>	31 Blacks (20.3%) 111 Whites (72.5%) 11 Other (7.2%)
	<u>Marital Status:</u> Single: 61 (39.9%) Married: 68 (44.4%) Separated: 3 (2.0%) Widowed: 10 (6.5%) Divorced: 11 (7.2%)
<u>Income:</u>	Range \$1,000-1,999 (3.3) to \$50,000 (.7%)
	Mean = \$9,000-\$11,999 Mode = \$15,000-\$24,999 (25%)
	<u>Occupation:</u> A wide range of occupations were listed.

TABLE 2

General Overall
Regression Results

<u>Analysis of Variance</u>	<u>DF</u>	<u>Sum of Squares</u>	<u>Mean Square</u>	<u>F</u>
Regression	8.	2644.316	330.539	55.532
Residual	1062.	6321.192	5.952	

<u>Variable</u>	<u>Beta</u>	<u>Variables in the Equation</u>	
		<u>Std Error B</u>	<u>F</u>
Store Power	0.28093	0.01977	109.378
Race	-0.25078	0.02855	76.039
Sex	-0.22188	0.15535	68.447
Honesty	-0.14410	0.01726	304.429
Education	-0.13408	0.03117	20.749
Atomsphere	-0.11044	0.15968	17.391
Shopping			
Experience	0.09064	0.06146	11.522
Salesclerks	0.05956	0.16732	5.167
	Multiple R	0.54309	
	R Square	0.29494	
	Adjusted R Square	0.28963	
	Standard Error	2.43970	

TABLE 3

Overall Regression
Destroying or Damaging Merchandise

<u>Analysis of Variance</u>	<u>DF</u>	<u>Sum of Squares</u>	<u>Mean Square</u>	<u>F</u>
Regression	5.	142.704	28.540	71.999
Residual	1065.	422.169	0.396	

<u>Variable</u>	<u>Beta</u>	<u>Variables in the Equation</u>	
		<u>Std Error B</u>	<u>F</u>
Race	-0.22718	0.00734	59.440
Store Power	0.26038	0.00491	95.907
Sex	-0.23466	0.04002	72.691
Education	-0.15952	0.00803	27.891
Honesty	-0.13987	0.00445	27.193
	Multiple R	0.50262	
	R Square	0.25263	
	Adjusted R Square	0.24912	
	Standard Error	0.62961	

TABLE 4

Overall Regression Fraudulent Returns				
<u>Analysis of Variance</u>	<u>DF</u>	<u>Sum of Squares</u>	<u>Mean Square</u>	<u>F</u>
Regression	4.	108.626	27.156	63.791
Residual	1066.	453.810	0.425	
<u>Variables in the Equation</u>				
<u>Variable</u>	<u>Beta</u>	<u>Std Error B</u>	<u>F</u>	
Store Power	0.25462	0.00521	82.172	
Race	-0.24825	0.00690	79.929	
Sex	-0.21197	0.04016	58.636	
Shopping Experience	0.10172	0.01632	12.903	
	Multiple R	0.43947		
	R Square	0.19314		
	Adjusted R Square	0.19011		
	Standard Error	0.65247		

TABLE 5

Overall Regression Shoplifting				
<u>Analysis of Variance</u>	<u>DF</u>	<u>Sum of Squares</u>	<u>Mean Square</u>	<u>F</u>
Regression	5.	97.131	19.426	54.443
Residual	1065.	380.011	0.356	
<u>Variables in the Equation</u>				
<u>Variable</u>	<u>Beta</u>	<u>Std Error B</u>	<u>F</u>	
Race	-0.22100	0.00697	52.787	
Store Power	0.22551	0.00466	67.507	
Honesty	-0.17596	0.00422	40.384	
Sex	-0.15407	0.03797	29.405	
Education	-0.12381	0.00762	15.766	
	Multiple R	0.45119		
	R Square	0.20357		
	Adjusted R Square	0.19983		
	Standard Error	0.59734		

TABLE 6

Overall Regression Vandalism				
<u>Analysis of Variance</u>	<u>DF</u>	<u>Sum of Squares</u>	<u>Mean Square</u>	<u>F</u>
Regression	5.	75.115	15.023	53.388
Residual	1065.	299.682	0.281	
<u>Variables in the Equation</u>				
<u>Variable</u>	<u>Beta</u>	<u>Std Error B</u>	<u>F</u>	
Race	-0.23662	0.00619	60.276	
Store Power	0.20274	0.00414	54.349	
Honesty	-0.18565	0.00375	44.781	
Sex	-0.13142	0.03372	21.310	
Education	-0.12293	0.00676	15.482	
	Multiple R	0.44768		
	R Square	0.20042		
	Adjusted R Square	0.19666		
	Standard Error	0.53046		

TABLE 7

Overall Regression
Fraudulent Complaints

<u>Analysis of Variance</u>	<u>DF</u>	<u>Sum of Squares</u>	<u>Mean Square</u>	<u>F</u>
Regression	3.	84.620	28.206	53.929
Residual	1067.	558.070	0.523	

<u>Variable</u>	<u>Variables in the Equation</u>		<u>F</u>
	<u>Beta</u>	<u>Std Error B</u>	
Store Power	0.24931	0.00563	76.147
Sex	-0.18817	0.04450	43.009
Race	-0.18803	0.00763	42.847
	Multiple R	0.36286	
	R Square	0.13167	
	Adjusted R Square	0.12922	
	Standard Error	0.72321	

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IN SEARCH OF THE VALIDITY
AND APPLICABILITY OF DIFFUSION THEORY

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Abstract

One of the most celebrated theories ever borrowed from the social sciences to be used in marketing is "diffusion process of innovations" theory. The theory, however, has serious problems in terms of its validity and applicability.

Introduction

Virtually all "consumer behavior" texts devote at least one full-length chapter for this topic. Likewise, textbooks in the areas of "principles of marketing" as well as "marketing management" rarely fail to include the diffusion theory and its familiar bell-shaped curve. Such books will try, universally but unconvincingly, to convince their readers of the value and necessity of identifying innovators for some marketing purpose, without really stating "what" that marketing purpose is and "why" and "how" it should be achieved. This is a dilemma often faced by marketing instructors who, after extolling the value of the diffusion concept, have a difficult time showing how it can be applied effectively. Students soon realize that innovators may be a rare breed indeed--too elusive and illusive for marketers to handle.

A Conceptual Problem

The diffusion process, briefly stated, describes five adopter categories for a new product or service over a period of time. Distinguished by the time of adoption, these categories are known as innovators, early adopters, early majority, late majority, and laggards respectively. This process is basically a closed system; it is self-contained in the sense that late adopters are influenced solely by innovators while being almost completely oblivious to marketing efforts. Theoretically, innovators are socially active (King, 1965) and will influence others but are rarely, if at all, affected by them. It is difficult to believe that society operates in such a manner. Since innovators are socially active, a great deal of interaction among innovators and non-innovators should take place, and their relationships should be interdependent.

Another characteristic of the diffusion process is that it is able to precisely identify a definite start and a conclusive end within the adoption process. One adopter group is supposed to follow another in an irreversible sequence, with each sequence length being very predictable--something which has not been confirmed by the real world. It fails to note that many products never quite get past the innovator group while scores of other products seem to survive forever. The diffusion theory further assumes a 100% market penetration situation, and this in reality is far from the truth. The market penetration percentage is rarely static--it can either go up or down within any time period due to economic conditions, marketing activities, and population movement.

A Methodological Problem

Considering the fact that there are more than 2,700 publications related to the study of innovation diffusion (Rogers and Shoemaker, 1971), it is not surprising that there are many definitions of "innovator". What is surprising is that these definitions are quite vague and greatly vary, resulting in divergent--instead of convergent--methods of measurement/classification. Furthermore, consumers are sometimes simply classified as either innovators or non-innovators, while the complete five adopter categories are used at other times. It is no wonder then that contradictory interpretation and results abound.

Three common methods are often used to identify innovators. The first one uses some percentage of the expected number of adopters by defining innovators as the first X% to adopt a certain product. Theoretically speaking, this percentage is usually given as 2%--obviously too small for any marketing and research purposes. It is thus not uncommon for researchers to choose the higher percentages (e.g., 10%, 20%, etc.). In any case, such a predetermined percentage is arbitrarily chosen without much regard for its justification. Consequently, a person classified as a non-innovator in one study can easily become an innovator in another.

The second method for establishing the innovator category focuses on "time" of adoption. Thus innovators are those who adopt a new product within a specified time period. But what is the appropriate time period and how should the time frame be divided for each adopter group? Once again, the time in question is arbitrarily chosen to fit researchers' purposes rather than being based on any theoretical basis.

The third method of innovator determination is the cross-sectional technique which assumes that innovators were born with a distinctive innovativeness personality trait and that this innovation proneness characteristic will isolate innovators from others. However, this method seems to contradict the fact that any overlap between new products and innovativeness is not great and that it tends to occur only for related products (Summers, 1971; Robertson and Myers, 1969).

A Marketing Strategy Problem

Much more serious than the measurement problems just mentioned are the problems of marketing applicability. Product, distribution, promotion, and pricing strategies are, more often than not, conspicuous by their absence. The diffusion process contributes very little as far as product policy is concerned. It makes no recommendation with regard to product addition, modification, and deletion. As a matter of fact, it is not even clear if the adoption theory is applicable for product class, form, or brand. Similarly, the theory suggests that a separate distribution system should be designed with innovators in mind--something that is really out of the question because the associated costs would be prohibitively

high. Moreover, it is difficult to justify designing a distribution system for innovators who are small in number and low in brand loyalty.

The diffusion theory makes only one concrete pricing recommendation: price should be kept high initially because innovators are financially privileged and are not interested in low price per se. While many firms use skimming pricing policy, it is inspired more by a high initial production cost, a desire to recoup research and development costs as soon as possible, and a lack of competition. Finally, as far as promotion is concerned, proponents of the diffusion theory invariably argue that it is important to appeal to innovators. But they stubbornly ignore the fact that consumer confusion and the high costs associated with such an approach make it virtually impractical to develop different advertising appeals for the same product for each of the different adopter categories. Furthermore, marketers still have not yet been able to find selective advertising media to reach innovators with a minimum waste.

Conclusion

The diffusion theory offers very few meaningful marketing recommendations and, when it does, such recommendations are vague and impractical. Whether the diffusion process can predict sales any better than chance alone is debatable. Equally doubtful is its assumption that the marketing mix is a function of the diffusion process. The reverse seems to make more sense. In its present form, marketing practitioners have no choice except to ignore this theory, and it appears that they have every right to do so.

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PEAK EXPERIENCES: LATENT DIMENSIONALITIES IN CONSUMPTION BEHAVIOR

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ABSTRACT

Although psychologists have described self-actualization (Maslow) as a spiritual rather than a materialistic state, there is evidence to suggest that some material possessions can lead to a "partial" form of actualization or peaking in some mode or style of living. Since this can lead to the modification of existing appeals or contribute to the development of more effective promotional programs (promotional synergies between products), a study was undertaken to investigate the phenomenon.

Subjects were surveyed to determine if they were likely to experience peaking in response to a variety of items within four product/service classes. MANOVA analysis showed significant differences in peaking among items, as well as significant effects of age and sex jointly (covariates), but no differences were observed on the basis of product/service class. Finally, regarding the peaking experiences investigated, a factor analysis revealed that the greatest variability in reported peaking was associated with a food product category. Thus, greater variability in reported peaking occurred for products which predominantly satisfy more basic, rather than higher level, needs.

INTRODUCTION

Maslow (1962) has been credited with giving wide dissemination to peak experiences, as a derivation of James' (1943) "mystic experiences," by describing the experience as one of "Moments of highest happiness and fulfillment" (Maslow, 1962, p.69). However, it is Thorne who first attempted to categorize the experiences and formalize an operational definition of peak experiences as "A systematic experiencing of what is subjectively recognized to be one of the high points of life, one of the most exciting, rich and fulfilling experiences which the person has ever had" (Thorne, 1963, p. 248). As a result of his efforts to categorize the experiences into seven major and 13 secondary categories, other authors have factor analyzed the experiences (Hallaq, 1977; Panzarella, 1980) or measured the level of the experiences among respondents, making statistical comparisons based on some respondent demographic characteristics such as sex, and a variety of personality dimensions (Tolar, 1978; Panzarella, 1980).

Since the original exposition by Maslow, psychologists have gone beyond the mere description of these experiences into a study of the characteristics of those individuals who, to a greater degree, are likely to experience "Peaking." Most psychologists seem to agree that experiencing peaking is positively related to some form of self-actualization. Wuthnow (1978), for instance, concludes from his study that "Peakers are less likely than nonpeakers to say they value material possessions, high pay, job security, being famous, and having a lot of friends" (Wuthnow, 1978, p. 59). Nevertheless, in a study by Stewart (1976) involving college students, the respondents perceived

peaking to be more frequently experienced by people in the middle age (what he calls the command generation) stage of the life cycle. Accordingly, the authors of this paper contend that by this stage in the cycle, individuals have satisfied or are in the process of fully satisfying many of their material needs in life. Therefore, it can be suggested that some types of possessions may be a prerequisite to, if not the source of, the attainment of some peak experiences. As a result of such contemplation the authors felt that a study of some products and their potential contribution to experiencing some level of peaking may help marketers in the development of more effective promotional appeals. Furthermore, the methodology may prove useful in suggesting possible modifications of some existing appeals which have been based on traditional notions of patterns of consumer behavior, which may have changed due to many dynamic social changes that have taken place in our society in the last decade or so.

PURPOSE

It was pointed out in the previous section that most psychologists agree that peaking is more closely associated with self-actualization than with the satisfaction of lower needs. Wuthnow (1978), when he classified respondents as high-, average-, and non-peakers, also concluded that peakers are less likely than nonpeakers to say they value material possessions. It is interesting, however, that if one were to combine high- and average-peakers from his study and compare their responses to those of nonpeakers, one finds that, respectively, 12% and 18% give great importance to having a beautiful home, new car and nice things, 17% and 24% to having a high paying job, and 40% and 48% to having job security. This apparent desire for, and interest in, material things and their requisite resources among high- and average-peakers stimulated interest in testing the following hypotheses, stated in the null form:

- H₀ 1: No difference in level or reported peaking experiences will be found among different product classes.
- H₀ 2: Within a product class or service category, no difference in level of reported peaking experiences will be found among different items.

Particularly, it is of considerable interest to determine whether greater peaking is reported in conjunction with the more esoteric, as opposed to the more basic, items/product classes. Differences in peaking experiences will also be examined on the basis of age and sex of the respondents.

METHODOLOGY

A convenient sample of 105 college students on a university campus were surveyed in 1979. They were asked to indicate by a score from 1-10 the level of

peak experiences that would be attained from the possession or consumption of goods and services in the following areas:

1. PLEAS: Bringing a feeling of most pleasurable sensations,
2. EUPH: Bringing a feeling or a state of euphoria,
3. SUCC: Bringing a feeling of success in understanding and discovery,
4. JOY: Bringing a feeling of joy in growing up, finding oneself, and becoming of age,
5. RESP: Bringing a feeling of coming to like and respect the self,
6. COMM: Bringing a feeling of full communication with nature.

Each subject rated all three different products within each product category on all six types of peaking experiences listed above.

The product classes were automobiles, foods (meats), alcoholic drinks, and vacations. Each class contained three products which ranged from more basic items that more or less satisfy a basic need to more esoteric items within each product class which presumably satisfy higher level needs as well.

To test the different hypotheses, a variety of statistical techniques were used. A crosstabs program was run to investigate differences based on sex and age of respondents. MANOVA was employed to study differences in reported peaking among product categories and among items within categories. Finally, factor analysis was used to analyze the structure of the data and to determine whether any underlying dimensionalities may be relevant to the development or modification of promotional strategies.

RESULTS

Crossclassification of the data on the basis of sex showed very few significant differences. Beer and Pinto generated significantly strong differences in experiencing euphoria between the two sexes (.004 and .03) with vacationing in Mexico placing third (.05), and ownership of a Porche a weak fourth (.09). On the other hand, when respondents were segmented into three groups, under 21 years, 21, and over 21, the three age groups showed several significant differences in all six peak experiences as a result of owning or consuming some products or services listed in the survey. The experience, "Brings a feeling of full communication with nature," showed differences between the ages on about one-half of the products or services. It is interesting that one or more of the alcoholic beverages appear in five of the six categories of peak experiences as having a different impact on each of the three age groups.

In order to test the two hypotheses, that there were no differences in peak experiences among products and/or among items, a MANOVA was performed. The data from 76 of the original 105 subjects were complete. Seventy-two of the 76 complete questionnaires were randomly chosen (to ensure equivalent cell sizes) for inclusion in the analysis.

The independent variables in the model were the four product classes, as well as the individual product items within each class. Thus, the product items

TABLE 1

Level of Significance from Crosstabulation of Peak Experiences and Demographics

Experience	Item	Age	Sex
PLEAS	Hamburger	.02	
	Liquor	.08	
	Hawaii	.03	
	Mexico		.05
EUPH	Hamburger	.05	
	Pinto		.03
	Beer		.004
	Liquor	.01	
Hawaiil		.02	
SUCC	Porsche	.09	
	Steak	.01	
	Wine	.06	
	Liquor	.01	
JOY	Turkey	.06	
	Steak	.01	
	Beer	.09	
	Hawaii	.04	
RESP	Hawaii	.0003	
COMM	Porsche	.02	.09
	Hamburger	.07	
	Turkey	.004	
	Steak	.03	
	Beer	.07	
	Wine	.01	
	Liquor	.04	
	Hawaii	.02	

were nested within product class. The different categories of peaking experiences were considered to be multiple dependent variables. All effects were considered to be fixed. Additionally, age and sex of the respondents were treated as covariates. Six subjects were randomly assigned to each treatment condition--item within product class--and the subject's responses for that item were included for each peaking experience.

The mean ratings for each product class relative to particular peak experience are presented below in Table 2. Results of the multivariate analysis indicate that ratings of the series of various peaking experiences were highly significantly different among the various individual items (Wilks Lambda = .162,

TABLE 2

Mean Ratings of Various Peak Experiences Relative to Particular Product Classes (collapsed over product items)

Class	PLEAS	EUPH	SUCC	JOY	RESP	COMM
Automobiles	5.92	6.58	4.58	4.58	6.08	3.25
Food (meats)	6.25	4.92	3.42	5.83	4.17	3.92
Alcoholic beverages	5.83	5.00	3.42	5.08	4.50	2.75
Vacation	5.67	3.50	4.50	6.25	4.00	4.25

approximate $F_{264}^{48} = 2.47, p < .001$). Furthermore, the covariate measures (age and sex) jointly reached statistical significance (Wilks Lambda = .700, ap-

proximately $F_{106}^{12} = 1.72, p < .10$). Nonetheless, the main effect for product class was not statistically significant. That is, the series of reported peaking experiences did not differ among the various product classes.

The results of the univariate analyses, for each type of peaking experience individually, produced similar results. Specifically, the effect of item within product class was highly statistically significant for every type of peaking experience. The main effect of product class was, without exception, not statistically significant. However, the findings regarding the joint effect of the covariate measures, age and sex, were different with respect to the individual type of peaking experience being considered. Acceptable levels of statistical significance for the covariates were reached only in the cases of two experiences: JOY and RESPECT. The results of the univariate tests are summarized in Table 3 below.

TABLE 3

Univariate Tests of Significance - ANOVA

Effect	Variable	M.S.	F ($\sqrt{F_{58}^2}$)
Regression (age, sex)	PLEAS	10.62	2.24
	EUPH	11.41	2.12
	SUCC	15.19	2.14
	JOY	27.88	3.82 c
	RESP	26.44	5.06 b
	COMM	8.56	1.45
($MS_C/MS_{I(C)} \sim F_8^3$)			
Product Class	PLEAS	4.75
	EUPH	5.60
	SUCC	4.69
	JOY	8.68
	RESP	14.61
	COMM	2.48
($MS_{I(C)}/MS_{within} \sim F_{58}^8$)			
Item (class)	PLEAS	47.25	9.95 a
	EUPH	34.48	6.41 a
	SUCC	21.30	3.00 b
	JOY	25.59	3.50 b
	RESP	20.55	3.93 a
	COMM	14.19	2.41 c
Within Cells	PLEAS	4.75	
	EUPH	5.38	
	SUCC	7.11	
	JOY	7.31	
	RESP	5.23	
	COMM	5.88	

a = p < .001
b = p < .01
c = p < .05

Thus, on the basis of the univariate ANOVA results, one can not reject H 1. The data do not support the conclusion that reported peaking experiences differ with respect to different classes of products. However, one caveat should be expressed. The particular

experimental design employed is insensitive to detecting such differences. That is, the tests of significance for product class for the various dependent measures is $MS_{class}/MS_{item(class)}$. The statistic is distributed as F_8^3 . Thus, very large values of the statistic would be necessary in order to reject H 1.

Conversely, one can reject H 2. Specifically, reported peaking experiences do differ from item to item within product classes.

Due to the puzzling, and somewhat contradictory findings regarding the two predicted hypotheses, it appeared worthwhile to factor analyze the various reported peaking experiences on individual items to determine if some latent dimensionalities were present in the responses.

Again, as was the case for the MANOVA, data from the reduced sample of 72 respondents were used in the factor analysis. A principal components procedure was employed in order to reduce the dimensionality of the multivariate data. Furthermore, VARIMAX rotation was utilized in order to provide maximal interpretability of the dimensions thus revealed.

The first four factors are reported which explain, collectively, 54.4 percent of the variance in reported peaking. The eigenvalue of the fourth factor included was 3.9, which corresponded to a reduction in the unexplained variance of 5.4 percent. Table 4 presents factor loadings of individual items on each of the four factors. It should be noted that all of the factor loadings of relatively large magnitude were positive. Such was the case because respondents were asked only to rate the positivity of particular items. There was no possibility for a respondent to indicate negative peaking (nading) relative to a presented product item.

Factor one, which explained 34.6 percent of the variance, nearly always loaded heavily on the food (meat) items listed within each of the six peaking experiences. The only type of peaking experience for which this was not true was the first one (PLEAS). Thus, by far the greatest proportion of the variability in responses occurred on one type of product. Apparently, individuals in the sample had differing reactions to the consumption of meat. For some eating meat produced little or no apparent peaking. For others it was a strong source of such experiences. The level of peaking for the other three product classes appears less idiosyncratic.

Factor two loaded heavily on alcoholic beverages, particularly beer and liquor. Reflecting on factor two, the phenomenon may describe the popularity of beer and liquor among the younger generation of college students. One could speculate that wine, which tended to have much smaller factor loadings (and a smaller mean response) across types of peaking experiences, may be beyond the current sophistication level of the students sampled.

The third factor tended to load on vacations, as well as one item from the class of automobiles, namely, the Porsche. It would seem that respondents tended to perceive similarly the satisfaction from vacationing in a foreign country, England in particular, and from owning and/or driving a Porsche, an expensive, sporty German car.

TABLE 4

Factor Loadings by Items

Experience	Item	F 1	F 2	F 3	F 4
PLEAS	Beer	.01	.66	.01	.12
	Liquor	.06	.73	.13	-.06
	Porsche	-.09	.14	.44	.20
	Pinto	-.10	.12	.03	.59
EUPH	Hamburger	.53	.01	.03	.09
	Turkey	.42	.01	.09	.07
	Beer	.01	.73	.13	.00
	Liquor	.14	.68	.26	-.08
	Porsche	.05	.28	.45	.09
	England	-.12	.11	.40	.13
SUCC	Pinto	.09	-.03	-.04	.62
	Hamburger	.64	.13	.17	.28
	Turkey	.80	.14	.13	.06
	Steak	.75	.22	.08	-.02
	Beer	.40	.78	.14	.07
	Wine	.42	.50	.13	-.04
JOY	Liquor	.44	.71	.14	.02
	Pinto	.22	.08	.25	.77
	Hamburger	.72	.21	.10	.37
	Turkey	.64	.31	.32	.20
	Steak	.59	.32	.40	.18
	Beer	.20	.74	.14	.24
	Wine	.31	.49	.34	.12
	Liquor	.21	.70	.37	.08
RESP	Porsche	.27	.37	.63	.06
	England	.14	.08	.69	.10
	Pinto	.29	.14	.17	.82
	Hamburger	.70	.16	.24	.38
	Turkey	.69	.20	.47	.16
	Steak	.60	.26	.44	.24
	Beer	.11	.66	.05	.20
	Wine	.23	.56	.20	.07
COMM	Liquor	.18	.75	.15	.16
	Porsche	.26	.32	.70	.20
	Hawaii	.40	.30	.63	.16
	England	.29	.16	.73	.21
	Impala	.41	.31	.14	.57
	Pinto	.24	.19	.13	.79
	Hamburger	.80	.20	.11	.18
	Turkey	.80	.15	.23	.01
	Steak	.84	.18	.24	.04
Beer	.38	.66	.22	.08	
Variance Explained:	Hawaii	.35	.24	.70	-.09
	England	.10	.03	.78	.03
	Mexico	.10	.10	.74	.09
	Eigenvalues:	29.92	5.09	4.62	3.88
Cumulative Variance-Factor 1-4:	.534				

The fourth factor is particularly interesting even though it explained only a little over five percent of the variance. That is, in most cases it loaded heavily on the Pinto automobile for five of the six experiences. This dimension may be interpreted as tapping the "First Car Syndrome," and given the ages of the student respondents, it reflects the satisfaction resulting from having one's own car. Although the Pinto may epitomize small economy automobiles which college-age students typically acquire, it is interesting that use of the Pinto seemed to generate relatively minimal variability in responses across subjects (compared to meats), despite the fact that when the data were collected, the "Pinto Gas Tank Controversy," was still pending. It might be reasonable to assume that had a different inexpensive

automobile been chosen, greater peaking might have been observed.

CONCLUSIONS

The present study should be considered preliminary, but it serves to uncover a new construct which is potentially relevant to the understanding of consumer behavior. That is, the current study tends to refute the previously held notion that the subjective experiencing of "peaking" among younger individuals does not relate to material possessions. However, it would be inappropriate to generalize such a conclusion to nonstudent populations without the support of further research.

Additionally, it was found that level of perceived peaking was product item-specific. However, it is particularly interesting to note that by far the greatest variability in such reported experiences was associated with the consumption of meat, which presumably related to the satisfaction of a lower level need. Further research involving cluster analysis might reveal substantial natural segments around which differing promotional appeals could be based. Furthermore, the linking of foreign travel with a sports car, for various sorts of peaking, clearly suggests a useful promotional appeal.

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CONSUMER CHOICE OF INFORMATION PROCESSING STRATEGIES
IN DISPOSITION DECISIONS

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Abstract

Information processing strategies were investigated in a product disposition context. One hundred subjects participated in an experiment designed to test the effect of predecisional perceived risk and the functional condition of the product on the type of processing strategy selected. No significant effect of the two independent variables was reported; however, a significant number of subjects selected a lexicographic strategy. The results suggest that consumers disposing of durable goods tend to focus on the financial benefits or costs that accompany different disposal alternatives.

Introduction

Jacoby, Berning, and Dietvorst (1977) defined consumer behavior as the "acquisition, consumption, and disposition of goods and services, and ideas by decision making units." This definition as accepted by marketing scholars (Hawkins, Coney, and Best, 1980; Hanson, 1978; Burke, Conn, and Lutz, 1978) places disposition in the domain of marketing and consumer research. A careful review of the literature in these areas, however, indicates that very little effort has been made to extend consumer research paradigms and methodologies to investigate disposition processes. Only a handful of studies have addressed directly the issue of product disposition (Burke, Conn, and Lutz, 1978; Hanson, 1978; Jacoby, Berning, and Dietvorst, 1977; and Razzouk, 1977).

In recent years there has also been a growing interest on the part of marketing researchers in the area of consumer acquisition and processing of information (Capon and Burke, 1980). This interest was spurred, in part, by attempts of government, consumer groups, and marketers to enhance the quality of product information available to consumers. A major research thrust in consumer information processing has focused on understanding the human decision process through a taxonomy of processing strategies (heuristics) which an individual utilizes in a decision situation.

Consumer information processing is a dynamic phenomenon, be it related to acquisition, consumption, or disposition behavior. Jacoby (1975) and Simon (1975) noted that only through a complete understanding of the individual steps leading to a final decision could we hope to understand the basis for choice. The growing national concern over problems of energy, resource depletion, shortages of various kinds, and environmental decay as well as the increasing costs of solid waste disposal make choice decisions at the consumption and disposition stages very important. Disposition in this context is concerned with the termination of a product's useful life within the household (Conn, 1978).

This study was conducted in an attempt to fill a current void in the literature by investigating consumer information processing strategies when disposing of durable goods. More specifically, the research experimentally investigates the impact of pre-decisional perceived risk and the functional condition of the product at the time of the disposal decision, on the type of information processing strategy used in selecting a disposal alternative.

Processing Strategies

Newell and Simon (1972) have postulated that consumers have limited processing capacity. Hence, they use heuristics to keep the information processing demands within the bounds of their cognitive capacity. Heuristics are rules of thumb for problem solving. They tend to reduce the search and increase efficiency, while sacrificing the certainty of a correct judgment (Payne, 1976a).

The use of heuristics by individuals has been reported in several studies (Newell and Simon, 1972; Braunstein, 1976; Payne, 1976b; Reilly and Holman, 1978; Tversky, 1972; and Wright, 1974). The major thrust of these studies has been the development of a taxonomy of methods which individuals use to compare, eliminate, and select the appropriate alternatives. Three major heuristic processes appear in the literature: compensatory, non-compensatory, and sequential or phased strategies.

Compensatory Strategies

When compensatory strategies are used by consumers, the perceived strength of an alternative on any evaluation criteria can compensate for the weaknesses on other criteria. The final judgment is then based on the combined ratings of all criteria. The Fishbein multi-attribute attitude model (Fishbein, 1966) assumes a compensatory processing strategy where alternatives are evaluated one at a time along all attributes, and the final evaluation is the summation of all ratings.

Non-Compensatory Strategies

Non-compensatory strategies do not allow for the strength of any evaluative criteria to compensate for the weaknesses of others for a given alternative. Engel, Blackwell, and Kollat (1978) and Reilly and Holman (1978) identify three types of non-compensatory strategies: conjunctive, disjunctive, and lexicographic. In conjunctive processing, the consumer establishes minimum cut-off points for each evaluative criterion. An alternative is then considered acceptable if the ratings of each evaluative criterion for that alternative equal or exceed the cut-off points (Coombs, 1964; Dawes, 1971). When following a disjunctive strategy, consumers would establish cut-off points for those key criteria. Lexicographic processing involves the rank ordering of the evaluation criteria and the selection of the alternative with the highest rating on the most important evaluative criterion (Tversky, 1972).

Sequential Strategies

Sequential strategies (Reilly and Holman, 1978) or phased strategies as referred to by Bettman (1979), are hybrid strategies in which a certain strategy is first used to eliminate some alternatives from consideration. A second strategy is then used to make comparisons among the smaller set of remaining alternatives. Reilly and Holman (1978) identified four combinations of sequential strategies: conjunctive-compensatory, disjunctive-compensatory, conjunctive-disjunctive, and disjunctive-conjunctive.

Consumer researchers have utilized different methods to investigate the nature of information processing

strategies in consumer decision situations. Jacoby, Speller, and Kohn (1974a, 1974b) favor the use of information display boards which contain a number of information cues about a number of products. The subjects are asked to evaluate as many of the cues as needed to make a selection of a particular product.

Einhorn (1970 and 1971) recommends the use of actuarial methods which provide a post-hoc account of how decisions were made. Bettman (1972) and Wright (1974) used protocols in which consumers were asked to recreate the decision process which they went through before making the final selection. More recently Park (1976) and Reilly and Holman (1978) utilized a simple method of structural protocols. In these studies, participants were presented with descriptions of the different processing strategies under study, and then asked to select the one that most closely resembled the actual process. This latter method was adapted for use in the present research because of its focusing on behavior responses and immediate reporting.

Development of Hypotheses

Several factors have been investigated in the literature for their probable effect on the use of processing strategies in choice decisions. Wright (1974, 1975) considered the effect of such factors as the desire to optimize, desire for simplicity, information load, task complexity, distraction, and cue intercorrelation. Park (1976) and Sheth and Raju (1974) considered the influence of product familiarity and product complexity on the type of processing strategies selected. Reilly and Holman (1978) empirically investigated the effect of task complexity and cue intercorrelation on the type of processing strategy used. No significant effects for either factor were reported.

In a disposition decision situation, other factors may have a bearing on the processing strategy selected. Predecisional perceived risk or the degree of product and task involvement could heighten the desire for optimization and thus increase the use of compensatory and conjunctive strategies (Park, 1976). On the other hand, a low level of perceived risk or involvement may diminish the need for optimization; instead, a stronger desire for simplicity may develop, resulting in a more frequent use of lexicographic processing strategies.

The functional condition of the product at the time of the disposal decision is thought to influence the nature and extent of information processing (Conn, 1978). Products in working condition would require greater search and demand more optimization than non-working products in need of repair. One may then expect a prevalence of compensatory and conjunctive processing strategies for decisions to dispose of working products, and more lexicographic strategies to accompany the disposition of non-working products.

Two null hypotheses were developed in this research to test the influence of predecisional perceived risk and the functional condition of the product on the type of information processing strategy selected.

H1: In a disposition context, there is no difference in the processing strategies selected for high versus low perceived risk products.

H2: In a disposition context, there is no difference in the processing strategies selected for working versus non-working products.

Methodology

A 2x2 factorial experiment was employed in this study in which two levels of perceived risk (high and low)

and two levels of product functional condition (working vs. non-working) were operationalized.

Subjects

Subjects were business administration majors enrolled in the first five-week summer session 1980 at Arizona State University. The sample consisted of one hundred subjects, or twenty-five for each experimental cell.

These subjects were recruited by the experimenter from the business library. Sixty-one males and thirty-nine females participated in the experiment. The age of these participants ranged from eighteen years to forty-six years. Ninety-four percent had completed at least two years of college, and eighteen percent had completed some graduate work. The average household income of the subjects was between \$15,000 and \$20,000, and twenty-five percent reported incomes over \$30,000.

The use of students in this sample was justified on the basis that college students, like other segments, are involved in disposition decision processes. Also, the two durable goods utilized in the experiment are just as common among college students as among other segments of the population.

Product Selection Process

The two household durable goods used in this research are a stereo component system and a hair blow-dryer. These products were chosen on the basis of a pretest that helped determine the level of consumer perceived risk for a number of products.

A two-stage pretest was conducted to select the high-perceived-risk and low-perceived-risk products. In the first stage, 160 subjects (n=160) were asked to identify two common household durable goods they perceived to rate high on five risk surrogates (purchase price, resale value, conspicuousness, functional risk, and extent of pre-purchase information search) relative to other household durable products they were familiar with. Similarly, the subjects were to list two common household durable goods they perceived to rate low on the same risk surrogates.

The frequencies of occurrence in the first stage of the pretest led to the selection of stereo component systems (f=100) and color televisions (f=88) at the top of high-perceived-risk products. Toasters (f=70) and hair blow-dryers (f=107) were also selected as low-risk products. These four products were then presented to another group of business majors (n=190) who were asked to rate each of the four products on the same risk surrogates used in the first stage, using a scale of one to ten (one being very low and ten being very high). An average rating of each surrogate and each product was computed.

The stereo component system scored higher than a color television on almost every surrogate and was selected for the high-risk experimental conditions. The scores for the toaster and hair blow-dryer were such that either of the two products could have been selected for the low-risk conditions. However, the hair dryer was selected due to greater familiarity of the subjects with that product (eighty-one percent owned a hair dryer) as compared with the toaster (sixty-five percent owned a toaster).

The functional state of the products used in this study was experimentally manipulated to fit one of two levels: working, or not working (needing repair). This manipulation was achieved through written and oral instructions given to the subjects at the outset of the experiment. For the "working" condition, the subjects

were told that the product they were asked to dispose of was in good working condition. For the other level, subjects were told that the product had quit working and was in need of repair.

Procedures

One hundred subjects were individually placed into a simulated disposition situation and instructed to dispose of a given product in the manner in which they would normally do so. Each subject was randomly assigned to one of the experimental conditions: high perceived risk/working condition, low perceived risk/working condition, high perceived risk/non-working condition, and low perceived risk/nonworking condition.

A booklet with instructions and the independent variables was handed to each subject. The purpose of the study was explained as gaining insight about how consumers make decisions to dispose of some common durable products after these products have been used for awhile. To increase the level of task involvement (involvement in the disposition decision process), subjects were requested to assume that they have already decided on terminating the present useful life of the assigned product and that they were presently seeking and evaluating information for a final selection of a disposition alternative.

Information on the possible disposal alternatives and selected attributes of these alternatives were also provided.

Subjects could select to store the product, convert it to serve some new purpose, lease it, loan it, throw it away, give it away to be used, give it away to be resold, trade it, sell it direct to a consumer, or sell it to a middleman (Jacoby, et al, 1977).

Six attributes of the disposal alternatives were available for evaluation: the financial cost involved in a particular disposal alternative, the effort involved, the financial benefits realized, the functional feasibility, availability, and the social acceptability attached to each alternative (Conn, 1978; Jacoby, et al, 1977; and Razzouk, 1977).

After the subjects arrived at their disposition decision, they were asked to fill out a questionnaire and respond to a set of structural protocols that described eight different processing strategies (Table 1). In the first part of the questionnaire, subjects were asked to list and then rate factors that influenced their choice of a disposal alternative. Subjects were also asked to rate each disposal alternative attribute on how important it was in influencing their choice of a disposal alternative.

To capture the nature of the information-processing strategies used, subjects were presented with a description of eight structural protocols that represent various combinations of processing strategies. These protocols were randomly grouped in four different arrangements in order to minimize order effect. Subjects were instructed to read the protocols and select the one that resembled or the one that came closest to the way they actually made their disposal decision. Subjects were then thanked for their participation and dismissed.

The methodology utilized in this study focuses on behavior responses along with the verbal reports. Subjects were asked to make a decision in the present and thus did not have to worry about recall problems of forgotten and/or unimportant events.

TABLE 1
STRUCTURAL PROTOCOLS DESCRIBING
INFORMATION-PROCESSING STRATEGIES
FOR A DISPOSAL DECISION

1. I first considered the possible disposal alternatives, eliminated the alternatives with really negative ratings on any attribute, and then chose from the rest of the alternatives that which seemed the best overall when I balanced the positive ratings with the negative ratings. (Conjunctive-Compensatory)
2. I chose the disposal alternative that did not have any negative ratings on any of the attributes. (Conjunctive)
3. I looked at the attribute that was the most important to me and chose the disposal alternative that would rate the highest on that attribute. If two or more alternatives were equal on that attribute, I then looked at the second most important attribute to break the tie. (Lexicographic)
4. I chose the disposal alternative that had a high positive rating on at least one attribute. (Disjunctive)
5. I chose the disposal alternative that had a positive rating when I balanced the positive and negative ratings. (Compensatory)
6. I first considered the possible disposal alternatives, eliminated any alternative that did not have at least one positive rating, and then chose from the rest the disposal alternative that seemed the best when I balanced the positive with the negative ratings. (Disjunctive-Compensatory)
7. I first eliminated the disposal alternative with a negative rating on any attribute and then chose, from the rest, the one with a high positive rating on any attribute. (Conjunctive-Disjunctive)
8. I first eliminated any disposal alternative that did not have at least one positive rating and then chose, from the rest, the alternative that did not have a really low rating on any attribute. (Disjunctive-Conjunctive)

Analysis

One basic dependent measure was considered in this study: the information-processing strategy. The data gathered was categorical in nature, indicating the exact strategy used or the one that came the closest to the exact strategy. Given the nominal nature of the data, a Bartlett Chi-square analysis was used to test the effect of the two independent variables on the dependent measure of processing strategy.

Results

The results of the analysis as reported in Table 2 failed to produce any Chi-square values significant at the .05 level. Accordingly, the two hypotheses of no significant difference were accepted. The treatments of perceived risk and the functional condition of the product did not yield a significant effect on the type of processing strategy that was utilized by subjects in reaching their choice decisions.

A closer look at the results (Table 3) reveals a dominance of lexicographic decision strategies (F=53). Twenty of the respondents indicated that this strategy

TABLE 2
SUMMARY OF CHI SQUARE ANALYSIS FOR THE
INDEPENDENCE OF THE DECISION STRATEGY
SELECTED FROM THE TREATMENT EFFECTS
OF PERCEIVED RISK AND
FUNCTIONAL CONDITION

Nature of Selection	df	X ²	P
<u>Perceived Risk</u>			
Exact strategy	3	5.585	.1337
Approximate strategy	3	2.793	.4247
<u>Functional Condition</u>			
Exact strategy	3	2.985	.3940
Approximate strategy	3	3.282	.2984

Note: Some cells were combined to compute Chi-square.

represented their exact behavioral strategy, and thirty-three said it came closest to describing their behavioral strategy. The next most favored strategy was the conjunctive/compensatory (F=16). This strategy was more favored by subjects in the high perceived risk and working product conditions. Lexicographic processing, on the other hand, was favored slightly more by subjects in the low perceived risk and non-working product conditions. However, none of the differences proved significant.

TABLE 3
PROCESSING STRATEGIES SELECTED
(EXACT AND APPROXIMATE COMBINED)

Number of Times Selected	Perceived Risk			Functional Condition	
	High	Low	Total	Working	Non-Working
Conjunctive/Compensatory	11	6	17	9	8
Conjunctive	0	2	2	1	1
Lexicographic	25	28	53	25	28
Disjunctive	5	5	10	6	4
Compensatory	2	5	7	3	4
Disjunctive/Compensatory	4	1	5	2	3
Conjunctive/Disjunctive	2	3	5	4	1
Disjunctive/Conjunctive	<u>1</u>	<u>0</u>	<u>1</u>	<u>0</u>	<u>1</u>
Totals	50	50	100	50	50

Discussion

The results of this study support the conclusion that predecisional perceived risk and the functional condition of the product at the time of disposal did not influence the choice of a processing strategy.

Some explanations could be offered for the dominance of lexicographic processing. Reilly and Holman (1978) researched processing strategies in buying decisions utilizing similar structural protocols to those used in

this study. The authors reported a significantly high frequency of lexicographic processing (60.7 percent) followed by 32.1 percent who reported using a compensatory strategy. Reilly and Holman speculated that their results may be due to the attractive description of the lexicographic model. If this were true, subjects may have been influenced by the language of the description rather than the content of the statement. In the present study an effort was made to maintain balance and uniformity in the protocol statement while maximizing content discrimination.

Park (1976) provided a very viable explanation for the results of the present research. He indicated that lexicographic processing is an expected phenomenon in circumstances of high familiarity with the product, and well developed choice criteria. The fact that both the stereo component system and the hair blow-dryer are very familiar consumer goods, and the alternative attributes evaluated were well developed as presented to the subjects, may have reduced the effect of the independent measures and skewed the choice of a decision strategy in favor of lexicographic processing.

The managerial implications of the findings in this research are clear. If a significant portion of consumers involved in disposing of durable products process information lexicographically, the efforts of government, good-will organizations, recycling centers, or others, to promote a specific disposal alternative must then focus on the most important attribute of the disposal alternative. In this study both "financial cost" and "financial benefit" received an importance rating of 7.0 on a scale of one to ten, one being very unimportant and ten being very important. This was followed by the "effort involved" with an average rating of 6.5. "Availability" and "functional feasibility" had an average rating of 5.5 and 5.0, respectively. The lowest average rating of 3.0 was reported for "social acceptability." Also, when subjects were asked to cite the factors that influenced their choice of a disposal alternative, seventy-one percent (F=71) cited the "financial benefit" followed by the "effort involved" (F=57), and the "financial cost" incurred (F=44).

The high frequencies reported for "financial benefit" and "financial cost", along with the high ratings these attributes received, indicate the paramount importance of perceived monetary risk and economic considerations in the processing of information when disposing of durable goods. These salient attributes suggest that marketers involved in reverse distribution should not only promote their availability but should emphasize the financial benefits and convenience that accompany their exchange transaction.

One major contribution of this study to marketing theory is the utilization of a research method originally developed for studying consumer purchase behavior to expand the domain of consumer research and information processing to disposition decision processes. Further research in this area is recommended utilizing products at different levels of familiarity.

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SELF-IMAGE/PRODUCT-IMAGE CONGRUITY AND ADVERTISING STRATEGY

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Abstract

This article discusses the state-of-the-art of self-concept literature in consumer/market behavior, introduces an integrated self-concept model to the advertising practitioners, and shows how this model can enhance the formulation of advertising strategic effectiveness.

Introduction

Developing an effective advertisement does not only entail communicating the evaluative functional benefits of a product or service but also the evaluative symbolic benefits as well. Based on a tradition of attitude modelling, advertising researchers have neglected to systematically tap the rich source of symbolic attributes related to their advertised products. This is primarily due to the fact that advertising researchers focus their attention on the functional attributes of their product as traditionally established by a history of implementing the multiattribute attitude models in devising a creative copy. How symbolic attributes affect consumers' purchase motivation is a growing study related directly to the self-concept.

This paper reviews how the self-concept has been treated in the marketing/consumer behavior literature. It also introduces an integrated self-concept model to advertising practitioners and discusses research and policy applications.

Self-Concept

The self-concept in the pure social science disciplines (e.g., psychology, sociology) has been conceptualized differently by different self-concept investigators. However, most self-concept theoreticians seem to agree that the self-concept denotes the "totality of the individual's thoughts and feelings having reference to himself as an object" (Rosenberg, 1979, p. 7).

The self-concept literature in consumer behavior is muddled with ambiguity and confusion in regards to the precise conceptualization of self-concept. A number of investigators have conceptualized self-concept as being a single construct and treated it to mean the actual self-concept defined as that image of oneself as he/she perceives himself/herself (Grubb & Hupp, 1968; Birdwell, 1968; Green, Maheshwari, & Roa, 1969; Grubb & Stern, 1971; Bellenger, Steinberg, & Stanton, 1976; Hughes & Naert, 1970; Martin, 1973; Jacobson & Kossoff, 1963). The actual self-concept in this vein has been labeled as "actual self", "real self", "basic self", "extant self", or simply "self".

Within the single self-construct tradition some investigators have restricted self-concept to merely sex-role self-concept, which has been defined as that image of oneself as he/she perceives his/her sex role (Gentry, Doering, & O'Brien, 1978; Vitz & Johnston, 1965; Gentry & Doering, 1977; Morris & Cundiff, 1971; and Golden, Allison, & Clee, 1979).

In the multiple self-constructs tradition, self-concept has been conceptualized as having two or more dimensions. Some investigators argued that self-concept has

to be treated as having two components -- that of the actual self-concept and the ideal self-concept (the ideal self-concept is defined as that image of oneself as he/she would like to be) (Ross, 1971; Delozier, 1971; Delozier & Tillman, 1972; Lamone, 1966; Stern, Bush, & Hair, 1977; Schewe & Dillon, 1978; Belch, 1978; Landon, 1974; Dolich, 1969; Munson, 1974; Guttman, 1973; Belch & Landon, 1978; Hamm & Cundiff, 1967; Landon, 1972; Greeno, Sommers, & Kernan, 1973). The ideal self-concept has been referred to as the "ideal self", "idealized image", and "desired self".

Other investigators have gone beyond the duality dimensions. These include Sirgy (1979, 1980) who referred to the actual self-image, ideal self-image, "social self-image", and "ideal social self-image". The social self-concept (sometimes referred to as "looking-glass self" or "presenting self") was defined as that image that one believes others have of him/her; and the ideal social self-concept (sometimes referred to as "desired social self") denotes that image that one would like others to have about him/her. (cf. Maheshwari, 1974). Hughes and Guerrero (1971) talked about the actual self-concept and the ideal social self-concept. French and Glaschner (1971) used the actual self-concept, the ideal self-concept, and the perceived reference group image of self". This latter concept, although used in French and Glaschner's study, was never formally defined by the authors. Dornoff and Tatham (1972) used the actual self-concept, ideal self-concept, and image of best friend." Sommers (1964) used the actual self-concept and described other" (defined as "as if I were this person"). Sanchez, O'Brien, and Sommers (1975), on the other hand, employed the actual self-concept, ideal self-concept, and the expected self" (which refers to that image somewhere between the actual and the ideal self-concept). Furthermore, Munson and Spivey (1980) referred to the expressive self" which pertains to either the ideal self-concept or social self-concept.

Based on the theory of symbolic interactionism, Schenk and Holman (1980) argued that distinction between or among different self-perspectives is not fruitful since the activation of a specific self-perspective is situation-specific. They argued for the consideration of the situational self-image" which is the product of the individual's repertoire of self-images and the perception of others in the situation. Situational self-image has been referred to as the role which the individual undertakes to attain a specific goal or to avoid a specific aversion in a specific situation. This construct is labelled differently in the sociology and social psychology literatures - "presenting self," "role self," "social self," etc. In the case where situational self-image can be expressed through product consumption, the individual compares product or brand images to that of his/he situational self-image. The brand whose image matches the situational self-image influences the individual's decision making regarding his preference and purchase of that brand.

Product Image

Tucker (1957) argued that consumers personalities can be defined through product use.

"There has long been an implicit concept that consumers can be defined in terms of either the

products they acquire or use, or in terms of the meanings products have for them or their attitudes towards products." (p. 139).

Newman (1957) elaborated upon this concept.

"Among other things, a product is a symbol by virtue of its form, size, color, and functions. Its significance as a symbol varies according to how much it is associated with individual needs and social interaction. A product, then, is the sum of the meanings it communicated, often unconsciously, to others when they look at it or use it." (p. 100).

Products, suppliers, and services are assumed to have a personality or image, just like people. This image is not determined by the physical characteristics of a product alone, but by a host of other factors such as packaging, advertising, price, and channels of distribution. Images of products, suppliers, or services are also formed by other associations such as stereotyped image of the generalized or typical user and other related factors (cf. Levy, 1959; Grubb & Grathwohl, 1967; Britt, 1966).

It should be noted that product images can be classified as being functional or symbolic (Sirgy, 1981b, 1981c). Symbolic product images refer to the stereotypic personality images consumers have of a specific product. Examples of stereotypic personality images people may have of a particular store include traditional versus modern, classy versus folksy, sexy versus plain, friendly versus formal, high status versus low status, etc. These symbolic images are differentiated from their functional counterparts in that the latter involve attributes that are related to the physical benefits of the product and not the stereotypic personality characteristics associated with it.

Self-Image/Product-Image Congruity

The discussion of self-concept and product-image congruity was initiated by Gardner and Levy (1955) and Levy (1959). The main attention was focused upon the image projected by various products. Consumers were thought to prefer products with images which are congruent with their self-concepts. Grubb and Grathwohl (1967) formally proposed that

". . . the consuming behavior of an individual will be directed toward furthering and enhancing his self-concept through the consumption of goods as symbols" (p. 26).

Self-image/product-image congruity specifically refers to the match or mismatch of one or more actual self-image, or ideal self-image, social self-image, or ideal social self-image with the corresponding personality images of the designated product. The match between actual self-image and product image has been referred to as "self-congruity"; between ideal self-image and product image "ideal congruity"; between social self-image and product image as "social congruity"; and between ideal social self-image and product image as "ideal social congruity" (Sirgy, 1979, 1980, 1981a; Samli and Sirgy, 1981). The congruence between these two sets of constructs (product image and self-concept) has been modelled using a variety of distance measures such as, the Euclidean distance, absolute difference, simple difference, and difference squared indices (Birdwell, 1968; Dolich, 1969; Ross 1971; Schewe and Dillon, 1978; Sirgy, 1979, 1980).

Single Congruity Versus Multiple Congruities

The issue whether product image interact with one or more self-perspectives such as, the actual self-image, the ideal self-image, the social self-image, and the ideal social self-image has been addressed by Sirgy (1981b, d). Many studies have treated self-image/product-image congruity only and exclusively in terms of a single congruity effect, namely self-congruity (i.e., involving only the actual self-image) (e.g., Grubb & Stern, 1971; Birdwell, 1968; Bellenger, Steinberg, & Stanton, 1976; Hughes & Guerrero, 1971; Green, Maheshwari & Roa, 1969). Most of these studies provided support for the relationship between self-congruity and consumer choice.

Many other studies have been found to assess the independent effects of ideal self-image versus actual self-image (or ideal congruity versus self-congruity) on consumer choice (e.g., Dolich, 1969; Ross, 1971; Sirgy, 1979, 1980; Munson, 1974; Belch, 1978; Dornoff and Tatham, 1972). The overall pattern of findings in regards to the differential effects of multiple congruities seems at best equivocal (Sirgy, 1980a).

An Integrated Self-Concept Model

An integrated self-concept theory was developed by this author (Sirgy, 1981b, d) to explain self-concept effects on consumer behavior. The theory advances the notion that every self-image has a value association which determines the degree of positive or negative affect felt when that self-image is activated. This value component associated with a particular self-image replaces the traditional constructs of ideal self-image, ideal social self-image, etc. Correspondingly, every product image has also a value component reflective of the affective intensity associated with that attribute. A specific value-laden self-image interacts with a corresponding value-laden product image and the result occurs in the form of positive self-congruity (match between a positive product image and a positive self-image), positive self-incongruity (match between a positive product image and negative self-image), negative self-incongruity (match between a negative product image and a positive self-image), or negative self-congruity (match between a negative product image and negative self-image).

Based on self-esteem need dynamics, the theory predicts that an individual would experience more approach motivation towards a particular product given a positive self-incongruity than a positive self-congruity condition. In contrast, more avoidance motivation would be felt towards the product under negative self-incongruity than negative self-congruity conditions (see [Figure 1](#)).

However, these predictions are based only on the psychological dynamics of self-esteem needs. Other self-concept motives such as the need for self-consistency are known to play a significant role in goal-directed behavior (see Sirgy, 1981b, d). Self-consistency motivation is said to drive the individual to behave in ways consistent with his/her perception of himself/herself, since behaviors which are realized to be inconsistent with his/her self-image threatens the organization of his/her self-theory. Therefore, people guard themselves from the threat of conceptual disorganization by attempting to behave consistently with their self-perceptions. As a result, self-consistency motivation counteracts self-esteem motivation under incongruity conditions. The resultant motivational tendency is shown in [Figure 2](#).

	PRODUCT IMAGE	SELF-IMAGE	SELF-IMAGE PRODUCT CONGRUITY	SELF-ESTEEM MOTIVATION
POSITIVE PRODUCT IMAGE POSITIVE SELF-IMAGE			POSITIVE SELF-CONGRUITY	(+)
POSITIVE PRODUCT IMAGE NEGATIVE SELF-IMAGE			POSITIVE SELF-INCONGRUITY	(+) ²
NEGATIVE PRODUCT IMAGE NEGATIVE SELF-IMAGE			NEGATIVE SELF-CONGRUITY	(-)
NEGATIVE PRODUCT IMAGE POSITIVE SELF-IMAGE			NEGATIVE SELF-INCONGRUITY	(-) ²

FIGURE 1

THE SELF-ESTEEM MOTIVATION AS A FUNCTION OF THE INTERACTION BETWEEN PRODUCT IMAGE AND SELF-IMAGE.

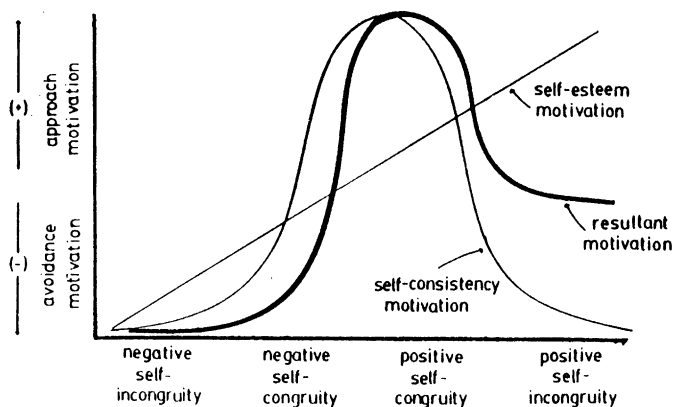


FIGURE 2

THE EFFECTS OF SELF-ESTEEM MOTIVATION AND SELF-CONSISTENCY MOTIVATION ON PURCHASE MOTIVATION.

Advertising Strategy Implications

As can be seen from **Figure 2**, consumer who experience positive self-congruity with an advertised product would be most motivated to purchase that product, controlling for other factors. Therefore, the advertising manager should be able to identify and segment the market into the four different congruity groups: positive self-congruity group, positive self-incongruity group, negative self-congruity group, and negative self-incongruity group. This structural strategy should then be followed by a process strategy which directs a differently designed message for each of those groups for the purpose of effecting an optimal image/product image congruity state, and therefore motivate them to approach the advertised product. The precise structural and process strategies recommended are as follows:

1. Conduct a perceptual test on a sample of your target population to identify those symbolic attributes which are associated with your product.
2. Segment your target population into (a) those who perceive your product along negative symbolic attributes and (b) those who perceive your product along positive symbolic attributes.
3. Further segment those who negatively perceive your product into (a) those who have a positive image of themselves (have self-images opposite of those perceived product images) and (b) those who have a negative image of themselves (have self-images which match those perceived product images).
4. For those who positively perceive your product, segment them into (a) those who have positive self-images (corresponding to those of the product images) and (b) those who have negative self-images (self-images which are the opposite of the product images).
5. For that segment which has a negative product image and a positive self-image (negative self-incongruity group), advertising should be geared to change the negative product image in the direction of their positive self-image to effect future positive self-congruity. Such self-concept states would insure high product preference, possible purchase intention, and given purchase, high product satisfaction.
6. For the segment which has a negative product image and a negative self-image (negative self-congruity group), advertising should be directed to moderately change the negative product image to a positive one while showing the consumers possible instrumental ways of changing their negative self-image to a positive one and revealing the benefits associated with that change. This state-of-affairs if successfully completed prevents the instigation of negative self-congruity and allows for future positive self-congruity.
7. For that segment which has a positive product image and a corresponding positive self-image (positive self-congruity group), advertising should be developed to reinforce the positive product image and provide instrumentalities for those consumers to further enhance themselves by maintaining their positive self-image with the help of the positively perceived product.
8. For that segment which has a positive product image and a negative self-image (positive self-incongruity group), advertising is created to maintain the positive perception of the product and depict behavioral instrumentalities designed to change their negative self-perceptions in the direction of the positive images associated with the product.

Since this may sound a little bit overtechnical, an example of self-concept research/advertising application is in order. Let us choose a product which is loaded with symbolic (personality) characteristics. How about a sports car? Generally sports cars project stereotypic images of sexiness, social outgoingness, and carefreeness. And we want to advertise our brand of sports car (brand x).

The structural strategy involves identifying at least four different market segments: (1) positive self-congruity group, (2) positive self-incongruity group, (3) negative self-congruity group, and (4) negative self-incongruity group.

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The positive self-congruity group believes that the people who drive sports cars are sexy, socially outgoing, and carefree. They also see themselves in this light, and they have a positive attitude toward these image characteristics. For this market segment, the process advertising strategy is primarily that of reinforcement. In other words, devise an advertising copy which associates brand x sports car with people who are sexy, socially outgoing, and carefree, and direct it to those people (through proper media selection) who think of themselves as being sexy, socially outgoing, and carefree.

The positive self-incongruity group believes that people who drive sports cars are sexy, socially outgoing, and carefree, but think of themselves as not possessing (or lacking) these characteristics. They also value (or like to be seen) as sexy, socially outgoing, and carefree. In this case, the advertising manager should devise an advertising copy which associates brand x sports car with people who are sexy, socially outgoing, and carefree, but also show that these people weren't sexy, socially outgoing, and carefree to begin with. They became to reflect this positive image with the purchase and use of brand x sports car.

The negative self-incongruity group may perceive people who drive sports cars as being immature, spoiled, and irresponsible (negative product image), and may think of themselves as being quite mature-like, disciplined, and socially responsible (positive self-image). For these people, the advertising copy should attempt to change the negative product image associated with brand x to that of a positive one to match their self-perceptions. This can be accomplished by effectively associating brand x with people who are quite visibly mature, disciplined, and responsible in an advertising campaign directed at this group.

The negative self-congruity target is the most troublesome. This is because they view the product image as well as themselves in a negative light. That is, they may perceive people who drive sports cars as being immature, spoiled, and irresponsible (negative product image), and also they see themselves as being immature, spoiled, and irresponsible and don't like themselves this way (negative self-image). In this case the best strategy might be to associate brand x sports car with people who are mature, disciplined, and responsible; however, in doing so, show how people who used to be immature, spoiled, and irresponsible changed to become more mature, disciplined, and responsible by driving brand x sports car.

Conclusion

The role of product symbolism is being discovered. Advertising researchers are beginning to realize that consumers react more strongly to affect-laden symbolic product-related stimuli than "affect-free" functional product attributes. This is an enormously rich area which advertisers can exploit. On the other hand, lack of awareness concerning how these symbolic attributes interact with the self-concept of the target population can be very costly under those circumstances when an advertisement which is loaded with product symbolism would result into consumer behavior unfavorable to the advertiser's market position.

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AN INVESTIGATION OF
THE SHOPPING ORIENTATIONS OF RECENT MOVERS

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Abstract

Previous Research

The purpose of this paper is to determine how the shopping orientations of recent movers are different from the orientations of the population at large. Specifically, the research questions analyzed are: (1) to what extent do movers differ from nonmovers on demographics, shopping benefits desired, purchases made, and life style traits; and, (2) do recent movers form a relatively homogeneous market segment or do they conform to the general market segmentation patterns of the general population.

Introduction

The United States is still the most mobile of all societies. One out of every five individuals move each year. Obviously, movers represent a large proportion of society and a growth market for the future. A conservative estimate of 67% move to alternative residences within the same country; approximately 16% move to a different country, and close to 17% change their state or country of residence. (Bell, 1969; Lansing & Mueller, 1967; Long, 1977.)

There are several large groups of individuals ignored by the census records, which tend to understate the amount of movement. For example, the movements of millions of students who leave home for college or those individuals in the military, go unrecorded. (King & Hyman, 1979.)

Toffler (1970), Pierson (1973), Bell (1969), and the Stanford Research Institute all suggest that moving will increase in the future. Also, it has been suggested that continued high mobility may be ensured due to the large number of regional population centers in the United States. (Long, 1977.)

Many firms depend on attracting recent movers to an area as the primary source for developing customer franchise. Since the customer base is constantly shifting this means that different buying patterns and preferences are being established. This also implies that programs to convert newcomers to steady customers can perhaps be identified and made on-going on a continuous basis. Obvious examples are commercial banks, service related industries, and furniture retailers. Few customers switch once they select a bank. Physicians, dentists, barbers, and laundromats need to attract recent movers in order to build their customer base.

The structure of Mover Shopper Types is also of importance for marketing strategy. If a specific type of mover represents a relatively homogeneous market segment then they should be attracted with specific marketing strategies tailored toward their particular characteristics. However, if they follow the segmentation structure of society in general, then a firm can use its existing marketing strategy communicated in the media which movers are likely to use.

Differences Found Between Movers and Nonmovers on General Shopping Orientations

Andreasen (1966) found that long distance mobiles possessed higher education levels, occupation and income than the residents. They also possessed the characteristics of high aspirations and relative youth. The study revealed that mobiles exhibited a greater present spending power, a greater potential for future increases in spending power, presently higher expenditure rates, and a greater potential for future higher expenditure rates in comparison to nonmobiles.

Andreasen and Ratchford (1976) used the same data base as the one above to analyze information sources used by long distance mobile households to make a variety of product and service decisions. The number of sources assessed and amount of information collected was positively associated with the degrees to which a joint husband and wife decision process was responsible for the selection and the number of previous moves. The implication of this is that in an investigation of retail patronage and store image perceptions, both spouses should be questioned.

Some scholars have undertaken to study the development of shopping behavior among geographically mobile consumers. Efforts by Bell (1969, 1970) (even though weak due to an incomplete set of demographic, socioeconomic, and conditioning variables) proposed the concluding patterns of behavior of long-distance mobiles as a guideline for retailers who are considering a mobility oriented segmentation strategy: (1) mobiles transfer firm and brand loyalties between communities, therefore, firms need to feature brand name products in their promotions in order to attract mobile consumers; (2) mobile households purchase appliances and furniture at twice the rate of nonmobiles, with the same income; (3) credit is an important variable in transferring loyalties between communities since the majority of furniture and appliances purchased were bought with transferred accounts; (4) over 70% of the selection reasons are centered about six categories: convenience, familiarity, recommendations, quality of work or merchandise, low prices, and service; (5) personal information is an important factor in choosing dry cleaners, banks, furniture, and clothing stores and appliance outlets; (6) within six weeks of arrival, the majority of mobiles make supplier choices and rebuild a working shopping pattern; (7) as a group, mobiles exhibited similar higher socioeconomic patterns independent of their move destination. Bell also overlooked, unfortunately, the relationship of consumer store image perceptions to store choice, there was no baseline for comparing the responses of long distance mobiles since neither local movers nor nonmovers were sampled.

In addition, the Progressive Grocer Study (1965) indicated a rapid development of food shopping patterns. They concluded that identification of a favorite store required from 3.6 weeks for local movers to 4.3 weeks for long distance movers. The study also showed that these two groups also differed in the perceived annoyances and problems associated with shopping in a different grocery store. Convenience, reputation, and

the recommendations of friends and neighbors were the chief stated reasons for selection of a grocery store; while meat quality, cleanliness, brand variety, friendliness of personnel, prices, and convenience were found to be of relative importance in identifying a favorite store.

In another grocery store related study which confirms the Progressive Grocer findings regarding a shifting of supermarket selection criteria over time, Atkins (1962) found that 65% of his respondents were loyal to their previously patronized supermarket chain. Kleimenhagen and Stampfl (1968) explained that almost one half of their sample chose their first supermarket on the basis of convenience, yet 25% chose on the basis of previous chain experience.

Types of Moves Found

Anderson and Golden (1979) determined four distinct life style typologies through cluster analysis: Young Urbanites, Entrenched Ruralites, Established Urbanites, and Counter-Stream Migrants. Their results indicated that the typologies differed significantly across four areas: (1) the relative importance of standard patronage dimensions; (2) the use of information sources; (3) shopping convenience orientation; and (4) the dynamics of the shopping trip. This is encouraging since it appears possible to identify differentiated shopping behaviors by "mobility" variables. It should be noted, however, that even though their work showed positive results, the research was limited to Oklahoma residents.

Relationship of This Study to Previous Research

Previous research on recent movers has been conducted on unrepresentative samples, typically using a limited number of shopping dimensions. In contrast, the first research question of this study attempts to determine the differences of recent movers across a large representative sample (n=4,408) of individuals who live in nine different areas, with four basic inventories of shopping orientations: demographics, benefits desired, purchased made, and life style traits. The second research question attempts to compare the life style structure of recent movers with nonmovers, never previously analyzed, in order to determine if movers are a unique market segment or whether they conform to the general market segmentation patterns of the population at large.

Research Design

4,408 individuals were telephone interviewed as a representative sample of nine different communities throughout the United States. The population was approximately 500,000 in four of the communities and about 40,000 in five of the communities.¹ 353 individuals, or 8% of the sample, had moved into the community within the previous year.

This paper compares those who have moved into the community within the previous year, with the members of the sample who lived there already. The first research question is analyzed by comparing the shopping orientations (demographics, shopping benefits desired, purchases made, and life style traits) of recent movers with the other respondents. The second re-

search question is examined by developing a general life style segmentation solution of all respondents and determining the representation of recent movers for each segment.

Comparison of Movers and Nonmovers Overall (Research Question I)

The demographic differences between movers and nonmovers are reported in Figure I. Movers were much younger, more highly educated, of a higher social class, earlier in family life cycle, and had smaller households. However, the income of the two groups were not significantly different.

TABLE I

Chi Square Levels of Significance of Demographics

Demographic Variable	Recent Movers	Nonmovers	Totals
Age			
18-24	28.9	12.6	13.9
25-34	42.8	28.3	29.5
35-44	16.7	20.3	20.1
45-54	7.6	16.4	15.7
55-64	2.8	13.2	12.4
65-74	1.1	7.8	7.3
75 and above	0	1.3	1.2
Total	100%	100%	100%
N	353	4010	4363
Chi Square = 155.99 Significance = 0.00			
Education			
K-6	.3	2.5	2.3
7-9	1.9	8.5	7.9
10-11	3.4	9.5	8.9
High School	27.9	34.4	33.9
Some College	31.0	23.4	24.1
College Graduate	27.3	14.3	15.5
Graduate School	8.2	7.3	7.4
Total	100%	100%	100%
N	319	3375	3694
Chi Square = 76.31 Significance = 0.00			
Family Income			
Under \$4,000	6.8	6.9	6.8
4,000-4,999	4.1	4.5	4.5
5,000-5,999	4.1	4.4	4.4
6,000-6,999	5.1	3.9	4.0
7,000-7,999	6.1	4.7	4.8
8,000-8,999	5.1	5.4	5.4
9,000-9,999	5.8	6.3	6.3
10,000-11,999	12.5	12.9	12.9
12,000-14,999	15.6	16.4	16.3
15,000-19,999	20.0	16.7	17.0
20,-00-24,999	7.5	8.3	8.2
25,000 or more	7.5	9.5	9.4
Total	100%	100%	100%
N	295	3311	3606
Chi Square = 22.035 Significance = .0002			
Family Life Cycle			
Bachelor	6.6	4.1	4.4
Newly Married	21.8	7.4	8.6
Full Nest I	31.0	19.7	20.6
Full Nest II	6.0	4.9	5.0
Full Nest III	22.2	29.8	29.2
Empty Nest I	8.5	17.9	17.1
Empty Nest II	2.5	10.0	9.4
Solitary Survivor I	.6	3.7	3.5
Solitary Survivor II	.6	2.5	2.3
Total	100%	100%	100%
N	316	3477	3793
Chi Square = 143.46 Significance = 0.00			

Respondents also rated the importance of twenty store benefits, on a zero to ten scale. As shown in Table II, migrants exhibited few benefit differences from nonmigrants. The major difference in migrants appeared to be their lower interest in employee service factors. Not surprisingly, migrants also had less interest in convenient location. They demonstrated little difference in fashionable clothing, attractive decor, variety and selection of merchandise, and store cleanliness. Therefore, both groups appeared to have the same level of upscale taste.

¹We wish to thank Bert C. McCammon, Jr., for the use of data collected by the Distribution Research Center, at the University of Oklahoma.

TABLE II

Benefits Desired

Benefits Desired Statements	Level of Significance of Differences	Means	
		Recent Movers	Nonmovers
Low Everyday Prices	.340	8.75	8.64
Good Sales Prices	.595	8.59	8.53
Friendly Employees	*** .006	8.69	8.96
Knowledgeable Employees	** .044	8.32	8.54
Shelves Fully Stocked	.238	8.09	8.23
Enough Employees	*** .010	7.97	8.27
Variety and Selection of Merchandise	.751	8.68	8.62
Attractive Decor	*** .044	6.38	6.67
Ease in Changing Purchases	.379	5.57	5.40
Quality of Merchandise	.793	9.22	9.20
Ease in Finding Items	.253	8.21	8.34
Speedy Checkout	.403	8.58	8.67
Easy to Walk Through Store	* .107	7.83	8.02
Store Cleanliness	.556	9.09	9.14
Convenient Location	*** .003	7.90	8.26
Variety and Selection of National Brands	** .012	7.62	7.92
Convenience of Other Stores	.712	6.90	6.95
Fairness on Adjustments	* .124	8.51	8.68
Easy to Return Merchandise	** .013	8.49	8.77
Fashionable Clothing	.988	7.61	7.61

*** if less than or equal to .01
 ** if less than or equal to .05
 * if less than or equal to .15

Respondents ratings on thirty nine life style statements revealed some of the most penetrating differences. Respondents rated them by "how true is this statement for you" on a 0 to 10 scale. Movers were strongly more interested in socializing and entertaining, such as bar-b-quing outdoors. They also wanted checkout clerks to be able to approve checks. They had a preference for professionals to make home repairs. In addition, movers were less likely to work in the home or garden. They knit or do needlepoint much more often. In summary, lifestyle traits added a great deal of interpretative color to the demographics and benefits reviewed.

TABLE III

Life Styles

Lifestyle Statements	Level of Significance of Differences	Means	
		Recent Movers	Nonmovers
Usually Buy More than Intended	* .091	6.47	6.79
Uses Power Tools Frequently	* .082	4.39	4.75
Carefully Compares Prices	.648	7.34	7.42
Frequently Goes Camping or Hiking	.213	2.95	2.71
Pays Attention to Ads for Sales	* .067	6.93	7.23
Shop Several Stores for Best Price	.427	5.03	5.19
Family Member Likes to Repair Cars	** .015	4.38	3.84
Newspaper Ads Are a Great Help	** .050	7.12	7.45
Prefer Store's Brand to National	.454	6.45	6.58
Convenience Over Variety or Price	.503	6.59	6.70
Rely Heavily on Store Signs	.700	7.08	7.01
Often Shop at Discount Stores	*** .002	7.92	7.36
Checkout Clerks Should OK Checks	** .108	3.13	3.48
Family Member Uses Workshop	* .119	3.02	3.31
Frequently Purchase by Catalog	.778	5.26	5.20
Family Member Active Do-It-Yourself	.951	7.80	7.99
Store Signs Are Helpful	*** .000	3.72	4.61
Prefer a Professional on Home Repairs	.549	2.21	2.10
Frequently Enjoy Boating and Ski	* .059	6.29	6.57
Store's Brands Are Better Value	.281	4.92	4.68
Frequently Sew or Make Clothes	.844	4.93	4.98
Fashion Conscious Female	.971	1.55	1.54
As a Male Feel Uneasy if Out-of-Style	.220	4.07	3.87
Among First to Buy New Products	.164	5.52	5.27
Impatient with Clerks	*** .000	4.38	3.42
Frequently Knits or Needlepoints	.454	5.69	5.56
Likes to Try New Products	** .059	3.63	4.05
Frequently Goes Hunting or Fishing	.766	6.53	6.48
Seek Stores with a Wide Variety			

TABLE III (continued)

Impatient in a Checkout Line	.765	5.11	5.16
Frequently Work in the Yard	*** .000	4.85	6.23
TV Ads are Helpful in Shopping	.790	5.05	5.10
Frequently Bar-b-q or Eat Outdoors	*** .000	7.22	6.50
Usually Use Most Store Coupons	* .129	4.48	4.77
Radio Ads are Helpful in Shopping	* .051	3.88	3.90
Enjoy Personalizing Car	.925	3.41	3.04
Helpful Clerks are Very Important	.648	8.62	8.66
Enjoys Socializing Outdoors	** .014	6.41	5.95

*** if less than or equal to .01
 ** if less than or equal to .05
 * if less than or equal to .15

Consumers were asked if they had recently made a purchase in each of twenty-seven product categories. The primary findings showed that movers were more likely than current residents, to purchase all types of clothing and less likely to purchase kitchen accessories, records or tapes.

TABLE IV

Purchasing Behavior

Purchasing Behavior Statements	Level of Significance of Differences
<u>Did You Purchase Any:</u>	
Small Appliances	.960
Automotive Supplies	.947
Candy	.613
Boy's Clothing	*** .003
Girl's Clothing	.224
Infant's Clothing	.823
Men's Clothing	.776
Women's Hosiery	** .022
Women's Accessories	** .021
Costume Jewelry	.651
Women's Clothing	.539
Domestic Goods	.922
Decorator Gift Items	.201
Electronics	.693
Fabrics-Sewing Aids	.731
Footwear	* .125
Unfinished Furniture	*** .000
Hardware Supplies	* .146
Health-Beauty Aids	.997
Kitchen Accessories	** .032
Lawn-Garden Items	*** .010
Pet-Pet Supplies	.783
Plants-Plant Supplies	.931
Records or Tapes	*** .001
Sporting Goods	.840
Stationery Supplies	.541
Toys	.471

*** if less than or equal to .01
 ** if less than or equal to .05
 * if less than or equal to .15

Extent of Movers Conforming with Lifestyle
 Solution of Population at Large:
 (Research Question II)

A Q factor analysis was conducted across the 4,408 individuals in the entire sample on the life style statements to develop a general life style segmentation solution. Figure 1 profiles the types of shoppers found across the sample.

FIGURE 1

The Archie Bunker Suburbanites are somewhat consumer conscious, however, are more do-it-yourselfers than any other segment. Their social life centers around the home, such as, bar-b-quing and working in the

yard. This may be economically driven since they tend to have big families and fall into the lower middle class, with incomes in the \$10,000 to \$15,000 range.

The Self-Indulgent Consumers are impatient and seek convenience always over price. They almost never shop at discount stores and always buy national brands. These self-indulgent consumers tend to always use professionals for home repairs since they never do any work with their hands, nor do they take part in any outdoor activities. They show no social class trend, however, their incomes range from low to high. Their educational background is high school diploma. They have very few children in their families which definitely goes along with their self-indulgence.

The Upwardly Mobiles are dramatically younger either in the bachelor stage or newly married stage. They appear to be the first college educated generation in the family coming from blue collar backgrounds. Therefore, they are new to their lower to middle social class which is indicated by the contradictory lifestyle statements. They are interested in convenience, don't shop at discount stores, and buy national brands, are fashion conscious, yet at the same time, concerned with price; they make their own clothes and are active do-it-yourselfers. Upwardly mobiles are outdoor people.

The Traditional Seniors are conscientious price shoppers. This older segment reports having low incomes which is representative of those individuals in the Empty Nest I & II life cycle stages. These retired consumers buy store brands and frequently use coupons to get better value. Convenience is unimportant compared to price. They do not engage in any outdoor activities or socializing. Neither do these traditionalists work with their hands, consequently, almost always use professionals for home repairs. They are the last to try or buy new products and, obviously, are not fashion conscious.

Impulsive Innovators are young college graduates, either newly married or Full Nest I, with low present incomes but entrenched in the middle to upper class. They have almost all been to college. They are compulsive shoppers frequently purchasing much more than they intended. They do pay attention to advertising and use coupons to try the newest products, often purchasing by mail. Because of their outgoing personalities, they frequently socialize and are very fashion conscious. These budding innovators enjoy working with their hands and being creative.

The Conscientious Assembly Liners represent the youngest segment. This group of consumers has graduated from high school and are in the bachelor stage or just recently married with no children. Due to their limited education, and youth, they are making below \$9,000 annually. Conscientious Assembly Liners carefully compare and shop for low prices by paying attention to ads (T.V., radio, newspapers) for sales. They try new national brands only when coupons are available, however, most frequently purchase store brands. They spend a great deal of time watching television and socializing outdoors. Most likely this is due to their limited ability to pay for other social activities. This segment is not a do-it-yourselfer group, nor do they work with their hands except when personalizing their cars.

TABLE V

Percentages of Movers In Each Segment

Segments	Recent Movers	Nonmovers	Overall
Archie Bunker Suburbanites	13.2%	15.2%	15.0%
Self-Indulgent	17.7%	20.1%	19.9%
Upward Mobiles	19.2%	13.2%	13.7%
Traditional Seniors	15.0%	20.5%	20.1%
Impulsive Innovators	18.9%	19.9%	18.0%
Conscientious Assembly Liners	16.2%	12.9%	13.2%

Chi Square = 16.90
Significance = 0.005

Table V reports the representation of movers in the general life style solution. Statistically, movers and nonmovers have a representation which produces a significant (at $p < .05$) chi square difference. Movers tend to overrepresent Archie Bunker Suburbanites, Self-Indulgent Consumers, and Traditional Seniors, and underrepresent Upward Mobiles and Conscientious Assembly Liners.

However, a large number of movers can be found in each segment. Recent movers are hardly a one-segment shopper phenomenon. Instead, they significantly represent each of the underlying market segments found for the population in general.

Summary and Conclusion

The analysis of the first research question found life style traits to offer a richer, fuller profile of differences between movers and nonmovers than the other variables used. Demographics and benefits desired, two of the primary types of variables used in previous research, were weak discriminators of movers versus nonmovers.

The analysis of the second research question indicated that movers disproportionately represent some general life style market segments. Regardless, large numbers of movers are found in each major segment. This finding indicates that while marketing strategy can profitably take note of segmentation differences of movers versus nonmovers, there is no single segment which should always be attracted when attempting to reach movers.

Obviously, there is a need for further research on recent movers, such as time-phased research to determine orientation-related trends. Also, an investigation into the time it takes for consumers to diffuse into a community would be of interest to marketing managers in exploring shopping behavior by defined segments. This research area could also be an excellent area for analyzing consumer processes, since consumers moving into a new community are starting fresh and not biased by previous behaviors. Mobiles are found to represent

an economically strong market segment and they should be investigated to gain an understanding of their shopping behavior and patronage patterns.

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AN EXAMINATION OF INCOME DIFFERENTIALS ON BLACK
BUYER BEHAVIOR OF FASHIONS

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ABSTRACT

This study examines the income effect on black women shopping behavior of fashions. Black women of all income groups are extremely interested in fashions. Discount stores are frequented by those in the lower income group and specialty stores are preferred by those in the higher income group. Various types of print and broadcast media are used by black women of all income groups to find out the introduction of the latest fashions. Advertisements with black models get more attention from black women, especially those in the lower income group.

INTRODUCTION

The black consumer market has gained increasing attention from marketers as evidenced by the amount of research conducted in the last two decades. Blacks are viewed as a market with distinctive characteristics from whites. Blacks generally have lower socio-economic status than whites and tend to be concentrated in inner cities of large urban areas. Consequently, studies of black buyer behavior often treated blacks as a homogeneous group and compared their consumption patterns, shopping behavior, media exposure patterns, etc. with those of white consumers. Differences have been found in these aspects of buying behavior between the two groups. Since black family income is much lower than white family income, these differences may be attributed to the income effect on buying behavior.

However, the black consumer market is far from being homogeneous. There are young and old blacks, rich and poor blacks, etc. The differences in demographics and motivation may lead blacks to have different buying behavior. Therefore, the purpose of this paper is to investigate the effect of one of these characteristics, income, on black female shopping behavior of fashions.

BACKGROUND

Bernard Portis (1966) found that black women are as fashion conscious as white women. The lower the income level of blacks, the higher are their expressed interests in fashions. Furthermore, blacks were found to be more innovative in clothing behavior (Robertson, Dalrymple, and Yoshino 1964). This innovativeness is directly related to income; i.e., the higher the income, the more innovative are blacks.

The methods used to follow fashions do not differ significantly between the black and white women. Shopping in stores, looking at newspaper ads, reading fashion magazines, and reading articles about fashions in newspapers are the more popular means to follow fashions. However, the fashion conscious women use more methods to follow fashions than do the less fashion conscious women (Portis 1966).

For store shopping behavior, it was found that low income blacks shop more frequently at discount stores than do whites (Feldman and Star 1968). However, for fashion items, large department stores are the favorite retail outlets for fashion conscious black women. This fashion shopping behavior differs from

white women, as the latter group shop more frequently at high-priced specialty stores (Portis 1966).

Tolley and Goett (1971) reported that the use of black models in newspaper ads by department stores for clothing items get more visibility among black female shoppers. Moreover, blacks are more likely to be able to recall ads with black models. This is especially true with the lower income blacks.

Total consumption expenditures of blacks are less than those of whites. Blacks spend less for food, housing, medical care, and automobile transportation; and more for clothing, non-automobile transportation, and savings. As the income of blacks rises, the differences diminish. Consumption patterns of blacks approach those of whites, except for clothing, personal care, home furnishing, alcohol, and tobacco for which blacks spend more (Sexton 1972).

METHODOLOGY

Black female shoppers at a major department store in Orangeburg, South Carolina were interviewed during the second week of July 1980. A total of 241 interviews was completed during this period resulting in 212 usable responses.

Orangeburg is a city with a population of approximately 34,000. Of the total population, 45 percent is black. The nearest major metropolitan area, Columbia, South Carolina, is 40 miles from the city. There are two other metropolitan areas within 80 miles of Orangeburg: Charleston, South Carolina and Augusta, Georgia.

The instrument used in this study was a structured questionnaire. Statements used to measure fashion interests and methods used to follow fashions were selected from the Portis (1966) study. In addition, a list of statements concerning fashion shopping behavior, media behavior as well as demographic data were included in the questionnaire. The respondents were asked to indicate their level of agreements or disagreements along a six-point scale ranging from definitely agree to definitely disagree. In the data analysis, the responses were grouped into two categories: agree or disagree.

To find out the income effect on fashion shopping behavior, the respondents were grouped according to the reported income into five income categories: less than \$5,000, \$5,001 to \$9,999, \$10,000 to \$14,999, \$15,000 to \$19,999, and over \$20,000. The income variable then was crosstabulated with the behavioral variables and chi-square technique was used to test whether significant differences existed among the responses.

FINDINGS

Fashion interest reported by the respondents is presented in Table 1. Chi-square analysis indicates there is no significant difference in income level and reported interest in fashions. Black women in this study are extremely interested in fashions. Almost 90 percent of all respondents indicated they read fashion news regularly and try to keep their wardrobe up to

TABLE 1

FASHION INTEREST AND INCOME

	Less than \$5,000	\$5,000 to \$9,999	\$10,000 to \$14,999	\$15,000 to \$19,999	Over \$20,000	Total	Degree of Freedom	Chi-Square
I read the fashion news regularly and try to keep my wardrobe up to date with fashion trends								
Agree	94.87%	91.04%	84.48%	95.65%	81.82%	89.90	4	4.662
Disagree	5.13	9.96	15.52	4.35	18.18	10.10		
I keep up to date on all the fashion changes although I do not always attempt to dress according to these changes								
Agree	92.31	88.06	87.93	95.65	90.91	89.90	4	1.597
Disagree	7.69	11.94	12.07	4.35	9.09	10.10		
I check to see what is currently fashionable only when I need to buy some new clothes								
Agree	53.85	65.57	68.97	52.17	36.36	61.11	4	6.566
Disagree	46.15	34.33	31.03	47.83	63.64	38.89		
I don't pay much attention to fashion trends unless a major change takes place								
Agree	38.46	56.62	58.62	60.87	45.45	53.30	4	5.113
Disagree	61.54	43.94	41.38	39.13	54.55	46.70		
I am not at all interested in fashion trends								
Agree	20.51	15.63	21.82	9.09	27.27	18.32	4	2.727
Disagree	79.49	84.38	28.18	90.91	72.73	81.68		

date with fashion trends. The same percentage of respondents reported they follow fashion changes although they do not attempt to dress according to these changes. About 82 percent disagreed with the statement, I am not interested in fashion trends.

Table 2 presents the methods used to follow fashions. Black women with different income levels do not differ markedly in the ways they follow fashions. Disregarding income, the most popular methods used to follow fashions are: going to stores selling fashion items (92.82%), observing what other women wear (92.58%), discussing fashions with other women (89.69%), and reading fashion magazines (86.53%). If income is considered, black women with higher income seem to rely more on observing what other women wear (100%) and discussing with other women to follow fashions (100%).

Fashion shopping behavior is presented in **Table 3**. Income does have a significant effect on black shoppers in the selection of stores. Black women with lower income have a tendency to shop more frequently at discount stores. On the other hand, those with higher income shop more frequently at specialty stores. However, department stores are the favorite choice of retail outlets among blacks (90.82%). Slightly more than half of the respondents reported they order fashion items from mail catalogs.

Income also has a significant effect on outshopping behavior of black women. The percentages reported by the respondents for outshopping behavior vary among income groups. Those in the middle to high income groups, \$10,000 and over, seem to be more willing to travel to large cities to shop for fashion items.

The income effect on media behavior is shown in **Table 4**. The level of income has no significant effect on

black women's use of media to find out the introduction of latest fashions, except for radio. Magazine articles is the most frequently mentioned type of medium for finding out the introduction of latest fashions (96.43%). On the other hand, radio programs are not a good source to find out the introduction of fashions (35.20%).

Income has no significant effect on black women's perceptions of the usefulness of different types of media for fashion advertisements. Again, magazine's ads and radio's ads are the most and least useful types of media for fashion advertisements.

Advertisements with black models get more attention from black women (83.91%). However, this attraction varies among blacks in various income groups. More than 90 percent of the less than \$5,000 income group agreed that they pay more attention to advertisement with black models. For the over \$20,000 income group, less than 55 percent agreed with this statement.

SUMMARY AND CONCLUSIONS

Black women in this study are extremely interested in fashions. The lack of income does not prevent them from being fashion conscious. Regardless of income, black women use similar methods to follow fashions. Since discussion with others is frequently used to follow fashions, it would be beneficial for marketers of fashions to find out who are the opinion leaders of fashions and focus their marketing efforts on this group.

The level of income does affect the choice of stores among black women for fashion items. Specialty stores are preferred by those in the higher income group and discount stores are frequently shopped by those in the lower income group. Nevertheless, department stores

TABLE 2
METHODS USED TO FOLLOW FASHIONS AND INCOME

	Less than \$5,000	\$5,000 to \$9,999	\$10,000 to \$14,999	\$15,000 to \$19,999	Over \$20,000	Total	Degree of Freedom	Chi-Square
To find out the latest fashion I usually:								
1. look at newspaper ads or articles about fashion								
Agree	71.79%	80.30%	81.03	73.91%	72.72%	77.66	4	1.760
Disagree	28.21	19.70	18.97	26.09	27.27	22.34		
2. go to stores selling fashion items								
Agree	100.00	92.54	91.23	90.48	81.82	92.82	4	5.413
Disagree	0.00	7.46	8.77	9.52	18.18	7.18		
3. read fashion magazines such as Vogue and Essence								
Agree	94.74	83.33	85.45	86.96	81.82	86.53	4	3.042
Disagree	5.26	16.67	14.55	13.04	18.18	13.47		
4. go to fashion shows								
Agree	50.00	53.03	58.93	63.64	54.55	55.441	4	1.488
Disagree	50.00	46.97	41.07	36.36	45.45	44.56		
5. watch television								
Agree	76.92	79.10	78.57	59.09	63.64	75.38	4	4.822
Disagree	23.08	20.90	21.43	40.91	36.36	24.62		
6. listen to radio								
Agree	36.84	50.00	52.63	43.48	36.36	46.03	4	3.134
Disagree	63.16	50.00	47.37	56.52	63.64	53.37		
7. discuss fashions with other women								
Agree	79.49	89.39	94.74	90.91	100.00	89.69	4	7.152
Disagree	20.51	10.61	5.26	9.09	10.00	10.31		
8. observe what other women wear								
Agree	86.84	95.31	92.86	80.95	100.00	91.58	4	6.468
Disagree	13.16	4.69	7.14	19.05	0.00	8.42		

TABLE 3
FASHION SHOPPING BEHAVIOR AND INCOME

	Less than \$5,000	\$5,000 to \$9,999	\$10,000 to \$14,999	\$15,000 to \$19,999	Over \$20,000	Total	Degree of Freedom	Chi-Square
To shop for fashions, I usually go to:								
1. Department stores								
Agree	86.84%	94.03%	91.23%	86.96%	90.91%	90.82%	4	1.972
Disagree	13.16	5.97	8.77	13.04	9.09	9.18		
2. Discount stores								
Agree	71.05	67.16	61.40	43.48	27.27	61.22	4	10.934 ^a
Disagree	28.95	32.84	38.60	56.52	72.73	38.78		
3. Speciality stores								
Agree	52.63	59.70	64.29	73.91	100.00	63.59	4	9.777 ^a
Disagree	47.37	40.30	35.71	26.09	0.00	36.41		
4. Mail Order Houses								
Agree	45.45	58.06	59.62	25.00	40.00	51.38	4	9.048 ^b
Disagree	54.05	41.94	40.38	75.00	60.00	48.62		
To shop for fashions, I usually go to:								
1. Stores in Orangeburg								
Agree	76.92	86.57	84.48	82.61	70.00	82.76	4	2.872
Disagree	23.08	13.43	15.52	17.39	30.00	17.26		
2. Large cities such as Columbia and Augusta								
Agree	76.92	80.60	92.98	95.45	90.91	85.71	4	8.300 ^b
Disagree	23.08	19.40	7.02	4.55	9.09	14.29		
3. Order from catalogs								
Agree	46.15	56.92	46.43	40.91	36.36	48.70	4	3.181
Disagree	53.85	43.08	53.57	59.09	63.64	51.30		

^a significant at the .05 level

^b significant at the .10 level

TABLE 4

MEDIA BEHAVIOR AND INCOME

	Less than \$5,000	\$5,000 to \$9,999	\$10,000 to \$14,999	\$15,000 to \$19,999	Over \$20,000	Total	Degree of Freedom	Chi-Square
I usually find out the introduction of the latest fashion from:								
1. Newspaper's articles								
Agree	56.41%	68.18%	79.31%	65.00%	72.73%	69.07%	4	6.021
Disagree	43.59	31.82	20.69	35.00	27.27	30.93		
2. Magazine's articles								
Agree	100.00	94.03	96.55	95.24	100.00	96.43	4	3.060
Disagree	0.00	5.97	3.45	4.76	0.00	3.57		
3. Television programs								
Agree	82.05	85.07	77.59	77.27	54.55	79.70	4	5.870
Disagree	17.95	14.93	22.41	22.73	45.45	20.30		
4. Radio Programs								
Agree	23.68	42.42	43.10	21.74	18.18	35.20	4	8.531 ^b
Disagree	76.32	57.58	56.90	78.26	81.82	64.80		
The most useful advertisements about fashion can be found in:								
1. Magazines								
Agree	97.44	97.01	100.00	95.65	100.00	97.98	4	2.425
Disagree	2.56	2.99	0.00	4.35	0.00	2.02		
2. Newspapers								
Agree	64.10	70.15	77.19	69.57	72.73	71.07	4	2.027
Disagree	35.90	29.85	22.81	30.43	27.27	28.93		
3. Television								
Agree	79.49	80.60	83.64	82.61	63.64	80.51	4	2.430
Disagree	20.51	19.40	16.36	17.39	36.36	19.49		
4. Radio								
Agree	30.77	38.81	43.86	17.39	18.18	35.03	4	7.200
Disagree	69.23	61.19	56.14	82.61	81.82	64.94		
I usually pay more attention to the fashion advertisements modeled by black models								
Agree	92.11	78.79	83.93	95.65	54.55	83.91	4	12.275 ^a
Disagree	7.89	21.21	16.07	4.35	45.45	16.49		

^a significant at the .05 level

^b significant at the .10 level

are the favorite choice. In addition, blacks in the higher income group indicated they are more willing to travel to large cities to shop for fashion items. This finding suggests that it would be worthwhile for retailers of fashions in large cities to promote their merchandise to consumers in surrounding small cities.

Black women rely on various type of media to find out the latest introduction of fashions. Magazines are reported to be the best source for this information. Moreover, advertisements with black models get more attention from black women, especially those in the low income group. Thus, in order to reach the black women and build up product awareness among them, the use of minority models in various kinds of print and broadcast media would be more effective than the use of just one particular medium.

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AN EXPLORATORY STUDY OF PRODUCTS USED FOR ENJOYMENT AND ENHANCEMENT
PURPOSES: II. BRAND IMPORTANCE, INTER AND INTRACLAS CORRELATIONS

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Background

The relevance of maintenance and of enhancement functions as parameters relevant to persistence, loyalty or change in brand purchasing has been demonstrated by Woods and Osborne (1979) and further expanded by Woods (1980).

These writers have suggested, and have presented supporting data, which indicates that where products are purchased for maintenance objectives, consumer persist in the purchase of certain brands, not because of "commitment" (Jacoby and Kyner, 1973) but rather, due to routine or "automated" behavior (Wasson, 1979). In contrast, where the behavior objectives are enhancing consumers change around more, (are less "loyal") due to the failure of any particular brand to satisfy the enhancement objective; their behavior is attentive, (Posner, et.al., 1978) and they search for better solutions.

Reflections on the nature of these types of behavior reveals that while they may be definitive classes, they do not encompass other major types of behaviors which may also relate to brand and product choices.

One such kind of behavior is enjoyment behavior. Just as orange juice is purchased for maintenance and shampoos for enhancement purposes, phonograph records are purchased for enjoyment. What is the brand choice behavior for products of this class?

Csikszentmihalyi (1975) has proposed an enjoyment behavior theory for which the motivating force is autotelic experience or intrinsic motivation. Woods (1980) has argued that the motivation is boredom, a state of discomfort and that the resolution of boredom is found in behavior change, or in variety of product choice. Desire for change, the "need" for variety has posed a problem in consumer behavior theory. One of the proposed solutions is that people have a genetic behavior "variety drive" (Hughes, et.al., 1980). Here, search for variety is conceptualized as a response, i.e., an activity, not a motive, in response to a motive called boredom. Accordingly, where products are used for enjoyment purposes it would follow that brand and/or pro-change, rather than repeat use or loyalty would be the rule; loyalty would be exceptional.

In a separate paper from the same study from which the data reported here was derived, Holland has tested the hypothesis implied in this assumption and has reported that the seeking of variety does dominate purchasing of "enjoyment" products. It appears, however, that in enjoyment behavior variety may be obtained within brands (e.g., a variety of artists who produce recordings for a particular label or "brand").

This paper addresses itself to the study of the "importance" of brand in the choice of enjoyment class products, and compares "importance" in enjoyment to importance in enhancement type products. Also, this study investigated the relationship (intercorrelations) of loyalty for a variety of enjoyment types and a variety of enhancement class products.

This study is preliminary and exploratory. The purpose of the study was to test some initial hunches and to provide bases for the formation of hypotheses for further research.

Method

A number of products were identified, either on the basis of logic or from previously reported studies, as products typically used for enjoyment or for enhancement behavior purposes. These products were:

Enjoyment Type

Enhancement Type

Music recordings	Aspirin
Carbonated beverages	Toothpaste
Theatrical events	Shampoo
Sports equipment	Soap (bath and beauty)
Restaurants for "dinner out"	Colognes

Theatrical events, listening to music, and eating out have been identified in a study, yet unpublished, as leading "enjoyment" activities. Shampoo, soap, and colognes were identified as enhancement products in the study by Woods and Osborne. There were described by Woods (1980) as social enhancement products. In the same discussion, aspirin was hypothesized to be a "physical enhancement" product. The other products were selected as logically representing the product classes in which they appear in the above list.

Each of the products' names were printed on separate cards and exposed to consumers who were asked to respond to questions and scales regarding each product. Data used in this study are based on responses to a 7 point "importance" scale which appeared as the last item in the interview. The question asked was:

"How important is it that you get a certain brand (label, etc.) when you are purchasing (choosing) (name of product class)? Here is a scale to use for your answer." Respondent is shown 7 point scale.

Scale value 7 was identified as "very important"; value 1 was identified as "very unimportant." Values between 7 and 1 appeared as numerical values with no characterizing verbal labels.

The choice of the sample was based on the need to have respondents who were users of all of the products represented in both product classes. College students best fit this requirement. Most college students--both male and female--are users of all products, whereas some housewives, for example, might be users of some but not others. Use of all products was a necessity since correlation analysis was involved. In order to provide a comparison sample, subsamples of young employed adults at approximately the same age level were also obtained. Responses from the young employed sample were obtained only for the enhancement products due to resource limitations.

The samples are essentially convenience samples. They were obtained from students at one college, during the summer session. Sample sizes were as follows:

Male Students	60	Male Employed	33
Female Students	60	Female Employed	31

Since all students responded to the enjoyment class products, but not to the enhancement class products, sample sizes are; male students 35, female students 31 for enhancement products.

Findings

The mean scores for the enhancement products, for each subsample, are provided in Table 1. Responses to aspirin are of particular interest. Brand of aspirin is less important to college students than is any of the other enhancement products. Both employed groups rank it higher significantly more often than do the corresponding student samples. Women, whether students or employed, significantly more often rank aspirin brand more important than men do. Employed women rank aspirin brand significantly higher than any other groups.

performance reasons. At issue is the question of whether brand is as important where variety is sought as it is where better product performance is sought. The findings indicate that importance is more a matter of individual products than class. Further, importance appears to differ by market segment. Grooming aids-shampoo, soap-are more important to women, but others-toothpaste and colognes-are just as important to men.

Among enjoyment class products, theatrical events and brands of sports equipment are more often important to men but restaurants are more important to women.

TABLE 1

MEAN SCORES OF SIX SUBSAMPLE GROUPS AND OF THE TOTAL SAMPLE ON A SEVEN POINT IMPORTANCE SCALE FOR 5 ENHANCEMENT CLASS PRODUCTS

	Female Students N=32	Male Students N=35	Total Students N=67	Female Employed 31	Male Employed 33	Total Employed 64	Total Female 63	Total Male 68	Grand Total 131
Aspirin	4.00	3.77	3.88	5.16 ^(1,2)	4.48 ⁽²⁾	4.81 ⁽²⁾	4.57 ⁽¹⁾	4.11	4.34
Toothpaste	5.31	5.31	5.31	5.64	5.33	5.48	5.47	5.32	5.39
Shampoo	5.31 ⁽¹⁾	4.74	5.01	5.32 ⁽¹⁾	4.85	5.08	5.31 ⁽¹⁾	4.79	5.05
Soap	4.62	4.40	4.50	4.77 ⁽¹⁾	4.03	4.39	4.70 ⁽¹⁾	4.22	4.45
Cologne	4.96	5.00	4.98	5.31	5.15	5.26	5.17	5.07	5.12

(1) Women's scores significantly higher than corresponding men's scores, p=.10

(2) Employed group scores significantly higher than corresponding college group, p=.10

Toothpaste brand rankings are also noteworthy for the responses they command. Toothpaste means are higher than for any other product except in the female student group; in that group the toothpaste mean shares top rank with shampoo mean. There are no significant differences between mean ratings for any of the subsamples.

Females rate two of the other grooming aids-shampoo and soap-higher than men do. But men appear to be about as involved with cologne brands as women.

Mean scores on the enjoyment products, available only for the student sample, are shown in Table 2. Comparison of these scores to the student scores in Columns 1, 2, and 3 of Table 1 reveals brand importance is about as high for enjoyment as for enhancement products.

TABLE 2

MEAN SCORES: COLLEGE FEMALE AND MALE STUDENTS ON SEVEN POINT "IMPORTANCE" SCALE FOR 5 ENJOYMENT CLASS PRODUCTS

	F(N=60)	M(N=60)	Total (N=120)
Phonograph records	4.45	4.80	4.62
Carbonated beverages	4.28	4.13	4.21
Theatrical events	4.25	4.70 ⁽¹⁾	4.48
Sports equipment	4.52	5.05 ⁽¹⁾	4.78
Restaurants for dinner	5.25 ⁽²⁾	4.71	4.98

(1) Males more often score significantly higher than females, P=10

(2) Females more often score significantly higher than males, P=10

Holland found that enjoyment products are significantly more often bought for variety reasons whereas enhancement ones are significantly more often purchased for

A second question asked of the study was whether correlations might be found in the responses of consumers to different products; do consumers who, for example, attach high importance to one product also attach high importance to other products as well.

TABLE 3

CORRELATION MATRIX OF IMPORTANCE SCORES: 5 ENHANCEMENT CLASS PRODUCTS, IN 4 SUBSAMPLES, AND IN THE TOTAL SAMPLE. A-TOTAL MALES, B-TOTAL FEMALES, C-TOTAL STUDENTS D-TOTAL YOUNG EMPLOYED, E-GRAND TOTAL

	A; n = 68 (Males)			
	Aspirin	Toothpaste	Shampoo	Soap
Toothpaste	.106			
Shampoo	.084	.491*		
Soap	.185	.406*	.488*	
Cologne	.164	.044	.144	.100
	B; n = 63 (Females)			
Toothpaste	.313*			
Shampoo	.378*	.112		
Soap	.318*	.326	.296*	
Cologne	.085	.018	.410*	.315*
	C; n = 67 (Students)			
Toothpaste	.369*			
Shampoo	.316*	.309*		
Soap	.226*	.495*	.515*	
Cologne	.320*	.006	.305*	.345*
	D; n = 64 (Young Employed)			
Toothpaste	.019			
Shampoo	.105	.379*		
Soap	.321	.211*	.296*	
Cologne	-.158	.065	.136	-.011
	E; n = 131 (Total Sample)			
Toothpaste	.204*			
Shampoo	.223*	.336*		
Soap	.254*	.375*	.426*	
Cologne	.129	.033	.243*	.198*

*p = .10

Intercorrelations between the 5 enhancement type products are provided in Table 3. This table shows intercorrelations in the major subsamples as well as in the total sample. The correlations shown here indicate that brand importance is relative. The importance of aspirin correlates insignificantly with grooming aids among men, but somewhat among women. Cologne, which ranks second highest in importance in the overall sample and in the men's sample (Table 1) does not relate significantly to any other variable among men, but has a significant relationship to shampoo and soap in the women's sample.

Comparisons of the 4 basic samples (Table 4) show eight significant (P=.10) relationships in the college women's sample and only 1 in the employed women's sample.

TABLE 4

CORRELATION MATRIX OF IMPORTANCE SCORES: 5 ENHANCEMENT CLASS PRODUCTS IN 4 SUBSAMPLES. A-FEMALE STUDENT, B-FEMALE EMPLOYED, C-MALE STUDENT, D-MALE EMPLOYED

		N = 32			
A	Aspirin	Toothpaste	Shampoo	Soap	Cologne
Toothpaste	.503*				
Shampoo	.536*	.394*			
Soap	.315*	.448*	.385*		
Cologne	.251	-.051	.488*	.529*	
B					
Toothpaste	.050				
Shampoo	.227	.225			
Soap	.326*	.139	.160		
Cologne	-.219	.099	.279	-.056	
C					
Toothpaste	.271				
Shampoo	.164	.501*			
Soap	.156	.532*	.597*		
Cologne	.385*	.059	.175	.191	
D					
Toothpaste	-.019				
Shampoo	.105	.379*			
Soap	.321*	.210*	.296*		
Cologne	-.158	.064	.136	.114	

*p = .10

Correlations between enjoyment products' scores are available only in the college samples. The coefficients are provided in Table 5.

TABLE 5

CORRELATION MATRIX OF IMPORTANCE MEAN SCORES: 5 ENJOYMENT CLASS PRODUCTS IN 2 SUBSAMPLES AND IN TOTAL SAMPLE. A-FEMALE STUDENTS, B-MALE STUDENTS, C-TOTAL SAMPLE

	M. Records	C. Beverages	Theatre	Restaurants
A. N=31 (Female Students)				
Beverages	-.160			
Theatre	.219	.204		
Sports Equip.	.089	.027	.074	
Restaurants	.091	.145	.153	.108
B. N=36 (Male Students)				
Beverages	.066			
Theatre	.388*	-.057		
Sports Equip.	.116	-.052	.245*	
	-.096	.013	.060	.012
C. N=66 (Total Sample)				
Beverages	.061			
Theatre	.384*	.073		
Sports Equip.	.029	-.018		
Restaurants	.024	.078	.075	.026

*Significant at P = .10

Correlations between importance ratings are almost absent in these samples. Theatre tickets' ratings correlate low, but significantly (P=.10) with musical recordings. Musical record brand, however, is probably a mislabel. Students really don't think in terms of recording studio, but rather in terms of artists. They actually are rating "artists" or "stars" rather than "labels," so the intercorrelation is not really a function of brand importance, but of artist importance.

Intercorrelations among the 5 enhancement and 5 enjoyment products are available only in the student samples. These intercorrelations are provided in Table 6. These are the data which should indicate whether the classification of products in terms of behavioral purposes which they are purported to serve has any validity. By and large, an absence of relationship is shown. A very decided tendency toward negative values is found in the men's sample, but these negative correlations, with one exception, (toothpaste with sports equipment), are insignificant. Some of the correlations seen are contrary to the general findings. Rating on restaurant "brands" correlate significantly with those for aspirin, for shampoo, and for cologne. But 2 of these-aspirin and cologne-have previously been shown to be "mavericks" in the enhancement correlations.

TABLE 6

CORRELATIONS OF IMPORTANCE SCORES: 5 ENHANCEMENT & 5 ENJOYMENT TYPE PRODUCTS IN 2 SUBSAMPLES & IN TOTAL SAMPLE. A-FEMALE STUDENTS, B-MALE STUDENTS, C-TOTAL SAMPLE

	Records	Beverages	Theatre	Sports	Restaurants
A. N=31 (Female Students)					
Aspirin	.141	.059	.025	.092	.286
Toothpaste	.024	.006	-.191	.022	-.136
Shampoo	.002	.030	.111	.164	.283
Soap	.162	.176	.093	.364*	.049
Cologne	.268	.255	.037	.397*	.434*
B. N=35 (Male Students)					
Aspirin	.178	.021	.194	.058	.177
Toothpaste	-.162	.116	-.179	-.407*	-.286
Shampoo	-.037	.195	.013	-.037	.177
Soap	-.258	.150	-.249	-.037	.118
Cologne	-.175	-.122	.209	.206	.346*
C. N=66 (Total Sample)					
Aspirin	.031	-.018	.107	.069	.224*
Toothpaste	-.074	.055	-.179	-.022	-.213
Shampoo	-.048	.113	-.002	.033	.229*
Soap	-.076	.158	-.118	.126	.057
Cologne	.123	.079	.127	.293*	.379*

Discussion

Studies of purchasing of products which serve enhancement functions (Woods and Osborne, 1979) (Holland, in process) reveal considerable brand switching as consumers seek to satisfy enhancement goals. The hypothetical seeking of product variety in enjoyment behavior (Woods, 1980) is supported by Holland's study. Thus, in both types of behavior considerable brand changing occurs. Changing operates against brand loyalty, in the sense that loyalty means continued, repeated purchasing of the brand. Does this mean that brand is of no importance?

The findings reported here show that brand is only marginally important on a 7-point importance scale. Brands, whether for products for enhancement purposes or for enjoyment purposes, are rarely rated on average higher than 5, and typically between 4 (the midpoint of

the scale) and 5. Only one product class—toothpaste—ranks consistently above 5. This ranking suggests (and is confirmed in Holland's study) that the market includes a highly loyal segment and a segment which switches in pursuit of enhancement objectives.

The results do demonstrate a fairly consistent pattern of intercorrelations between the enhancement products and absence of correlations between the enhancement and the hypothesized enjoyment products. These findings lend support to the theory that behaviors (and products used in their pursuit) can be meaningfully categorized in terms of such major purposes or objectives as enhancement and enjoyment. According to these correlations, the maintenance class products share a degree of importance not shared with the enjoyment ones, yet the enjoyment products have importance in their own right.

The findings give rise to some questions which must be dealt with in any further research and development of the theory.

The "maverick" patterns of scores for aspirins, for colognes and for restaurants raises questions which may relate to the general theory itself, or to the appropriateness of classification of some of these "products." One possible factor contributing to the eccentric aspirin scores may be that aspirin actually performs no enhancing function for college students, but does so for young employed women.

A somewhat different explanation may apply to colognes. Because of the hedonic nature of colognes, these products may be used as much for enjoyment purposes (they smell good) as well as for enhancement purposes (makes me smell nice to others). This split character may have something to do with the correlation of colognes with some products in each class.

Conclusions

These exploratory findings provide some general support to the proposition that products can be classified, in terms of behavioral purposes they serve, on a somewhat wider basis than originally proposed by Woods and Osborne. The findings support the hypothesis that enjoyment behavior is an additional class which should be considered further in pursuing the theory and model. The findings also indicate a need for refinement in product classification.

The findings suggest that a particular class of products may serve one purpose for a one market segment, and a different purpose for another segment. Hence, one direction indicates for further research in the investigation of whether some products and product classes have "multiple personalities."

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MARKETING AN ART EVENT:
THE CASE OF INDIANA RENAISSANCE FAIR

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Abstract

This study was designed to partially fill the void of marketing application to nonprofit art organizations and events. Through the use of the Indiana Renaissance Fair as a case in point, several avenues of exploration are undertaken. These avenues include both general and specific perceptions of the Fair and the inculcation of information regarding entertainment events. Specific recommendations are given.

Introduction

In the traditional sense, marketing has been viewed as an activity which is restricted to profit oriented business concerns. This traditional perspective, however, has been challenged by two contemporary marketing scholars, Kotler and Levy. Since the 1969 publication of their article, "Broadening the Concept of Marketing," considerable interest has been devoted to the analysis of the role of marketing in nonprofit organizations (Kotler and Levy, 1969). This is evidenced by the appearance of the first textbook on the topic (Kotler, 1975) and by the publication of numerous articles in academic journals and other publications.

For instance, the July 1971 issue of Journal of Marketing published three articles demonstrating the application and potential benefits of marketing to nonprofit organizations. In one of these articles, Kotler and Zaltman (1971) contend that marketing techniques and concepts can be utilized to influence public acceptance of social ideas and that marketing "reasoning is required by those who market altruistic causes (e.g., charity giving, blood donation), personal health causes (e.g., nonsmoking, better nutrition), and social betterment causes (e.g., civil rights, improved housing, better environment)."

In "Health Service Marketing: A Suggested Model," Zaltman and Vertinsky (1971) again take marketing out of its traditional boundaries and present a model which can be effectively used by marketers of health services.

The application of marketing tools and marketing techniques to fund raising is discussed by Mindak and Bybee (1971) in "Marketing's Application to Fund Raising." That article describes a specific case study where marketing techniques were applied to a March of Dimes fund raising drive held in Texas. The authors claim that benefits achieved from the application of marketing tools have outweighed their costs and that the contributions increased for the first time in twelve years.

Urging the administrators of nonprofit organizations to use marketing techniques more often, Shapiro (1973) concludes that marketing analysis and planning can substantially improve the operations of such an organization. In the article, the author identifies the major tasks of nonprofit organizations as being resource attraction, resource allocation, and persuasion. He then describes how the four Ps of marketing (place, promotion, price, and product) can be put into use in performing these key tasks.

Since then, many articles illustrating the application of marketing techniques by nonprofit organizations have been published. Representative ones include articles describing the application of marketing know-how to colleges (Stuhr, 1974), family planning organizations (Simon, 1974), and charities (Riecken and Yavas, 1979; Yavas, Riecken, and Parameswaran, 1980).

Despite this growing literature concerning the application of marketing in the nonprofit sector, there is a paucity of information and published research dealing with marketing of nonprofit art organizations and events. As Raymond and Greyser state "in no area of arts management has the absence of professionalism been more evident than in marketing (Raymond and Greyser, 1978). This study is intended to fill the void partially. Here an attempt is made to extend the application of marketing expertise to the area of nonprofit art organizations by using Indiana Renaissance Fair as a case in point.

Background and Purpose of the Study

The County Council for the Arts sponsored the first Renaissance Fair in 1978 with a matching grant from the Indiana Committee for the Humanities. Along a river bank near the center of a Midwestern community (population 85,000) the atmosphere of a fair from the Renaissance period was re-created in a setting which represented Florence, Italy. The purposes of the fair were to provide wholesome entertainment, to inspire pride in the city, and to broadly educate the local residents about history while stimulating an interest in arts and cultural events.

Despite these commendable objectives, the fair since its start in 1978 has been plagued with financial problems. This was attributed to poor attendance. Although public attendance is but one source of revenue for the fair, it has direct effect on the fair committee's ability to raise funds through donations and matching grants.

The conditions faced by the local committee demonstrated the need for the application of marketing expertise to effectively promote the fair. In an attempt to assist the fair committee in targeting its marketing efforts effectively, the author undertook the current study. Specifically the objectives of the study were:

1. To determine the awareness of the fair,
2. To determine the information sources which were effective in inculcating awareness of the fair,
3. To determine the attendance patterns at the fair,
4. To determine the level of satisfaction/dissatisfaction with several fair-related activities among those who have attended the fair,
5. To determine the public's attitudes toward an art fair in the local community,
6. To determine the public's viewpoints in relation to timing, place and admissions fee of an art fair in the local community, and
7. To determine sources that the public uses in obtaining information about entertainment e-

vents.

Sample and Data Collection Procedure

The data for the study were collected through telephone interviews from a sample of 429 adult community residents. To avoid the "unlisted numbers" problem, the plus one random digit dialing technique was used in calling the respondents (Landon and Banks, 1972).

The profile of the survey sample presented in Table 1 indicates that most of the respondents were married and were home owners. It also appeared that respondents on the average were long-time residents of the local community and were fairly well educated. They mostly came from households of 1 to 3 people. Approximately 56 percent of the respondents were younger than 35. Little over one-half of the respondents (52 percent) earned less than \$15,000. Close to one-third of the survey sample held white-collar jobs. While approximately 12 percent were either unemployed or retired, the rest were almost equally divided into student, housewife and blue-collar categories. Finally, 45 percent of the respondents belonged to one or more civic/religious/community organizations.

The demographic characteristics of the survey sample described here are representative of the community population. More importantly, however, the survey procedures with proper modifications can be adapted for use elsewhere.

Age

18 - 24	33.4
25 - 34	22.4
35 - 44	16.6
45 - 54	13.6
55 and over	14.0
Total	100.0

Income Level

Less than \$10,000	32.8
\$10,000 - \$14,999	19.5
\$15,000 - \$19,999	18.3
\$20,000 - \$24,999	14.7
\$25,000 or more	14.7
Total	100.0

Occupation

White collar	32.5
Blue collar	18.2
Unemployed/Retired	11.9
Housewife	18.2
Student	19.2
Total	100.0

Membership in Civic/Religious/Community Organizations

Member	44.6
Nonmember	55.4
Total	100.0

Findings

Awareness and Information Sources

Respondents were asked if they had heard of Indiana Renaissance Fair and approximately 73 percent of them had. These respondents were then asked where they had heard of it. As presented in Table 2, newspapers and friends were the primary sources in inculcating awareness among the respondents. Data further show that magazines and brochures were the least effective sources in informing the respondents about the fair.

TABLE 1
PROFILE OF SURVEY SAMPLE
(N=429)

Length of Residence	%
1 - 5 years	25.9
6 - 15 years	23.7
Over 15 years	50.4
Total	100.0

Home Ownership	%
Rent	36.0
Own	64.0
Total	100.0

Education	%
Less than high school/Technical Trade school	30.8
High school graduate	15.9
Some college	25.4
College graduate	20.3
Graduate degree	7.6
Total	100.0

Marital Status	%
Married	54.5
Single	32.2
Divorced/widowed	13.3
Total	100.0

Number of People in Household	%
1 person	15.0
2 people	26.2
3 people	21.0
4 people	19.4
5 people	11.2
6 or more people	7.2
Total	100.0

TABLE 2
AWARENESS OF IRF AND SOURCES OF INFORMATION

Awareness	%
Aware	73.1
Not Aware	26.9
Total	100.0

Source of Awareness ^{a, b}	%
TV	10.4 (6)
Radio	19.0 (3)
Colleagues at work	5.5 (8)
Friends	25.6 (2)
Billboard	11.7 (5)
Newspaper	49.7 (1)
Magazine	0.3 (10)
Relatives	8.1 (7)
Saw it in the area	16.2 (4)
Brochures	4.5 (9)

^a Due to multiple answers, percentages do not add up to 100 percent.

^b Numbers in parentheses indicate rankings based on percentage of mentions.

Attendance Patterns

Table 3 summarizes the attendance patterns of community residents at the fair. As can be seen from the table, approximately one-fourth of those who were aware of the

fair had attended it in 1980. More importantly, a substantial proportion of the respondents (almost 87 percent) indicated that they would definitely (or probably) attend it next year. Data also suggest that respondents view attendance at the fair as a group function as almost 88 percent were with others when they went to the fair. Evidence also indicates that respondents were mostly accompanied by local people during their attendance at the fair.

TABLE 3
ATTENDANCE AT IRF

<u>Attendance in 1980</u>	<u>%</u>
Attended	24.6
Did not attend	75.4
Total	100.0
<u>Plans to Attend the Fair Next Year</u>	
Definitely will attend	37.0
Probably will attend	49.4
Not sure	7.4
Probably will not attend	3.7
Definitely will not attend	2.5
Total	100.0
<u>Attendance Alone or With Others</u>	
Alone	12.5
With Others	87.5
Total	100.0
<u>Attendance With Out-of-Town Guests</u>	
Yes	16.5
No	83.5
Total	100.0

Satisfaction/Dissatisfaction with IRF Events

Respondents who attended the fair were asked to indicate if they were aware of several activities that took place at the fair and if so whether they were satisfied with them. An interesting response pattern that emerged was that in some instances a large proportion of the respondents had no opinion regarding an event. It can be assumed that they were not either present when the event took place or the event made no lasting impression on them. Such activities included Tillinghast Early Music Concert, human chess game, kite flying contest, Highland dancers, Uncle John's band, Mime over Matter, and Beledi Dancers.

Otherwise respondents appeared to be aware of and satisfied with the events surrounding the fair as reflected in their answers concerning historical dialogues, costume contest, story telling and crafts/exhibits. In effect, when the analysis was repeated by leaving out the no opinion category, it was seen that well over 80 percent of the respondents who were familiar with a particular event were satisfied with it.

Attitudes Toward An Art Fair

As the results presented in Table 4 suggest, respondents generally had favorable dispositions toward an art fair in the community. They thought the city needed an art fair and that it would enhance the image of the city. They also felt that an art fair would not only help build a cultural awareness among the local residents but would also contribute to the local merchants and artists.

TABLE 4
ATTITUDES TOWARD AN ART FAIR IN LOCAL COMMUNITY

<u>Statement</u>	<u>%</u>			
	<u>Agree</u>	<u>Disagree</u>	<u>Not Sure</u>	<u>Total</u>
An art fair would enhance the image of the local community.	80.4	3.3	16.4	100.0
An art fair would contribute to the local merchants in the local community.	69.5	8.2	22.4	100.0
Local artists in local community would benefit from an art fair.	90.9	2.3	6.8	100.0
An art fair can help build cultural awareness in the local community.	87.6	1.6	10.7	100.0
I feel local community does not need an art fair.	4.9	82.1	13.1	100.0

Viewpoints of the Timing, Location and Admission Price

It appeared that 38 percent of the respondents preferred April/May as the more suitable time to hold a fair in the community (see Table 5). Thirty percent of the respondents expressed that June, the time when the fair is currently being held, was more appropriate. The remainder preferred July (11 percent), August (9 percent), or September (12 percent).

Respondents also seem to believe that the current location of the Renaissance Fair is a good place to hold an art fair in the community. In relation to a fair admission price to enter the fair, 11 percent of the survey sample felt that there should be no charge. Twenty-two percent thought 1\$, and 43 percent thought \$2 would be fair amounts to charge. Only 8 percent favored a price of \$4 or more.

TABLE 5
VIEWPOINTS ON THE TIMING, LOCATION AND ADMISSION PRICE OF AN ART FAIR

<u>Timing</u>	<u>%</u>
April/May	37.9
June	29.9
July	10.9
August	9.4
September	11.9
Total	100.0
<u>Location</u>	
Current location	70.6
Elsewhere	29.4
Total	100.0
<u>Admission Price</u>	
Free	11.3
\$1.00	21.7
\$2.00	42.6
\$3.00	16.5
\$4.00 or more	7.9
Total	100.0

Sources of Information About Entertainment Events

Finally, respondents were asked to indicate where they generally obtained information about entertainment

events in the community. The sources, as seen in Table 6, which seem to be more salient to the respondents are newspapers, friends and radio. Magazines emerged as the least effective source.

The Spearman Rank-Correlation analysis was performed to determine if the rankings of information sources utilized by the respondents to learn about entertainment events in general were similar to the rankings of information sources that were responsible for inculcating the awareness of IRF (Siegel, 1956). The correlation coefficient was found to be .79 ($t = 3.62$; $df = 8$; $p < .01$) leading to the conclusion that the two rankings are similar.

TABLE 6
SOURCES OF INFORMATION
ABOUT ENTERTAINMENT EVENTS

Source ^{a, b}	%
TV	13.6 (4)
Radio	33.3 (3)
Colleagues at work	10.9 (5)
Friends	35.2 (2)
Billboards	7.7 (8)
Newspaper	80.8 (1)
Magazines	4.3 (10)
Relatives	5.5 (9)
Seeing it in the area	9.6 (6)
Brochures	7.5 (7)

^a Due to multiple answers, percentages do not add up to 100 percent.

^b Numbers in parentheses indicate rankings based on percentage of mentions.

Summary and Conclusions

Faced with a challenging task of increasing attendance of art fairs, nonprofit cultural organizations need a marketing approach to develop the appropriate programs and strategies. The specific findings reported here conjure up some implications that may be potentially useful for the IRF committee in increasing attendance at the fair. These include the following:

1. The fair should be held in April or May. Since a large state university is located in the local community, holding the fair during these months when the school is in session would make it possible for the students to attend. In June, the time when the fair is currently being held, most students are out of town.
2. To maintain current attendees, the events which were found to be satisfactory last year should be rescheduled. Such events should be featured in the advertising and publicity for this year's fair.
3. Entrance fee should be set at \$2.
4. Study results fall short of explaining why people who were aware of the fair did not attend it. A possible factor may be that the types of activities scheduled were not of much interest to those people. If this is the case, then it would be helpful to broaden the "activity assortment" by including folk dancing, area high school jazz band and wandering minstrels and/or violinists among others.
5. The activities should be repeated throughout the fair. This would tend to get more people involved, thus increasing interest in the fair.
6. Because friends appear to be an important source of information in learning about entertainment events and the fair and given the fact that

close to 50 percent of the respondents belong to an organization, speakers, or better yet, short skits should be presented at social/civic, etc., clubs prior to the fair. The people who belong to such clubs might then disseminate the information to their friends.

7. Public relations efforts should be targeted at the local newspaper since this medium is also a very important source of information about entertainment events.

In conclusion, it should be restated that the findings and implications reported here are strictly applicable only to the population where the study was conducted. However, the study findings may be of value to other art fair organizations in forming some meaningful hypotheses that can be tested in other locales. It is hoped that studies similar to this one will be undertaken in other areas to broaden the data base for further generalizations. Conclusions of such studies would be useful in designing comprehensive programs for the dissemination of information about the important role of marketing in promoting art fairs at a much wider scope.

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PERCEIVED RISK IN STORE CHOICE
IN THE SECOND ORDER MARKET

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Abstract

This presents the results of a study designed to investigate the impact of risk on store choice of used merchandise. A variety of retail stores dealing in used goods are examined using a perceived risk paradigm. Findings of the study show perceived risk differences between permanent and temporary used merchandise stores as well as profit and nonprofit stores.

Introduction

A plethora of perceived risk research has been conducted, since the publication of Baure's (1960) classic work. Some studies related perceived risk to retailing with in-home phenomena (Cox and Rich, 1967; Spence, et. al., 1970). A few of these studies have dealt with perceived risk in store choice. For example, Hisrich, Dornorf and Kerman (1972) probed the relationship between perceived risk and store choice for high risk/low frequency purchase of goods (carpeting, draperies and furniture). They found that high perceived risk possibly transferred to store choice. Dash, Schiffman and Berenson (1976) investigating store choice between specialty stores and department stores found that shoppers of specialty shops perceived less risk and considered the general product area to be more important than did shoppers of department stores.

Research has traditionally concentrated on purchasers of new merchandise (i.e., first-order retail goods) and choice of stores selling such products. However, the role of perceived risk in outlet selection as it relates to used merchandise has received little attention.

The purpose of this study is to extend the investigation of perceived risk/store choice phenomenon to second-order retail merchants.

Background of the Study

Second-order retailers can be classified based on their orientations (profit versus nonprofit) and permanence of their operations. Exhibit 1 displays the typology and presents an example of each type of outlet.

EXHIBIT 1
TYPOLOGY OF SECOND-ORDER RETAILERS

Orientation	Permanence of Operation	
	Permanent	Temporary
Nonprofit	e.g. Goodwill	e.g. Church Bazaar
Profit	e.g. Used merchandise; retail stores	e.g. Flea markets; garage sales

Profit oriented permanent retailers seeking to penetrate the second-order market must deal with added competitive dimensions which the first-order market retailers do not have to contend with. One of those added dimensions is the involvement of nonprofit permanent retailers of second-order goods. These retailers, such as Goodwill, generally receive their merchandise either from donations of private individuals or damaged goods from first-order retailers. They use either volunteers or hire the handicapped as workers. The "profits" generated from these business ventures by nonprofit, second-order retailers are given to charity, to support philanthropic causes or are used to expand and support the services of the nonprofit organization (McClelland, 1980).

Another competitive dimension taken by used merchandise stores is the non-continuous "dealer" (e.g., the garage sales or flea market dealers) which are characterized by noncontinuity of operation and flexible pricing system. The noncontinuous, second-order retailer is organized on an informal basis with no full-time manager and only part-time help. They are not bound by formal managerial policy or laws effecting traditional employers.

Profit oriented, second-order retailers on the other hand are organized on the pattern of first-order retailers, since they share several common characteristics. They have a permanent store, regular store hours and hired employees. The proliferation of these second-order retail goods suppliers is recorded in local newspapers. Dovell and Healy (1977) showed not only the increase of second-order dealers but also reported record sales levels of some of the second-order retail establishments.

Generally, investigations indicate that the patronage motives and shopping behavior of second-order buyers seem to be very similar to those of the first-order shopper (Dovell and Healy, 1977; Riecken, Yavas and Battle, 1979; Yavas and Riecken, 1980). Extending this investigation into perceived risk of second-order store choice will provide managerial implications for the traditional second-order retailer that will aid such retailers in their exchange processes with consumers.

Methodology

Sample

The data for the study were collected as part of a larger study through self-administered questionnaires from a sample of 178 undergraduate students in a mid-western university. With the thrust of the study being to explore the existence of relationships rather than to generalize to a universal, a student sample was satisfactory.

Table 1 presents a profile of the survey sample. A little over one-half of the students were male and 61 percent were employed. Almost two-thirds of the students did not belong to a fraternity/sorority. Little over half of the students indicated that they had ade-

quate or plenty of spending money left over after paying their school expenses.

TABLE 1
PROFILE OF SURVEY SAMPLE

Variable	Percentage
<u>Sex</u>	
Male	53.3
Female	46.7
Total	100.0
<u>Employment</u>	
Employed	61.4
Not employed	38.6
Total	100.0
<u>Membership in Fraternity/Sorority</u>	
Member	33.5
Nonmember	66.5
Total	100.0
<u>Spending Money</u>	
Adequate/plenty	57.3
Little	42.7
Total	100.0
<u>Marital Status</u>	
Single	88.8
Other	11.2
Total	100.0
<u>Race</u>	
White	93.4
Black	6.6
Total	100.0

Used Merchandise Outlets

A pilot study was undertaken to obtain a representative list of places/outlets that used products were purchased by students. A group of subjects who would not participate in the primary survey were asked to list places that they had considered buying or had actually bought second-hand merchandise during their college years. Grouping individual answers enabled the derivation of the following "outlet" typology: (1) garage sales, (2) second hand stores, (3) Goodwill, (4) private owner known personally, (5) lending institutions, and (6) private owner not known personally.

Measurement of Risk

Perceived risk is generally considered to be a function of the amount of uncertainty and the magnitude of the consequences associated with taking a certain course of action (Bauer, 1960). To operationalize the extent of risk that the students perceived in buying from the six types of used merchandise outlets, students were asked to indicate how certain they were that they would experience a time (convenience) loss and a money loss in shopping at these outlets. A four-point scale ranging from very certain = 4 to almost never certain = 1 was used. Subsequently, they were asked how important (4 = very important, 3 = important, 2 = somewhat important, 1 = not important at all) each type of loss was to them.

Responses to uncertainty and importance statements for each type of outlet were combined multiplicatively to derive a respondent's risk score on each loss type so that a respondent's score was derived by summing scores for time and money losses yielding scores bounded by a 2 to 32 range.

Table 2 shows the reliability coefficients of the total perceived risk indices for each type of outlet. Cronbach's alpha coefficients, ranging from .66 to .74, indicate that the scales are internally consistent (Nunnally, 1967).

TABLE 2
RELIABILITY COEFFICIENTS
(Perceived Risk Index)

	Alpha Coefficients
Garage Sales (T)	.74
Second Hand Store (P)	.71
Goodwill (P)	.69
Private Owner You Know (T)	.74
Repossessed by Lending Institution (P)	.71
Private Owner You Do Not Know (T)	.66

Results

To determine if overall risk differences could be attributed to either the time (convenience) risk or the money risk, a comparison was made in the ranking between convenience and money risk together with overall risk. Results are shown in Table 3. A priori, it was expected that permanent retail establishments should be

TABLE 3
MEAN INDEX SCORES

	Score		Convenience Rank		Money Rank		Overall Rank	
	min.	max.						
Garage Sales (T) (X)	1	16	6.81	3	6.78	5	13.76	5
Second Hand Store (P) (X)	1	16	6.96	2	7.03	4	14.04	2
Goodwill (P) (Y)	1	16	8.13	1	7.40	1	15.65	1
Private Owner You Know (T) (X)	1	16	5.14	6	5.91	6	11.06	6
Lending Institution (P) (X)	1	16	6.75	4	7.05	3	13.80	4
Private Owner You Do Not Know (T) (X)	1	16	6.63	5	7.34	2	13.91	3

T = Temporary
P = Permanent
X = Profit Orientation
Y = Nonprofit Orientation

Rank of 1 = Most Risky

associated with less convenience risk than temporary retail establishments since they are operating on a regularly hourly basis with an existing "permanent" policy concerning pricing as well as with an established managerial team. However, investigation of the data shows that the three permanent stores ranked 1, 2, and 4 in the perceived convenience risk category. Goodwill ranked first with a mean score of 8.13 and the Second Hand store ranked second with a mean index score of 6.96. The lending institution had a score of 6.75 with a rank of 4. The only temporary institution to rank higher than lending institutions were garage sales which had a mean index score of 6.81 and a ranking of 3. Known and unknown private individuals ranked fifth and sixth respectively. None of the mean scores were exceptionally high; however, the mean scores do show differentiation.

The mean index scores for the money risk tended to be greater than convenience risk for each of the stores with the exception of Goodwill and garage sales. The greatest risk of money loss was associated with buying from private owners you do not know.

The ranking of money loss or financial risk, across sources produced changes from the ranks based on convenience risk with two exceptions. They are Goodwill and private owners you know, where the rankings remained the same for both types of risk. Although this may be an anomaly of the sample itself, it should be further investigated. The range of mean index scores for money loss ranged from 7.4 to 5.91. As was true with convenience risk, Goodwill ranked first with a score of 7.4 on financial risk.

However, the dispersion of mean scores on money risk was considerably smaller than the mean scores for convenience risk. They ranged from 7.40 to 5.91 and 8.13 to 5.14 respectively. Likewise the dispersion between first and second ranking in money risk and first and second ranking in convenience risk were greater. In financial risk, Goodwill ranked first with a mean risk of 7.40 and private owner you do not know ranked second with a mean score of 7.34. Whereas, Goodwill ranked first with a mean score of 8.13 on convenience risk and a Second Hand store ranked second with a 6.96 mean score.

Interestingly, the three permanent sources ranked first, second, and fourth on convenience risk. This finding is contrary to the results obtained with convenience risk. Whereas permanent stores ranked first, third, and fourth for money risk. Likewise, private owner you know received the lowest risk scores in both categories.

The overall ranking (i.e., combination of the two scores) shows a trend. The risk index seems to point towards the permanent stores being more risky. That is, Goodwill ranked first, a second hand store second, and the lending institution ranked fourth in overall risk. The temporary institution ranked third (the private owner you know). Lowest risk scores in all indexes examined remain consistent with the private owner you know. Likewise the highest risk, the Goodwill store remained higher for both convenience index and money index as well as the overall index. These were the only two stores which had consistent rankings on both the convenience ranking and the money ranking as well as the overall rankings.

Conclusions

Exploratory research such as this study often provides more questions than answers. Research results have shown in this case that financial risk has a higher im-

portance to ~~most users than~~ convenience risk.

An examination of the most used risk components of perceived risk revealed differences in second-order store choice. A priori, one would believe that permanent stores would have lower convenience risk. However, this was true only for one of the three permanent second-order stores investigated, lending institutions. This may be explained by the fact that repossessed goods are peripheral business for lending institutions. Location decisions for lending institutions are made for their primary operation of lending money, a first-order good.

Managers of second-order permanent stores, such as Goodwill, Salvation Army, or Second Hand stores, cannot ignore the fundamentals of store location, if they desire to reach optimum efficiency. Too often, location is picked by the second-order retailer because of law, cost of occupancy, and accessibility of location for suppliers of second-order goods.

Since people in this sample generally have felt a lower convenience risk for temporary stores, they may be more willing to extend their search time since the goods are offered for a limited time. Information for temporary second-order goods locations is generally found through personal, telephone, or newspaper contact as in the case of private owner you know and private owner you don't know. The newspaper is the information source used by garage sale patrons (Dovel and Healy, 1977). As second-order merchants become more like traditional retailers (i.e., permanent, for profit stores), the information source tends to become more impersonal in nature, moving from a concentration word-of-mouth with a minimization of newspaper for the private owner you know. This trend reverses in its concentration for the permanent second-order retailer.

Likewise, financial risk is an important risk factor in second-order goods selection. The mean risk score on financial risk was lowest for private owner you know, garage sales, second hand stores, lending institutions, private owner you do not know, and Goodwill respectively. This ranking is the reverse of a priori expectations. It seems the financial risk of the money involved is possibly correlated with the degree of personalization the individual has with the retailer. With the exception of Goodwill, most second-order retailers are known to "haggle" over price, thereby possibly reducing financial risk.

The image of a retail store is affected by price as well as other factors. Since financial risk is so important to second-order customers, the second-order merchant should be careful in designing his image.

Specifically, Goodwill may have a high financial risk image because of its nonprofit orientation and its donated goods program. If people acknowledge that Goodwill is not operating for a profit and receive their goods only through donation, price may be psychologically seen as higher than its competitors, particularly since it is operated similar to a traditional store where negotiation of price is not acceptable social behavior. To compete more effectively with competition, Goodwill might be wise to stress its low prices and its guarantees.

Second-order retail merchants who have profit motives and permanent locations operate very similar to traditional retailers. The main difference between the profit oriented second-order retail merchants and traditional retail merchants of first-order goods is pricing policy. Unlike the traditional first-order mer-

chant, the profit oriented, second-order merchant has a more flexible pricing system. Therefore, a continuance of this policy is necessary to maintain a lower money risk ranking.

Permanent second-order retail merchants traditionally have advertised very little. They have depended on word-of-mouth or limited use of classified ads (Dovell and Healy, 1977; McClelland, 1980). It seems necessary to increase awareness of location to lower the risk level in convenience. This also necessitates, because of limited funds for advertising, a targeted market approach rather than a broader approach.

It has been seen in this research that second-order retailers face similar problems which traditional first-order goods retailers face. It seems that second-order goods retailers must more carefully follow the principles of retailing yet differentiate themselves in the area of price and awareness of location.

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Abstract

This paper reviews the applications of OR/MS to the Health Industry. It contrasts the successes at the micro level with the lack of fruitful applications at the macro level, and highlights the need to research the dynamics of implementation.

Introduction

Critical study, analysis, planning and control of health care systems are likely to be central problems of the next decade. The types of problems that need to be addressed may be broadly classified into the following two categories: (1) tactical problems and (2) strategic problems.

1) Tactical problems: Involve application, perhaps with some modifications, of existing Operations Research techniques to well-defined problems in such areas as: outpatient services; inpatient services; design of facilities in a hospital; and organization of emergency services, and the like.

2) Strategic problems: Require basic reexamination and restructuring of the whole system of health services. This may involve investigating the underlying implicit assumptions and basis of the system. For instance, such issues as the quasi-autonomy of the medical profession, and the need to balance the professional right to self-governance against the needs for social control of such an essential service as health may have to be considered in depth. Similarly, cost-benefit analyses at the broad level of social costs and welfare associated with the health of the population as a whole may have to be carried out.

In both tactical and strategic problems, Operations Research or Management Science (or whatever of the various alternative current names it may be called) is bound to play an important role. In fact, the discipline itself has the same two-fold nature. (1) Sometimes it is viewed as a set of specific techniques, as in the Ackoff-Rivett classification, discussed in greater detail below. (2) At other times, it is viewed as more of a system science, as for instance in the definition of O.R. adopted by the O.R. Society of America; "Operations Research is concerned with scientifically deciding how to best design and operate man-machine systems, usually under conditions requiring the allocation of scarce resources".

The aim of this paper is to review in brief the current state of use of OR in regard to both these types of problems, and to put forward some tentative thoughts in regard to the broader systems aspect of the use of OR, for applications in the Health or other sectors.

Micro-analytic Applications

In a recent review of the uses of OR for Health Services, Fetter (1978, p. 427) remarks that "Most of the initial work in the field concentrated on micro-analytic studies, usually within hospitals. Thus, work can be found, for example, dealing with scheduling in outpatient clinics; determination of appropriate inventory control methods for linens, drugs, and other consumables; the development of operating policies for blood banking; analysis of the utilization of inpatient facilities; and studies of the relative effectiveness of alternative methods of delivery of specific services". These may be viewed as essentially Operations Research in the sense of the widely accepted Ackoff-Rivett (1963) classification. In this schema, it is regarded as an empirical fact that a very large number of operational problems fall into one of a limited number of types (1) inventory, (2) allocation, (3) queueing, (4) sequencing, (5) routing, (6) replacement, (7) completion and (8) search.

The examples cited by Fetter include some examples of inventory problems. The most widely used allocation model is of course mathematical programming, and a typical instance of its application in the health sector is discussed by Greenberg (1978, p. 195). This relates to the study by Warner and Prawda (1972) in which a model to minimize cost of shortages of nurses in a hospital was developed. This model used as constraints the availability of nursing personnel of different skills classes and the expected demand for nursing skills by wards, shifts, and skill. Other applications have included use of linear programming for the following purposes: (1) assignment of nurses to patients who require special care; (2) planning of a health care system Shuman et. al. (1971); (3) optimization of distribution of funds among preventive care and curative treatment; (4) choice of technologies for population and family planning -- Correa and Beasley (1971) and (5) minimization of cost of feeding patients subject to constraints on nutritional requirements and menu variety (Cue and Liggett) (1966).

This is in fact an extension of the classic diet problem which was one of the earliest applications of Linear Programming by Stigler. The O.R. model most widely used in Health applications seems to be queueing theory and its extensions. This is not surprising. The theory of waiting lines is based on the problems associated with matching variable demand and variable rates of service so as to balance the costs of excess capacity against the costs of delay for the customers. As such, hospital situations present an obvious direct realization of queueing models. Bailey (1977, p. 153) cites the pioneer research in this field, the 'case-load' studies of the Nuffield Provincial Hospitals Trust (1955), which consisted in relating the actual volume of demand for beds to the effective population at risk. Bailey (1977, p. 162) also discusses the application of queueing theory in the design of hospitals. The fundamental idea is to balance the efficiency of use of beds in wards (defined as the percentage of time that the beds are actually used) with the efficiency of provision (defined as the percentage of time the actual demand is met). Trying to attain very high

efficiency of provision, in the face of probabilistic demand, would necessarily lower the efficiency of use, and conversely. Similarly, queuing theory has been applied in the area of outpatient scheduling systems. Here, the question is again of a trade-off between (a) cutting down on idle time of the doctor by always having a line of patients backed up and waiting, and (b) reduction of patients' waiting time at the cost of generating some idle time for the doctor.

However, as in fact is generally true of all areas where queuing theory has been applied, whenever complex patterns of uncertainty as to arrival and service patterns arise, the technique of simulation has been increasingly resorted to as in the studies by Fetter (1978), Hoffman (1970), and Rockart (1969).

In addition to extensive use of some of the most important OR techniques - inventory models, queuing models, mathematical programming and simulation - there have also been scattered examples of uses of other techniques. For instance, critical path analysis was used for hospital planning (Catliff 1964), and scheduling and sequencing models have also been used. And if models involving probability theory and statistics are considered as essentially OR models, there have been many instances of such applications.

Overall, therefore, it would seem that the use of OR at the micro-analytic level presents a picture of fairly wide applications.

Macro-analytic Applications

However, when one turns to the area of macro-analytic applications, the picture is startlingly different. Fetter (1978, p. 434) points out that "while the need for analytic work at the level of national planning is widely recognized...actual applications of OR are not widespread. The process is viewed as one in which hard data are lacking and where political, administrative and resource constraints inhibit rationality.In the developed settings such as the US and the UK tradition and institutional constraints are such that change in any guise is enormously difficult. In the less developed settings, politics and poverty combine very often to render ineffective the most rational and well-meaning efforts...further, the traditional methodologies, while useful in a limited sense, do not really compass the enormously complex problems of health care planning".

Bailey (1977, p. 173) observes that "Public health journals certainly contain plenty of articles, it is true, extolling applications of systems thinking. But, in most cases, the best that can be said is that a prima facie case has been made for the type of application in question, only with a specially concocted illustration using appropriate health data." He cites the proceedings of the International Institute of Applied Systems Analysis (Bailey, 1975) to show that serious attempts have been made in various countries - among others, Sweden, Czechoslovakia, and the USSR - to adopt a comprehensive systems approach. But he concludes that "While the outlook is promising, it is only fair to say that really significant advances in the application of systems analysis still lie in the future". (Bailey, 1975, p. 175)

So, paradoxically, it is in the area where there is the most important need for better decision-making that there has been the least development of Management science models and applications. It is interesting to consider the underlying reasons for this by looking at an illuminating example of failure in this area. The Rand Corporation was given a contract by the Health Services Administration of New York City, to organize a long-term plan.

The project is discussed by Greenberger et. al. (1976) under the significant title "Health, Hospitals and Hostilities". They summarize the net results thus, "The contract between the Rand Corporation and New York City's Health Services Administration was one of four initial agreements....when the agreement was dissolved, Rand had more than seventy research notes and written reports to show for its four-and-a-half year effort, but its labor had hardly left a trace on the programs and administrative policies of the HSA." (op. cit., p. 287)

It is interesting to consider in summary the reasons for the lack of success:

- (1) The health administrators complained that the research interests of the Rand analysts were so "abstract" or "academic" that their work could seldom be of any practical use to the agency. On the other hand, the Rand analysts complained that members of the agency were impatient, expecting immediate results from research projects which of their very nature would take a few months to complete.
- (2) The agreement was vaguely specified, not indicating clearly what was expected of the Rand team.
- (3) The periodic reorganization of the Health administration, arising from political developments, prevented a continuing working relationship from evolving.
- (4) The type of information collected by the hospitals in the normal course was not the type of data required for technical analyses.

One altogether new source of tension which arose in the project is extremely significant. "In the troubled association between Rand and HSA, a largely unacknowledged problem of policy research became evident - the problem of conducting research for sophisticated clients. The need to blend the disparate perspectives of policymakers and researchers has received so much attention that there has been a tendency to overlook the tensions that arise when the temperamental differences between analysts and decision makers narrow to the vanishing point". (op cit., p. 316) This problem of 'sophisticated clients' mentioned by Greenberger is obviously likely to be the prevalent pattern to an increasing extent. Research into this problem would therefore seem to merit very high priority. Greenberger et. al. highlight this point by contrasting the Health study with a successful study which the Rand organization carried out for the Fire Services Department. They summarize the reasons for the success of the latter study as follows: "The Fire Department, with its quasi-military hierarchy and its twenty-year employees, may not have been a promising source of administrative inventions, but the organization's long-established system of command and obedience helped to assure that an administrative change, once introduced, would actually be put into effect... ..Because Fire Department objectives were more

clearly defined, success in achieving them could also be more easily measured". (op. cit., p. 310)

The important conclusion which can be drawn from the Rand example can be briefly stated, but would seem to be of the highest importance for macro-analytic applications of management science, at a city or regional level as in the Rand study, and a fortiori for operations at national levels: the focus in such applications has to shift to what might broadly speaking be called the political dynamics of implementation. In the words of Greenberger et. al. at the conclusion of their study: "Although the Rand Institute was created to deal with the problems of New York City, it also represented an attempt to deal with the more general problem of introducing timely and usable research results into the process of public decision making.

In effect, it was an experiment - though not a controlled experiment - in policy research. The results suggest a need for more such experiments." (op. cit., p. 317)

Conclusion

In summary, it seems that OR has been successful at a micro-level, but not at a macro-level. One can, (with the usual element of overstatement inherent in all generalizations) say that perhaps the single biggest obstacle to widespread systems-level implementation of Operations Research has been the fact that the problems of the political dynamics of implementation have not been really researched in depth. Certainly they have not received the kind of thorough and detailed technical examination that tactical problems have received. Perhaps the next great advance in management science will have to be in this area. In other words, a second-order level of analysis, what one might call Operations Research of Operations Research, as distinct from Operations Research of problems, may be urgently necessary.

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PUBLIC HEALTH CARE MARKETING IN A DEVELOPING COUNTRY :
THE CASE OF MEXICO.

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Abstract

Marketing is just beginning to be a useful tool for the promotion of social causes in developing nations. This is an empirical study that shows how social marketing can be used effectively to promote effective sanitary practices against diarrhea in Mexico. Personalized letters were used to invite housewives to a health orientation meeting. Those who attended were interviewed before the beginning of the meeting. Their responses were compared to those who received the invitation and did not attend. Significant differences were obtained between the two groups, and the information gathered was used to plan public health campaigns.

Introduction

Social marketing involves the application of marketing skills to promote "social causes" (Kotler and Zaltman, 1971). Managers of non-profit institutions are beginning to realize that marketing can be applied successfully to enhance the efficiency of their institutions. A few scholars in the field still be in disagreement with this new role of marketing (Arndt, 1978). However, the amount of work published up to now suggesting new and innovative applications of the discipline to social motives is an evidence of majority agreement about the expanding role of marketing.

A review article on public and non-profit marketing (Lovelock and Weinberg, 1978), indicated that this area has come of age, with a large number of publications appearing in the 1970's.

One objective of this new research is to show how marketing can play an important role in public health care policy. The First National Workshop in Preventive Health Marketing held in Charlottesville, Virginia, in 1977 (Cooper, Kehoe and Murphy, 1978), was probably the most influential recent event in speeding up the research in this area. According to Cooper and Kehoe (1978), the real interest for health marketing started only four years ago. Before 1977, very few articles had been written on the subject. However, the trends in the literature have been quite different. New books have appeared on health care marketing and it's becoming difficult to keep up the date in this new field.

Purpose of the study

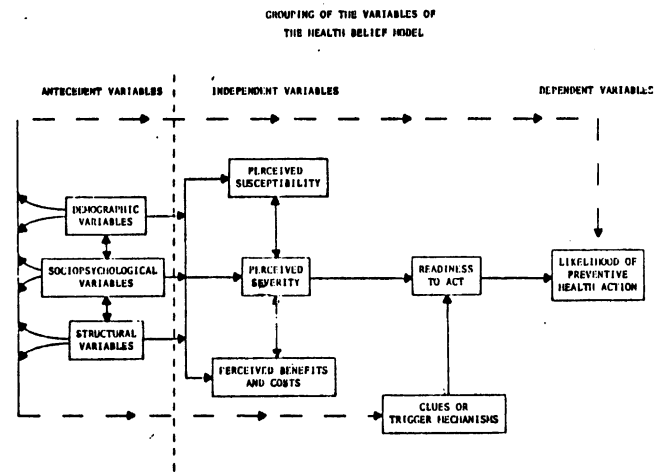
Our present research is focused on preventive health behavior: those activities taken by a person for the purpose of avoiding a disease while still in an asymptomatic state (Kasland Cobb, 1966). However, the study covered also some patterns of early detection of symptoms, immediate response in seeking medical care (illness behavior), and the compliance with medical indications for the purpose of recovery (sick role behavior).

The framework for the investigation was a sociopsychological model: The Health Belief Model (HBM), that has been used to explain preventive behaviors towards different diseases such as influenza, tuberculosis, rheumatic fever, etc. The model is based upon the idea in a series of perceptions towards disease. The HBM was elaborated, among other authors, by Irwing Rosenstock (Leventhal, Hochbaum and Rosenstock, 1960). The major

variables of this model have been borrowed and adapted from general sociopsychological theory.

The HBM assumes that before an individual can take some action to avoid a disease, he needs to believe that he is susceptible to the disease, that the disease has a significant degree of severity for him, and that taking preventive actions would be effective to maintain his health status. Also, the likelihood of action will be a function of the perceived barriers (real or imagined) to entering the health system. The model's factors are best summarized in Figure No. 1.

Figure No. 1



If we analyze this Figure, we notice a term called "readiness to act", which is defined in terms of the individual's perceptions about susceptibility to and seriousness of the illness. These two factors determine whether or not the "state of readiness to act" exists.

The reduction of the threat has two dimensions: barriers and benefits. Barriers or costs are not only economic but include inconvenience, the pain of the treatment, and the distance of travel for care. The likelihood of action increases if the individual perceives more benefits than costs in achieving a health action. The clues or trigger mechanisms set the process in motion and they might be internal (symptoms) or external (the influence of mass media).

Finally, antecedent variables are also modifying factors. Basically, there are three types: demographic, sociopsychological and structural variables. The flow chart shown in Figure No. 1 attempts to interpret the elements interactions, according to the literature. The marketing field reports only one application of such a model, that of Zaltman and Veritinsky (1971), but it was never tested empirically.

The place chosen for the research was a high-density, low-income area of Mexico City. For many years, Mexico has been facing the serious public health problem of enteritis (diarrhea), ranked as the second most important cause of death in the country, and the most important cause among children of five years old and younger

(Kumate, Cañedo and Pedrotta, 1977). The problem is not only important in Mexico, but in the rest of Latin America as well, (See [Figure No. 2](#))

Figure No. 2

THE TEN PRINCIPAL MORBIDITY CAUSES
(Rate: 100,000 x inhabitants)

CAUSES	MEXICO	CENTRAL AMERICA	U.S.	SOUTH AMERICA
INFLUENZA & PNEUMONIA	131	77	34	75
ENTERITIS & DIARRHEA	127	107	2	54
HEART ATTACKS	74	84	342	115
TRAFFIC ACCIDENTS	55	42	57	49
PRENATAL MORTALITY	48	-	-	-
TUMORS	37	57	160	80
NEURO-CENTRAL SYSTEM	24	40	98	45
CIRRHOSIS	21	7	15	12
RESPIRATORY INFECTIONS	18	9	10	17
HOMICIDES	16	13	8	7

Source: Jesus Kumate, Luis Cañedo, and Oscar Pedrotta
La Salud de los Mexicanos y la Medicina en Mexico. Editorial del Colegio Nacional, Mexico, 1977: 194.

Methodology

The sample in our study consisted of mothers who had at home children five years old and younger. Diarrhea is particularly severe in this age group, and mothers play a vital role in keeping the child safe from the disease.

According to health statistics in Mexico, 1.4 out of every 10 deaths are due to diarrheal diseases. However, in the pediatric group, children of five years or less, the death rate increases to almost 2 out to 5 (Nova et al, 1974).

We wanted to separate mothers into two groups according to their interest in health matters. In order to do this, we decided to organize a Seminar on health at one of the Clinics of the Ministry of Health in Mexico City. The Ministry also helped the researcher by providing assistance in the field work: social workers assigned at the clinic were instructed to deliver an invitation to those homes where the mother had at least one child of five years or under. We chose a random sample, but within the area of coverage of the clinic (estimated at 3/4 of a mile around the clinic).

The invitation delivered personally by the social worker consisted in a letter addressed "Dear Mrs.", explaining briefly the importance of diarrhea in little children, and encouraging her to attend the diarrhea prevention seminar. In the case of illiterate mothers, the message was read, and the letter was given as a reminder to another member of the family able to read. The seminar was held two days after delivering all invitations.

In order to have an adequate replication of the quasi-experiment, the same procedure was repeated in three other clinics. The idea was to test the Health Belief Model in different neighborhoods. The initial sample consisted of 600 mothers (150 mothers in each of 4 clinics). The sample size was determined principally by time and personnel constraints. Nevertheless, for to several reasons (e.g., not at home, moved out, neglected response, incomplete questionnaire, etc.) we collected only 471 complete questionnaires.

Attendants at the health seminar were defined as the "health concern group". The rest of the mothers who received the invitation but did not attend, were defined as the "apathetic group". The second group were interviewed at their homes, the day after the seminar was held.

The mothers who attended were received on the day and time specified by the letter, in a small auditorium. A team of researchers interviewed all attending mothers before the initiation of the health talk. The instrument applied was a questionnaire of about 36 questions which covered the main aspects of the HBM, as well as other relevant socioeconomic and demographic information. Included in the questionnaire, were 19 items of an attitude scale developed by the Thurstone Equal Appearing Interval Method, to measure the degree of concern of the mother about health matters (reliability coefficient of .85). Finally, a projective type of instrument consisting of ten pictures, size 5" X 8", in black and white, were used to measure the perception of hazardous diarrhea-contagious situations. Mothers were asked to identify those pictures that showed direct contact with the disease. The idea of the pictures was to avoid the "faking-good syndrome" or the "social desirability response" (Edwards, 1957) about health habits (or personal hygiene). The score was given by the number of "bad" pictures identified in the test. The pictures were previously selected by a group of physicians, who judged each picture in terms of the potential hazard.

A control list of names and addresses were the letters had been delivered was used the day of the meeting to check the identity of the attending mothers. A day after the meeting, each team of social workers received the list back, with questionnaires and pictures, in order to start interviewing the non-attending mothers. In this case, the interviews were performed at the mother's home.

The above procedure was followed in exactly the same fashion at each one of the four clinics. Attendance was, on the average, the same at all clinics (25 mothers out of each 150 invitations delivered). We tested the difference in attendance by clinic neighborhood using a chi-square test. The differences were not significant at the .05 level. Therefore, we decided to group the results of the four clinics in one, in order to have a larger sample size. The total number of attendants interviewed were 102, and home interviews produced 369 usable responses.

Summary of Results

Two group discriminant analysis was employed to discover which independent variables best discriminated between attending and non-attending mothers. The independent variables were metric (or dummy variables) and consisted of the psychological, demographic and socioeconomic information collected in the survey. The dependent variable was categorical (1= attended and 2= did not attend).

For the process of making a profile of differences in health behavior, Group 1 was defined as the attending mothers (102) and Group 2 was constituted by 91 "apathetic mothers". These 91 mothers were part of the non-attendees (360 in total), who did not have a strong reason for not going to the seminar, and who also reported in the interview a high diarrhea frequency on the child (every 15 days or less). The rest of the non-attendees (278), reported almost no incidence or very low appearance of diarrhea and therefore, were not considered for this analysis, on the basis that the Seminar was not particularly useful, for them.

The discriminant model consisted of a linear combination of 36 variables, and it was used to predict attendance at the health talk. Stepwise discriminant process was carried out and nineteen variables were selected, which accounted for 53% of the variance in the dependent set (canonical correlation coefficient squared). The percent age of correct classifications (Hit-Ratio) was 73% and the model proved to be acceptable beyond chance expectations (see [Tables No. 1](#) and [No. 2](#)).

On the other hand, children of the attending mothers also had problems with diarrhea. Their socioeconomic profile was similar to that of the apathetics. However, the main distinction was the positive response to our call. Also the health scale indicated that attending mothers are more health conscious than non-attendees. They were able to identify common situations of diarrhea incidence (pictorial scale). In spite of the near-poverty conditions of these mothers, they behave positively towards health.

Table No. 1
STATISTICAL TEST OF THE DISCRIMINANT FUNCTION DERIVED

DISCRIMINANT FUNCTION	EIGENVALUE	CANONICAL CORR.	% OF TRACE	W.L.	χ^2	D.F.	SIGNIFICANCE
1	1.15	.731	100	.4652	65.4	19	.000

Table No. 2

Classification Matrix for the Health Behavior Response (193 Cases)*

Actual Group	Predicted Group			Classification Accuracy
	Attendant	Non-Attendant	Total	
1. Attendant	71	31	102	69.6%
2. Non-Attendant	21	70	91	76.9%

Hit Ratio: $100[31 + 21 / 193] = 73\%$

The standardized coefficients of the discriminant function are shown in [Table No. 3](#). The table indicates that the variables that best discriminated between attending and non-attending mothers were: the last time the child was sick from diarrhea (internal clue of the HBM), feelings of anxiety about health, family income, occupation of the husband, past experience of the disease, picture No. 7, that showed a girl playing with food on a dusty surface, and the mother's recognition that her child is susceptible to diarrhea.

Using a t-test, we performed the analysis of differences between group means for both, attendants non-attendants. [Table No. 4](#) presents 19 socioeconomic and psychological variables used in the study and the respective probability of true differences.

Profile of Health Behavior Towards Diarrhea.

With the information provided in the study, it was possible to attempt to profile the "apathetic mothers" (those non-attending, with high incidence of diarrhea at home). In general terms, they are unmarried, middle age (30 years), with large family size (6.1 members), who have more than one child under 5 years of age. The income of these families is likely to be just barely above the poverty line. The education of the mother and the occupation of the father are likely to be lower than those of the attending mothers. Apathetic mothers tend to care less for health and participate less often in school activities. The incidence of diarrhea in this group is very high (2 to 4 times a month), although to them it may seem "normal". They are unable to perceive the common causes of diarrhea, since they identify very few of the pictures in which diarrhea is likely to occur. Finally, apathetic mothers are exposed more often to Radio than to T.V.

Another important difference is that attending mothers listen more often to T.V. than to Radio.

Table No. 3
STANDARDIZED DISCRIMINANT FUNCTION COEFFICIENTS

VARIABLE NO.	DESCRIPTION	STANDARDIZED COEFFICIENT
31	"Worrying about health takes us nowhere"	.415
10	Average Family Income	.380
D15	Common disease (diarrhea)	.250
7	Family size	.249
37	Health attitude scale	.244
5	Education	.234
44	Severe diarrhea	.218
34	Liberty to do what you want with your health	.205
4	Age of the mother	.208
D14	Common disease (flu)	-.160
47	Mother's perception of child's health status	-.185
D09	Water pipeline in home	-.193
D13	Type of medical care received	-.197
D17	Media messages received (external)	-.198
D06	Occupation (middle income)	-.306
66	Picture #7-knowledge about disease	-.310
43	Past experience with the disease	-.340
D07	Occupation (high income)	-.374
59	Last time child had diarrhea	-.553

Table No. 4
DIFFERENTIAL CHARACTERISTICS BETWEEN
ATTENDANT AND NON-ATTENDANT MOTHERS

TEST OF GROUP MEANS

VARIABLES	ATTENDANT	NON-ATTENDANT	P
Marital status (married)	.931	.857	.090
Social participation (school)	.186	.099	.090
Private medical care	.137	.241	.060
Most common disease (flu)	.422	.219	.003
Most common disease (diarrhea)	.186	.418	.000
Age	26.794	29.890	.050
Family size	5.147	5.923	.040
No. of children (5 years)	1.598	1.846	.031
Worrying about health takes us nowhere	.362	.648	.000
Health attitude scale	4.000	4.750	.000
Frequency of diarrhea	.167	.308	.021
Last time with diarrhea illness	2.911	1.835	.000
Picture #2	.863	.681	.002
Picture #7	.902	.736	.002
Picture #10	.657	.538	.090
Pictorial scale (average)	.693	.599	.009
Susceptibility to disease	1.990	1.846	.045
Do what you want with your health	.107	.330	.000

Concluding, the HBM was a useful frame for our research. Nevertheless, it is still in a development phase. Our findings indicate that the model would seem to be a close representation of sociological and psychological factors that influence health behavior.

Limitations of the Study

Clearly, the research design was not free from limitations. Our study simplified the question of "apathetic behavior" by using only attendance as a way of classifying mothers. It is logical to believe that one act is not sufficient to account such behavior. Another thing was that it was not possible to check clinically the health status of the children. The incidence of diarrhea reported was based on mother's estimations rather than medical check-ups. However, we consider that our hardest problem to solve was the high illiteracy rate of the sample, which could have had an effect on the reliability of the attitude scale.

Final Comments

Independently of the theoretical contributions, the study served as an example of the use of social marketing to investigate and promote health education. The fact that the research was partially supported by the Ministry of Health in Mexico, makes it a promising research experience for those interested in solving the urgent problems of developing nations, such as health education.

Instead of using the common shotgun approach to deliver health messages, public health authorities are beginning to realize that segmentation of the health market (the "rifle approach") is a more efficient effective way to deliver health messages. The profile of the "apathetic mothers" served as a portrait of this elusive population hard to motivate with simple T.V. health commercials. The Ministry of Health in Mexico would apparently be better off if more of its budget is put into Radio.

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MARKETING MEDICAL RESIDENCIES
IN FAMILY MEDICINE

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Abstract

This paper examines the application of marketing to medicine in an area where marketing concepts have not previously been applied - to recruiting and retaining residents. A case example is provided to illustrate the application.

Introduction

The many specialty areas of medicine in America engaged in graduate education have created an excellent educational system. However, the conditions under which this system developed are changing. With the possibility of a National Health Care system on the horizon and a shorter term perspective on the part of many young people, there has been a decline in interest in medical careers witnessed by a decrease in applicants to medical schools. At the same time the ability of the medical profession to offer graduate education is becoming greater each year. The current situation in some specialty areas is such that there are more residency positions than interested medical school graduates. Thus, the profession's capacity to supply graduate medical education is becoming greater than the demand. Competition between specialties and residency programs within specialty areas is increasing. In order to survive and prosper residency programs will need to develop "marketing" expertise to find, attract, and retain highly capable residents.

The thought that marketing might have relevance for the medical field, almost heretical only a decade ago, is gaining increasing acceptance today. It has been a mutual development, with marketing discovering the non-business sector as an area of interest, and with medicine facing new, multiple, and complex interactions with society demanding a shift in procedure. Gradually, although often grudgingly, the two fields have begun to cooperate. As a result it has become commonplace today to discuss ways for doctors to market themselves, to talk of "doctoring" and the "patient repair business" (Wickware, 1980).

However, in spite or because of the acceptance of marketing in the realm of the medical profession, we are running a new danger today. Marketing has been accepted by the medical profession in the context of facilitating the patient-doctor interaction. With this acceptance, marketing has been assigned its place, categorized, and become a "known" quantity. Here is where the danger lies! We are becoming so satisfied with the value of marketing for the doctor-patient relationship that we begin to see it as being important only for that area. A new attack of marketing myopia is coming about (Levitt, 1960). The broader view and applicability of marketing is being neglected, if not completely overlooked.

A Broader Concept of Marketing

As the material, technological, social, and cultural foundations of our society have experienced change over the years so have the "boundaries" of marketing.

In answer to the question "What is marketing?" a host of definitions have been offered:

It has been described by one person or another as a business activity; as a group of related business activities; as a trade phenomenon; as a frame of mind, as a coordinative, integrative function in policy making; as a sense of business purpose; as an economic process; as a structure of institutions; as the process of exchanging or transferring ownership of products; as a process of concentration, equalization, and dispersion; as a creation of time, place and possession utilities; as a process of demand-and-supply adjustment, and as many other things (Marketing Staff of The Ohio State University, 1965).

Perhaps the best approach to defining marketing is one that has been developed more recently. In searching for a generic concept of marketing, Kotler (1972) viewed marketing as "the set of human activities directed at facilitating and consummating exchanges."

Marketing viewed from this perspective improves in clarity and acceptability to the medical profession for several reasons: this definition specifically locates marketing "in the realm of human activities," distinguishing it from production and consumption. Marketing is seen as "directed at facilitating and consummating exchanges" which "can cover both the pursuit of transactions and exchange relationships." Transactions being a one time exchange while exchange relationships are of a more enduring nature.

Broadening the Application of Marketing in the Medical Profession

Marketing therefore has an overall applicability to every aspect of the medical profession in its interactions with people. Marketing relates to the perspective of the market, any market.

While different organizations may view the goals of marketing very differently, all organizations have the same types of marketing decisions to make. Marketing decisions can be classified into two major categories.

- 1) Marketing segmentation decisions, and
- 2) Marketing mix decisions which in turn are
 - o product decisions
 - o channel (distribution) and place decisions
 - o promotion decisions
 - o pricing decisions

Market Segmentation

The marketing decision process for a residency program, for instance, should begin with the identification or selection of customer (medical student) segments to develop a marketing mix. A "marketing

mix" is a blend of decisions to provide a marketing offer to the selected market segment. The concept of the marketing mix includes recognition that certain blends of product/service attributes, product prices, channels of distribution, and advertising and personal selling choices will produce greater customer satisfaction than other blends. For example, a Family Medicine Residency Program that is university based, located in the midwest, at a large state school, with a very demanding curriculum and rotations, paying a good stipend with liberal fringe benefits and having an outstanding faculty, may produce more satisfaction for residents from high caliber medical schools devoted to teaching and research than other available residency programs.

The first question of successfully marketing one's program is:

Who are our residency program's present and potential customers?

Defining a program's customers (residents) usually leads to rejecting several tentative marketing mixes and suggesting the comparison and possible use of a few candidate mixes.

Other questions then are:

How large is the organization's share of the market?

How many potential residents are part of the program's market segment?

Are there other market segments that would be better for the program to serve with marketing mixes different from the mix presently used?

What are the demographic characteristics of our residents?

Where and how do they learn about our program?

Who and what influence their choice decisions?

All these are market segmentation questions.

Marketing Mix

The marketing mix consists of the controllable variables which the residency program combines in order to attract and satisfy residents. Marketing mix differentiation is the process of attempting to differentiate a program's offering from the offerings of other programs competing for the same target market (pool of residents). The marketing mix is generally considered to consist of the variables of product, place, promotion and price.

The product decision area is concerned with developing the right "product" for the target market. This product may involve a physical product and/or some combination of services. In the residency program design it is everything from the buildings in which the training takes place to the stipend and benefits the resident receives.

The place decision concerns having the product available when and where the resident wants it. Geographic concerns play a large part in the residency program decision. The majority of medical students prefer to select a residency program in either the state where they live, went to medical school, or eventually hope to practice. The place decision also concerns whether all of a residency takes place at one facility or

whether the resident attends a number of different activities at different locations.

The promotion decision is concerned with the method of communicating to the target market and the determination of the message to be communicated. Convincing the target market that a residency program is the right product at the right price in the right place is the job of promotion. Personal selling, mass communication, and targeted communications are complementary methods of communicating with residents. Personal letters and trips to visit schools with prospective residents, mass mailings of brochures or other direct mail are all examples of promotion techniques used by residency programs.

The price in the case of a residency program is the cost to the resident in terms of efforts, other opportunities foregone, and anything else the resident must put into or forego for the program. The "best" price is of course the lowest; however, only in the sense of equal value received. Therefore, there is often a high perceived correlation between price and quality. The residency program that is the most demanding (charges the highest price) may be perceived as the best in terms of value.

To aid in the continuance of a broader perspective of marketing, the actual application of the marketing concept to a residency program is briefly outlined below.

A CASE STUDY

The department of family medicine at a large midwestern university realized that in order to continue the success which its residency program ought to have, turned to the marketing concept. Changing times required changes, but where?

Rather than resorting to short run solutions, such as simply raising stipends, it was decided to investigate the root of the problem by using a marketing approach.

The parties to the exchange process were clear--the school as "seller" of advanced education, the recently graduated medical doctors as "buyers" of advanced education. The issue was to bring those parties together in such a fashion that the university would attract and retain sufficient capable and motivated individuals into its program, and that the residents would want to come and stay at the family medicine residency program. A look at the market situation shows that nationwide there are more program openings than residency applicants; the resident's selection of a program therefore takes precedent over a program's selection of a resident. The complexity of the problem was compounded by the fact that family medicine is only one of many possible specialty choices available to the student.

Research Program

It was decided to investigate the market interactions of the participants in the exchange more closely. Research was initiated by conducting interviews and focus group sessions. The main purpose of this exploratory research was to gain more information about the process on the part of students in their choice of specialty and choice of residency programs. Several meetings with medical students and residents were conducted and transcribed. An analysis and interpretation of these meetings yielded various findings. First, both choice decision processes were found to contain influencers, e.g., professors and peers, and deciders, e.g., the student, family, the program.

Second, it was found that one way of viewing the decision processes of medical students was via an adoption decision framework. The decision to choose a particular specialty or residency program was not simply a "yes" or "no" decision. Students undertook the program choice in gradual steps. When a student is confronted with the possibility of selecting a residency program or specialty area, he or she goes through several mental stages before finally deciding what to choose or not to choose. Five stages in this decision-making process can be distinguished (Rogers 1962).

Another finding was that in all these stages, a wide variety of decision criteria were considered, such as future career desires, plans regarding the mode of work, geographic location, local environment, etc. Obviously, the exchange process does not depend upon one single, over-riding factor, but is a composite result of a complex interaction of a multitude of variables, for each of which the strengths and weaknesses of a program can be measured.

Concurrent with this investigation the perceived strengths and weaknesses of the current program of the Department of Family Medicine were assessed. Here not only students and residents but also the administrators of various outside programs were interviewed. Although the participants in this area of the research were quite diverse in backgrounds, surprisingly consistent patterns of evaluation emerged. In order to reduce biases, various recruiting situations were observed which confirmed the previous findings.

Subsequently, a broad based content analysis of communication materials was conducted in order to determine how the Department of Family Medicine presented itself to potential candidates. An evaluation was made as to how the decision criteria used by the applicants were addressed and how other programs communicated about themselves. This analysis resulted in a variety of fruitful suggestions for changes in the communication materials.

Based on all these preliminary findings it was decided to enlarge the focus of the research through the administration of a mail questionnaire distributed nationally to medical students and residents.

Questionnaire Survey

Based on the information gathered in the previous research process and additional information obtained through interviews with family medicine faculty, a questionnaire was designed. The questionnaire was administered to medical students in their last year of education who were presumably undergoing the choice process for a residency program. The questionnaire sought information on demographics, career planning, career goals, the desired mode of work, and specialty/program choice. The questionnaire was pretested with the help of family medicine faculty and students.

Five hundred questionnaires were mailed to medical students randomly selected throughout the entire U.S. A total of 213 completed questionnaires were returned, for a response rate of 43%.

Results indicate that family medicine students seem to decide earlier on their specialty, apply to residency programs earlier, are more firm in their decision, and are more likely to stay with their specialty than any other specialists. Family medicine as an overall specialty seemed to be firmly entrenched in medicine, holding rank 3 out of 7 among the most desirable specialty alternatives. The student interested in fam-

ily medicine seemed to be interested mainly in treating patients for their medical problems and in being able to deal directly with people. Factors such as research, prestige and status and the possibility of dealing with the psychological problems of patients, emerged as being quite undesirable. Thus, the results of the questionnaire indicated that the medical student interested in family medicine could be distinguished from students interested in other specialties.

In terms of preferred types of programs, students interested in family medicine indicated that a community based but university affiliated program offering many residency positions and filling them all was most desirable. Size of the residency stipend seemed to pay a minor role. Major influences in the residency program choice were found to be the interview with the program staff, other students, and brochures. Table 1 ranks the 12 most important influencers of the residency program choice. Factors of major importance in the residency program choice were the friendliness of atmosphere, the interview with the program staff, the geographic location, and the type of program (i.e., whether it was university based, affiliated, or community based). Table 2 ranks the factors considered important for the residency choice by medical students interested in family medicine.

Conclusions and Recommendations

The main conclusions and recommendations which were made based on all these findings are the following: First, it was suggested that recruiting efforts for residents should start early. Such an early start should consist of continuous encouragement of in-house students in the basic science years, and a main focus and concentration on the students early in their final clinical year of medical school. Second, due to its discovered importance, it was suggested to maintain and continuously update a friendly and informative brochure. Third, it was recommended to continuously seek out candidates. Once a candidate was brought to campus for an interview, it was recommended for the interview to be very warm and friendly rather than a stress type interview in which the candidate is knowingly evaluated. It was further recommended to deemphasize the research orientation of the university program, and to place greater emphasis on messages such as: the program will prepare candidates to contribute to society, the program is colleague oriented, and the program helps enhance part-time affiliation possibilities with a medical school later on in one's career.

Discussions with the residency program faculty subsequent to the final research results presentation indicated that the results were very valuable to the future design of the program's recruiting efforts. In the long run, an increase in residency applications and national reputation is the expected result and has already manifested itself in the recruiting year immediately following this study.

Implications

Investigations have been conducted in the past which focused on issues like medical specialization (Aphelstan and Paul, 1971), resident selection procedures in diverse specialties, such as psychiatry (Goretz, 1972), oral surgery (Marcian et al., 1976), or dentistry (Sharp, 1975). However, these issues were always seen in an isolated fashion, not benefiting from an integrative approach, attempting to facilitate the exchange process. Such a broad view is necessary, however, in order to yield possibilities for successful implementation.

As shown in the examples provided, many possibilities for the application of marketing in the interaction of medicine with society exist. The possibilities extend far beyond the doctor-patient relationship. Possible future applications will entail marketing plans for the attraction of students into medical programs, which in times of increasing programs and decreasing birthrates, might become a local or even national problem; plans for the attraction of doctors to certain geographic areas and of faculty to medical schools will be needed; planning for ways of dealing with the contracting supply of nurses, and the repositioning of their tasks in the medical area; plans to resolve the clashes in society's view of the medical profession and medical costs; all of these issues are only a few examples of what will be challenges in the future.

Marketing can be a helpful tool in converting these problems into opportunities. But to achieve such a fruitful interaction between marketing and the medical field, we need quid pro quo view on both sides.

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TABLE 1
IMPORTANT INFLUENCERS IN THE FAMILY MEDICINE
RESIDENCY PROGRAM CHOICE

Rank	Influencers
1	Interview with program staff
2	Other students
3	Brochures
4	Professors
5	Friends
6	Specialty programs at your school and their files
7	Family
8	Personal physician
9	Professional clubs
10	Professional journals
11	Dean
12	Academic committee

TABLE 2
IMPORTANT FACTORS IN THE FAMILY MEDICINE
RESIDENCY PROGRAM CHOICE

Rank	Factors of Importance
1	Friendliness of atmosphere
2	Interview with program staff
3	Geographic location
4	Type of program (university-based or affiliated, community)
5	General facilities
6	Location (urban-rural)
7	Reputation of program
8	Number of faculty
9	Rigor of Curriculum
10	Patient mix
11	Number of residents
12	Number of days on call
13	Proximity to intended area of practice
14	Library facilities
15	Teaching opportunities
16	Vacation time
17	Size of stipend
18	Fringe benefits
19	Sport programs and facilities
20	Research orientation
21	Research opportunities

A CLOSE LOOK AT THE OPTIONS IN THE HEALTH CARE INDUSTRY: THE MARKETING AUDIT

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Abstract

This paper explores the concept of the marketing audit and its applicability to the health care industry. The authors emphasize the importance of this tool for the health care administrator in light of increasing costs, intensifying competition, and more complex regulation. Examples of how the audit operates in a health care facility are provided throughout the paper.

The Health Care Industry--Improving Its Performance

The health care industry employs six percent of the nation's workers and accounts for nearly nine percent of the gross national product, making it the second-largest and fastest growing industry in the United States (*Business Week*, 1978). This rapidly growing industry is not without problems, however. Cost concerns, quality, distribution, access, and effectiveness of medical and hospital care concerns have reached crisis proportions (Milch and Martinelli, 1976).

There is little doubt that the traditional health care system is in need of techniques that would improve this somewhat dismal situation. Advocates of the marketing concept, as of late, have challenged the traditional system with ideas designed to reduce its ineffectiveness, inefficiency, and unresponsiveness. These individuals have made promises of improved capacity to respond to the needs and wants of consumers, personnel, and the community in general; clarification in the development of long-range strategies and objectives; and more effective allocation of resources within the organization (Berkowitz and Flexner, 1978; Clarke, 1978; Ireland, 1977; O'Halloran, Staples, and Chiampa, 1976). These benefits are being realized by those health organizations adopting the marketing concept.

Marketing, in fact, has become a hot "buzzword" in many health care environments. The increasing attention paid to marketing health care, however, is not in itself sufficient evidence that the answers are here and the controversy is over. Whittington and Dillon (1979) recently explored the myths and realities surrounding hospital marketing. Their findings indicate that while many hospitals openly acknowledge use of at least some marketing techniques, there still exists a dearth of formal marketing planning occurring (only nine percent of hospitals reporting in the study).

Such a lack of comprehensive planning is evidence that many health care institutions are still far from understanding, utilizing, and consequently benefitting from all the field of marketing has to offer. To achieve the full benefits that marketing activity can provide, a health care administrator must first understand, at its most basic, the role that marketing plays in his or her organization.

The marketing of health services focuses on the exchange between the health care organizations and such interested parties as donors, patients, employees and regulators of the organization. Hospital and health administrators must be more cognizant of the central and critical role of marketing and of the need for effective

planning in developing a marketing program for their organizations. These administrators must also recognize that marketing planning can be effective only if they appraise the validity of past decisions and policies; and even more important, they must appraise their present marketing policies in light of the feasible alternatives. These appraisals, must, of course, be undertaken from a total organizational perspective rather than on a piecemeal basis.

Every organization needs to assess its operations periodically to determine if they are in tune with the changing environment and opportunities that might exist. Since marketing operations are of crucial importance, a type of stock-taking similar to that applied to financial activities should be applied to marketing operations. A marketing audit is just as essential as an audit of the organization's books, physical assets, or employees.

The Marketing Audit

Most hospital and health administrators would probably refuse to admit that they do not recognize the need for auditing the marketing operations for which they are responsible. As a matter of fact, they would state that they are constantly evaluating these marketing operations--and they would most likely be right. Within many health care organizations a variety of evaluations are constantly being made. It is important to note at this point, however, that not every marketing evaluation is a marketing audit. At best, most of these evaluations can be regarded as parts of an audit.

The term marketing audit is used to denote "a periodic, comprehensive, systematic, and independent examination of the organization's marketing environment, internal marketing system, and specific marketing activities with a view to determining problem areas and recommending a corrective action plan to improve the organization's overall marketing effectiveness (Kotler, 1976)." In short, as pointed out earlier, the term marketing audit designates a total evaluation program and not piecemeal examinations of individual functions.

The failure of most administrators to adopt this view of a total evaluation program probably results from a misunderstanding of its objectives and potential value. The marketing audit is not only intended to detect and correct serious difficulties and shortcomings; it is also intended to improve conditions that are already better than average. As Schuchman has stated, ". . . the audit is a prognostic as well as diagnostic tool--a search for opportunity as well as malfunction" (1959).

The marketing audit consists of three parts: the marketing environment review, the marketing system review, and the detailed marketing activity review (Kotler, 1975). The marketing audit will serve as a basis for more effective planning by revealing the major practices, problems, and opportunities facing the organization. Only with such an ordered, comprehensive approach can the health care administrator hope to realize the complete benefits the field of marketing has to offer.

The Marketing Environment Review

In evaluating the marketing environment of the organization, the auditor is concerned with markets, customers, competitors, and the macroenvironment.

Markets and Market Segments

The markets and publics surrounding a health care organization are complex. There are at least five distinct markets or publics which can be identified (Simon, 1978): patients, physicians, employer or union groups, government and regulatory agencies, and employees. The organization must list the markets that it sees as important and, in addition, needs to discuss the relative importance of each of these markets in the total scheme of the organization's objectives.

The various markets identified can be further classified into market segments. A market segment is a group of people with homogeneous wants which the organization might successfully satisfy. Markets can be segmented geographically, demographically, psychographically, by service group, by perceptions and preferences, or by benefits derived.

Long-range planning will also require information relative to the present and expected future size and characteristics of each of the above markets and market segments of importance. Health service organizations are very much concerned with annual demand for health services.

Customers and Publics

Hospital and health administrators need to be concerned with the needs, preferences, perceptions, and satisfactions of each of their target markets. Through research administrators might determine areas in their institutions that are in need of improvement. For example, in a study of physicians conducted by a medical center's management:

" . . . In addition to the poor rating on interdepartmental education, approximately 25 percent of the group felt that the practice was poorly involved with the community health-planning groups and with the county and state medical societies (Glick, 1979)."

The problem areas expressed in this study suggest that administrators should consider the viewpoints of the various publics and customers of the hospital or health care organization. The better the health care organization understands its markets, the better it will be able to serve them.

Marketers are currently involved in aiding health care administrators in identifying and understanding their various publics. Traditionally, for example, hospitals tended to identify their patients by describing detailed demographic profiles. While this approach is certainly of some value, marketers can help administrators recognize and explore other valuable segmentation criteria. Sapienza (1980) recently discussed the use of psychographic profiles as an aid to identifying and serving various patient categories.

Another area which warrants study is consumer decision making. How successful planning is in achieving uniform utilization of health services depends on its ability to adjust service delivery to accommodate consumer decision making. Models dealing with the formation of individual preferences for primary health care providers have been developed and are useful tools for understanding the trade-offs among provider attributes

on which consumer decisions are based (Simon, 1978; Wind and Spitz (1976).

The current and future needs and satisfaction levels in each of the various markets are also important sources of information for the administrator. As Griffith points out in a recent article, "Patient satisfaction measures are important in any health care system as expensive as the present one (1978)." He further states that these measures would "provide a baseline to protect against over-zealous cost containment and might, in some communities, suggest profitable directions for investment in expansion or revision of services (1978)!"

Competition

The idea that competition between area hospitals and health service agencies exists is distasteful to many administrators. It seems to bring to mind cutthroat competition and unethical practices to achieve more patient involvement. Open competition, not cutthroat competition, is being proposed. Effective competition will control costs, keep operations more efficient and allow for better fulfillment of community needs (Simon, 1978).

The administrator has to know who the organization considers to be its main competition. This competition can be generic, product-form, or enterprise in nature (Kotler, 1975).

Generic competition refers to other broad product categories that might satisfy the same need. Generic competition for a hospital might include religious groups such as Christian Scientists who provide individuals with alternatives to medical care in coping with illnesses. Product-form competition refers to specific versions of the product that may be competitive with each other. Hospitals are in fact competing with such innovations as home health care. The final type of competition is enterprise competition, which refers to specific organizations that are competitive producers of the same product or service. For example, a university medical school hospital is in competition with Navy hospitals, HMOs, church-affiliated hospitals, and more.

In the future, administrators will see an accelerating integration of health care institutions into comprehensive health care systems, thereby reducing the number of separate institutions. Competition will increase for limited health care dollars. The industry has already evidenced this change in major urban areas.

In New York City, several significant mergers have been announced recently. Roosevelt Hospital and St. Luke's Hospital, two of New York's oldest medical institutions, are merging. While both of their principal facilities will remain open, as a first step, their combined total of 1363 beds will be reduced to 1100, with a single administration (Glick, 1979).

External Forces--The Macroenvironment

The major external forces that impact on the organization, its markets, and competition constitute the macroenvironment. Demography, economy, technology, government, and cultural forces can impact greatly on the organization.

Factors such as age, income, occupation, birth rates, and death rates definitely affect the size of the organization's markets and the demand for its products. Changes in the ages of, or increases in the number of patients, actual and potential, are likely to affect health care program utilization. The aging

of the population will lead to greater demand for long-term care, for instance. As MacStravic (1977) indicates, the effects of population factors will differ according to which market is affected. As an example, those individuals who support inner city hospitals with their donations may shift their support to suburban hospitals as they move to the suburbs.

Changes in the economy are an administrative concern. In times of economic decline, individuals who suddenly find themselves unemployed lose their health insurance and use less health care, while health care providers incur more bad debts and increased accounts receivable.

Diagnostic, surgical, and therapeutic technology has rapidly changed the face of the health care industry. The technology explosion has contributed to the installation of specialized services such as intensive- and cardiac-care units in many hospitals. Hospitals and health care organizations continually review proposed equipment additions that would increase delivery capacity or result in cost reductions.

Increased government intervention in the next twenty years will influence both the structure of the health care industry and the manner in which it operates. At present, a major political thrust for a national health care system is being made. In addition to this long-run solution, the government is proposing short-term solutions as well. Such solutions include: wage and price controls on doctors and hospitals; massive closings of hospitals or wards; prospective payment measures that prescribe fees in advance; and encouragement and subsidy of HMOs (Simqn, 1978).

Health care organizations operate in a cultural context that tends to be viewed as static. Cultural factors, however, change and can be critical determinants of the health organization's survival. One such factor is attitude changes concerning authority and citizen participation. These changes have led to greater consumer input into health care decisions.

The Marketing System Review

After reviewing the marketing environment of the organization, the auditor is next concerned with questions about the marketing system of that organization. During this part of the audit, the auditor will specifically evaluate the organizations' objectives, programs, implementation, and organization.

Objectives

Objectives and goals of the health care organization, both long-term and short-term, need to be determined first and foremost. When confronted with the question of objectives, however, many administrators often find it difficult to express objectives in terms other than the "provision of good health care." While this response is genuinely a desirable and worthwhile goal, it does little in guiding the organization toward successful exchange processes.

Objectives should be (1) arranged hierarchically; and (2) numerically stated to the maximum extent possible so that subsequent accomplishment can be planned for and measured (Granger, 1964). Perhaps the basic objective of a hospital is to deliver quality medical care to the community, but it cannot be successful at all things. Therefore, it needs to set more specific objectives relative to the various services offered. Specifically, some subsidiary objectives might be generated with respect to medical facilities, management capabilities, medical staff, technical facilities, reputation, financial capabilities, and image.

The audit should also generate questions about the validity of the core objectives.

"A small city hospital is deceiving itself if it adopts the objective to be rated as one of the top three cancer research hospitals in the nation within five years (Kotler, 1975)."

Objectives must be realistic and the result of well-designed goals that consider the organization's strengths and weaknesses.

Program

After assessing the various organizational objectives, the auditor should determine if the core strategy by which the organization expects to achieve such objectives is likely to work. Many organizations are under the belief that if they do a good job, they do not need a core strategy to succeed. This is simply not true! Sincerity alone will not provide success.

Health care organizations are continually trying to attract more funds and gain a better reputation but will not spend the money necessary to accomplish these ends. Marketing activities can be highly productive but can be extremely costly as well. Health care organizations tend to participate in low-budget marketing programs using the help of volunteers and staff who are now well-trained in marketing activities. These programs act to perpetuate the cynical attitude health care organizations have about the productiveness of marketing investments.

The auditor should also examine the allocation of marketing resources to the organization's markets, products, and territories. A hospital that spends a great deal of time and money in recruiting physicians to a facility that is inadequate will find those physicians to be the worst "sales force" they could ever have. If the hospital would spend more of its money on upgrading the facilities, physicians could be recruited with less effort.

Finally, the allocation of resources to the various elements of the marketing mix needs to be reviewed. National and local advertising, telethons, direct mail, and philanthropic solicitations are activities often used by medical charities to raise money. The optimal mix of these activities would exist at that point where no reallocation of funds from one activity to another would increase the total revenue raised.

Implementation

Implementation of a marketing program requires monitoring and control to make sure decisions are being followed or only the appropriate adjustments are being made. The administration of a health organization's marketing efforts and resources begins with a well-formulated procedure for annual marketing planning. Planning refers to the organization's attempts to translate the core strategy into a set of targets and scheduled actions that will be carried out by various organizational members. A range of approaches to planning are available for use. They include: top-down planning, bottom-up planning, and interactive planning. Top-down planning occurs where top administrators specify, organize, and make all planning decisions and inform the rest of the organization that they will carry out all directives. Bottom-up planning takes place when meetings are held at different levels in the organization and everyone gets involved in goal setting and commitment. Between these two extremes lies interactive planning in which objectives are sent down by

top management and plans are developed and sent up by lower management for approval.

Regardless of the method, careful planning is an absolute requirement for any organization hoping to be successful at what it does. Haphazard planning, on the other hand, may be as fatal to an organization as no planning at all. Marketers have provided considerable aid to the health care administrator attempting a carefully planned program. A variety of models have been proposed to provide systematic planning procedures for a number of health care related activities including the introduction of new services (Bushman and Cooper, 1980); the recruitment of nurses (Hughes, 1979); and the use of information systems (McLaughlin, Shapiro, and Umen, 1980).

Planning means nothing without control. Control is a process of monitoring program activities and outcomes, periodic reporting of actual performance, comparison of actual performance to standards developed, and corrective action designed to bring actual performance in line with expected performance.

Again, marketers are active in providing health care administrators with tools to aid them in the control process. Smith and Elbert (1980) recently suggested an integrated approach to performance evaluation which they believe can provide a foundation for the improvement of health care services delivery.

The health care organization needs to determine the contribution and effectiveness of specific marketing activities on a periodic basis. Does the organization know what each product is contributing to the entire product line?

The quality of the marketing information system should also be examined. The marketing information system is a structure that is designed to generate an orderly flow of pertinent information to administrators. This information is vital to implementation. Highly sophisticated marketing information systems can aid in the analysis of market potential or in the effectiveness of various marketing efforts.

Organization

The implementation of marketing concepts, techniques, and attitudes in the organization is dependent upon the recruitment and organization of competent marketing leadership. Many health care organizations presently carry out marketing operations through public relations offices, service development offices, and community education departments.

An appraisal of the present marketing organization should be done by the auditor. The appraisal will include an evaluation of the authority and power relationships among the individuals engaged in the given marketing activities; of the reasonableness of the division of the total job to be done among the persons responsible for doing it; and of the appropriateness of the individuals for the tasks assigned them (Oxenfeldt, 1959). The Whittington and Dillon (1979) study mentioned earlier found that only four percent of the hospitals reporting had an individual clearly responsible for comprehensive marketing activities.

Detailed Marketing Activity Review

The third part of the marketing audit is the detailed marketing activity review. The "marketing mix" audit is rarely considered by top administration, let alone carried out by them. This review is designed to evaluate the major areas of marketing activity in the

organization including: products, pricing, distribution, personal contact, advertising, publicity, and sales promotion.

Products

Administrators should be asked to complete a list of their organization's main products and lines produced. A health care organization would most likely include health care, research, and community education in such a list. Organizations should be continually aware of the needs the consumer is trying to satisfy through the product.

The audit should help to detect any weak products that need to be modified or eliminated. Another purpose of the audit would be to determine if products could be added to the organization that would make the organization more attractive to patients, medical staff, and nonmedical personnel. The organization can also determine how superior or distinctive its product mix is when compared to competitive offerings.

A variety of marketing tools can be helpful to a health administrator interested in improving his or her understanding of the product-related issues faced by the organization. The audit will be instrumental in uncovering the needs and opportunities for such aids. Venkatesan, Moriarty, and Sicher (1980) recently demonstrated the value of the product life cycle as a tool in planning marketing strategies for health maintenance organizations. A model for making product/market differentiation decisions in community hospitals has been proposed by Milch (1980). Both efforts demonstrate the value of utilizing marketing tools in the planning and implementation of activities in the health care field. Without a systematic audit, the potential for such tools would most likely go undetected.

Price

Hospital pricing, for the most part, is very cost-oriented. Demand-based pricing and competition-based pricing are also possible, however. Cost-oriented pricing is where price is determined on the basis of markup over unit cost. Demand-based pricing is where price is set to what the market will bear. Competition-based pricing is where price is set to be roughly equal to what others are charging. Pricing is particularly difficult in health care institutions because payment is made by secondary payers such as insurance companies and government instead of the immediate users.

It is important to note that the price the patient is expected to pay for products includes much more than money. Attributes of the product such as convenience of use, safety, side-effects, and interference with normal functioning all involve costs to the patient. Fragmentation of care and inaccessibility to the source of care are also costs incurred by the patient. Since all of these costs might be incurred by the patient, the health care organization must ensure that benefits to the patient are greater than or equal to the costs.

Distribution

An important aspect of the audit is the examination of how an organization's products are delivered, as well as whether improvements could be made in service level or cost. Although health care organizations are often in direct contact with their customers, many of the concepts in distribution can still be used. For example, the question of location arises whenever a new health service or an adjustment of existing services is decided upon. The site chosen is bound to affect programs, cost of care, and utilization of services.

Personal Contact

Clients of an organization can be reached through a network of agents, volunteers, and staff workers. Hospitals have developed the fairly common practice of inviting prenatal classes sponsored by community organizations to use hospital facilities for meetings.

For individuals to be successful at personal contact work, they must be well selected, trained, motivated, and evaluated. Sales force techniques from the commercial sector can be modified and applied to health care organization representatives.

Advertising

Health care organizations need to communicate the nature, benefits, and methods of securing their services. Paid advertising is one method available for carrying out such messages, but it is often viewed negatively by health care administrators. This negative perspective is probably a result of the fact that many administrators do not approach advertising with sufficient understanding. The organization is capable of tailoring its advertising to reach specific targets. Physicians might be informed about the development of new services by a local organization. Recent obstretical patients may be sent notices describing a new pediatric service.

Advertising agencies use a variety of techniques for pre-testing and post-testing advertising themes and copy to determine if campaigns will have the intended effect on the audience. Recently, one agency comprised of individuals from ad research, health communication, and academic research fields explored the idea of testing services structured for health information (Novelli, 1978). The group developed an assessment approach that could be: quickly and affordably administered, open-ended to allow for probing responses in some depth, able to test among a variety of audiences, based on natural forced exposure, capable of analysis of specific elements of each message, and capable of producing findings which could be understood and acted upon by health planners (Novelli, 1978).

Publicity

Health care organizations are particularly involved with the use of publicity, since they are often without a budget or inclination to use advertising. Publicity is defined as "the development and dissemination of news and promotional material designed to bring favorable attention to a product, person, organization, place, or cause (Kotler, 1975)." It differs from advertising in that messages are carried in the media without payment to the media and without explicit mention of the sponsor. Generally, a hospital staff member or a public relations agency hired by the organization writes stories about the organization in the hopes that the media will use them.

Publicity should be geared to raising the public image of the organization in general. If a famous person comes to town for care at a local hospital, the free publicity this generates may enhance the hospital's reputation in the community.

Sales Promotion

Sales promotion includes "those marketing activities, other than personal selling, advertising and publicity, that stimulate consumer purchasing and dealer effectiveness, such as displays, shows and exhibitions, demonstrations, and various nonrecurrent selling efforts not in the ordinary routine (AMA, 1960)." Organizations

might put their fund raisers into competition for large prizes for those who raise the most money for the organization.

Misconceptions About the Marketing Audit

Many administrators believe that only problem-ridden organizations could benefit from the marketing audit. This conception of the audit could not be farther from the truth. An audit under crisis conditions is likely to be more superficial and limited in its scope and depth than a true marketing audit.

A successful organization can be audited much more effectively than a problem-ridden organization. As a matter of fact, these organizations need to be audited. "Success tends to foster complacency, laxity, and carelessness (Schuchman, 1959)." The successful organization must recognize that the audit is preventive as well as curative in nature.

The marketing audit needs to be "continual, systematic, critical, and objective (Schuman, 1959)" to be effective. The audit will, if performed on these dimensions, serve its intended purpose--starting the needed dialogue about the organization's marketing strategy. Administrators must anticipate that some difficulties will be encountered in the execution of the marketing audit, of course. These difficulties include the selection of auditors, the scheduling of the audit, and the impact of the audit on personnel.

Auditor Selection

Auditors must be individuals who are critical, impartial, knowledgeable, and creative. They cannot be so involved with the policies and procedures of an organization that they cannot be objective in their assessments. They must also be able to identify marketing problems and opportunities in the organization and define courses of action to solve the problems and exploit the opportunities. The main problem becomes one of finding enough people with these characteristics in the health care field to staff the audit. As audits become more accepted, this problem should eliminate itself.

Audit Scheduling

The marketing audit is a long-term project that must be executed in accord with an established timetable. In the health care organization, a variety of distractions exist which may delay execution of the audit. These delays can always be rationalized by organizational members contributing to a dissipation of interest in the audit. Deviations from a stated timetable must be avoided if an audit is to provide accurate information about the organization's current status.

Impact of the Audit on Personnel

Administrators who are enthusiastic about the marketing audit are often overly eager to implement it in their organizations. Implementing the audit requires more than just the chief executive officer's enthusiasm, however. It requires the full cooperation of all personnel involved in the marketing operations of an organization. Many individuals may refuse to cooperate in an audit because they perceive such an evaluation as threatening to their status in the organization. These individuals must be convinced that the marketing audit is an appraisal that will enable all persons to do their jobs better before any full scale effort is inaugurated.

Conclusions

Hospital and health care administrators have the responsibility of critically, objectively, and systematically evaluating all of the organization's activities, policies, and objectives. Marketing is one area where such evaluations will prove to be extremely useful in pursuing increased revenues and reduced costs. Administrators must appraise rigorously the marketing environment, marketing system, and marketing activities to achieve these benefits. The marketing audit is not easy to develop and execute, but its benefits will exceed the costs and difficulties encountered in its implementation.

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THE NEED FOR MARKETING RESEARCH IN THE DEVELOPMENT AND DIFFUSION OF THE HOSPICE CONCEPT

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Abstract

Many new products and services fail as a result of poor marketing management and lack of adequate planning. This article identifies the market potential of a health care innovation--hospice care--and suggests several basic marketing concepts that can facilitate the development and diffusion of the hospice concept.

Introduction

Health care organizations, like their consumer goods and industrial counterparts, are interested in marketing new "products" or services to satisfy currently unmet needs in the marketplace. One can speculate many reasons why marketing thought is permeating the health care delivery system, but the reason doubtlessly falls at the bottom line: marketing may be logical and useful but, more importantly, marketing can contribute to increased productivity and returns. Yet another reason is the ever-increasing pressures upon health care providers to publicly substantiate the need for new programs, services and facilities that fall within federal, state, regional and area-wide planning criteria. Hence, these factors, among others, have spurred the realization that marketing can be of value in the researching, planning, implementation, evaluation, justification and communication of innovative health services. Among these innovative health services that have received attention from marketers are ambulatory care centers, same-day surgical centers, health maintenance organizations, satellite health centers, home dialysis centers and hospices.

Hospice Has Market Potential

One innovative health service that appears to have good market potential is the hospice (used as a singular, generic concept to include all existing models). Since its modern-day resurgence in the last decade, the hospice concept of care has generated widespread interest and inquiry among growing segments of the U.S. population--most notably, physicians, nurses, social workers and other health care professionals, as well as the consuming publics of health care services.

With its emphasis on palliative care rather than cure, the hospice concept has focused on providing specialized services designed to reduce pain and discomfort for terminally ill persons once the likelihood of effecting a cure is abandoned. Since the pioneering work of Dr. Cicely Saunders at St. Christopher's Hospice in Great Britain (Saunders, 1977, 1978) the U.S. health care delivery system has begun to embrace much of the inherent wisdom and philosophy of the hospice concept. In response, innovators have developed a variety of hospice models, all designed to palliate the dying patient, to provide support systems to family members, and to accept the patient, family and other significant others as the primary unit of care.

A Unique, Differentiated "Product"

Those who criticize acute care and long-term care facilities contend that neither system is skilled in the delivery of the specialized services that are needed or desired by dying patients and their families. In the

hospital, the terminally ill patient is clearly enigmatic in a setting that is cure-oriented and treatment centered. For example, a study by Richard Kalish indicates a significant difference in the attitudes of nurses toward those patients who were curable as opposed to those who were diagnosed with terminal illnesses (Dumont and Foss, 1972). In a study by Coombs and Powers (1975), it was determined that the most common strategy employed by physicians to cope with their own fears about death and dying was to avoid the terminally ill patient. Goldenberg, a physician at the Yale School of Medicine, notes that the dying patient is the one the doctor visits last on his rounds in a general hospital, and adds, "This is why we need a specialized care center like hospice." (Heifetz and Mangel, 1975).

The introduction of the hospice concept in this country appears to be serving a need, satisfying a demand--and from Goldenberg's perspective--filling a void. Thus, there appears to be market potential for this innovative program of care. Another attribute that makes hospice care a unique and differentiated "product" is its holistic orientation in addressing the familial, economic, psychological, social and spiritual needs of the dying patient and his family--in addition to his physical needs (Report to Congress, 1979). Yet another important attribute that clearly differentiates this innovation from other health care services is its apparently lower cost. It is believed that its emphasis on home care services, and its extensive use of non-paid volunteers has allowed hospice to be a less costly alternative to acute in-patient hospital care (Kolbe, 1966). Cohen writes that the matter of costs remains an unresolved issue (Cohen, 1979) but adds, "...because capital-intensive costs are less and because ancillary services are kept at a minimum, overall costs per patient tend to be less for hospice patients than for acute general hospital patients." (Cohen, 1979). A six-month study on hospice care underwritten by the Arthur Vining Davis Foundation supports Cohen's findings (Hospitals, 1979).

Thus, hospice appears to be well-differentiated in terms of the services delivered, its holistic orientation, its apparently lower cost (than acute hospital care) and its emphasis on palliation. Hospice care also appears to be satisfying a consumer need-state that apparently has not been addressed by many hospitals and nursing homes. (See Figure 1).

Well-Differentiated Doesn't Mean Well-Marketed

Despite the well-differentiated package of attributes that distinguishes hospice care from hospital and nursing home care, two conspicuous absences may preclude hospice from being well-marketed.

First, there is an apparent dearth of consumer input in the determination of need criteria for hospice care. In a recent survey of 20 hospice program administrators, only one respondent reported that demand for their hospice program was determined by consumer input (the interviewing of terminally ill patients to determine their needs and the kind of program they felt could address those needs). In the other cases, it was noted that demand was determined by measuring the number of cancer

FIGURE 1

Attributes of Hospice Care Relative to Hospital and Nursing Home Care*

	Hospital	Nursing Home	Hospice-Inpatient
PROBLEM	Acute illness	Chronic illness	Terminal illness
OUTCOME	Discharge to community or institution - 97.5%; death - 2.5%	Discharge to community or lower level of care--74.2%; or death - 25.8%	Death; bereavement
CARE GIVEN	Institutional: hospital	Institutional: nursing home	Home care with institutional backup
CARE GIVEN BY	Hierarchy of: Physician, Registered Nurse, Licensed Practical Nurse, Nursing Assistant, Auxiliary Personnel	Circle of: Physician, Registered Nurse, Licensed Practical Nurse, Nursing Assistant, Auxiliary Personnel	Team of: Physicians, Nurses, Social Workers, Volunteers, Clergy
FAMILY INVOLVEMENT	Peripheral	Some involvement	Great involvement of family incorporated in giving care
LENGTH OF STAY	7.3 days (1977)	84 days	Projected 10-12 days
ENVIRONMENT OF INSTITUTION	Sterile	Somewhat homelike but distinctly institutional	Homey, non-institutional
COST OF STAY	\$173.98/day (1977); about 50% of cost is for personnel	\$24.04/day (1977); about 55% of cost is for personnel	Approximately \$100/day (1977); more than 60% of cost is for personnel
SOURCE OF DATA	(Health Care Financing Administration, Division of Hospital Services, United States Department of Health, Education and Welfare)	(National Center for Health Statistics, United States Department of Health, Education and Welfare)	(Hospice, Inc., New Haven, CT)

*Sara Burger, R.N., "Three Approaches to Patient Care: Hospice, Nursing Homes, Hospitals," in A Hospice Handbook, A New Way to Care for the Dying, Michael Hamilton and Helen Reid, eds., William B. Eerdman's Publishing Co., 1980, pp. 131-145.

deaths in an area, past case-loads and by using "intuition." (Investigative Study Final Report, 1979)

A second void appears to be in the area of marketing communications programs. While the National Hospice Organization and its member institutions have generated plethora of pamphlets, newsletters, publicity, slide shows, movies and other promotional materials, it is questionable whether these communications vehicles were researched, planned, written or designed to reach specific objectives or to address well-defined market segments. According to Robertson and Wortzel (1977), most health care communications campaigns fail, particularly those campaigns oriented toward changing health care habits. They cite the following reasons for failure: (1) most health care campaigns operate without explicit objectives or with inappropriate or unrealistic objectives, probably because they are based on an inadequate understanding of the way mass communications work and on an inadequate understanding of the marketing requirements of the 'product' being promoted; (2) most health care campaigns are non-programmatic; they are short-run, one-time efforts, while the behavior change they are designed to induce must continue in the long run; (3) the beneficial effects of the recommended behavior change are not immediately apparent to the consumer, and perhaps never will be; and (4) most health care campaigns fail to identify market segments within the total audience who require different communication

approaches in line with their specific needs (Robertson and Wortzel, 1977).

One possible reason for the omission of these two areas in the aforementioned comprehensive six-month study may have been its emphasis on health planning, which Mages (1980) suggests has at times been confused with health care marketing. However, Mages distinguishes health care marketing from planning by emphasizing two skills possessed by the health care marketer that are not in the repertoire of most health planners: consumer research techniques and communications expertise (Mages, 1980).

With the current emphasis on planning in many health care organizations, it is not surprising that the two skills lacked by most health planners are also two of the missing links in the development and diffusion of this health care innovation. It is evident that there is room for both the planner and marketer in the development and diffusion of hospice care. An examination of several basic marketing concepts may demonstrate how marketing thought can aid health care administrators in affecting this process.

Marketing Concepts Applied to Hospice

Marketing has traditionally been preoccupied with profit making organizations. Today, however, the

concept of social marketing demonstrates that various health care delivery systems such as hospitals, nursing homes, and hospices, are utilizing marketing concepts. Social marketing has been defined by Kotler and Zaltman (1971) as the design, implementation, and control of programs calculated to influence the acceptability of social ideas and involving consideration of product planning, pricing, communication, distribution and marketing research (Kotler and Zaltman, 1971).

Where does marketing fit into the hospice program? According to Kotler and Levy (1969), marketing is that function of the organization that can keep in constant touch with the organization's consumers, research their needs, develop services that meet these needs, and build a program of services and communications to express the organization's purposes (Kotler and Levy, 1969). Marketing management, then, is the process of analysis, planning, implementation, and control of programs designed to effectively serve and communicate with specific target audiences. The analysis and planning stages require consumer research to accurately define the target audience, as well as the needs of this audience. Without proper knowledge of the target audience, objectives and strategies cannot be formulated nor can effective marketing programs or marketing communication tools be developed. To date, hospice organizations appear to have focused primarily on implementation of the hospice concept with little emphasis placed on formal consumer research or on well-planned marketing communications programs. Breindel and O'Hare (1979) write that the general populace lacks information on the hospice concept. The researchers also feel there is evidence of physician resistance and/or ignorance about the hospice concept and its role within the health care system. Ewart Thomas, Chairman of the Public Relations and Information Committee-National Hospice Organization (NHO) recently commented that NHO has done no public opinion research nor has the NHO established any procedures to measure the effectiveness of its public relations program (Thomas, 1980). Hatch and Boring identify the need for multi-hospice systems to collaborate on marketing. Any new service must be marketed to reach its target population and achieve its potential. A multi-institutional system can develop joint marketing strategies and assist individual members in developing specific marketing plans. They also suggest an application of marketing theory to diffuse hospice services to other parts of the health service area. This diffusion process might result through a cooperative community public relations program sponsored by institutional members of the hospice system (Hatch and Boring, 1980).

Suggested Areas of Research

An application of marketing to the hospice concept can offer more effective communications as well as increased consumer awareness and acceptance of this health care innovation. To initiate marketing research into the hospice movement, the following areas should be examined:

<u>Function:</u>	Marketing
<u>Service:</u>	Hospice Care
<u>Method of Gathering Data:</u>	Focus groups Survey interviews Diaries Personal interviews

Main Unit of Analysis:

Individual consumers
Physicians
Family members
Hospital staff
Volunteers

Suggested Area of Research:

Diffusion process
Adoption process
Opinion leadership in diffusion
Evaluative criteria
Awareness and attitude measures

Diffusion of Innovation

An innovation is any idea, practice, or object that is perceived as new by an individual. It is the perceived newness of the idea for the individual that determines his reaction to it (Rogers and Shoemaker, 1971). Diffusion, then, is the process by which innovations are spread to members of a social system. Examples of early diffusion of innovation studies in health care include (1) a new drug, and (2) a new contraceptive device. Three sociologists, Katz, Menzel and Coleman analyzed the diffusion of a new antibiotic among physicians (1954) and found a positive relationship between opinion leadership and innovativeness. Two other researchers, Berelson and Freedman, examined the diffusion of a new innovative method of contraception among women in Taiwan and discovered very high rates of adoption of the new device compared to older methods (Berelson and Freedman, 1964).

Rogers identifies the diffusion process as an orderly sequence of events. He proposes a diffusion curve of adopter categories based on the relative time of adoption of an innovation. These categories and the approximate percent of the population in each category are innovators (2.5 percent), early adopters (13.5 percent), early majority (34 percent), late majority (34 percent), and laggards (16 percent) (Berelson and Freedman, 1964).

Based on diffusion of innovation concepts, several questions should be asked: if hospice is regarded as an innovation, are the adopter categories and the diffusion process described by Rogers applicable to hospice? How can members of each adopter category be identified relative to their adoption or rejection of hospice? Are these adopter categories to be found among various publics of hospice such as physicians, nurses, hospital administrators, and the general public? What traits distinguish members of each adopter category? For example, if innovators among the publics of hospice can be identified, along with their social and media characteristics, then specific marketing communications can be developed and media can be selected that will most effectively reach these innovators.

The Adoption Process

Adoption refers to the mental and behavioral processes leading to the use of a new idea, practice or product by an individual. It consists of the covert and overt stages an individual moves through from total unawareness of an innovation to final acceptance and use of the innovation. The traditional hierarchical adoption model consists of five stages: awareness, interest, evaluation, trial, and adoption (DeLozier, 1976). Deficiencies in this model led to the development of an alternate model by Rogers and Shoemaker, labeled the "paradigm of the innovation-decision process." The new model consists of four stages: knowledge, persuasion, decision, and

confirmation (Rogers and Shoemaker, 1971). At what stages in the adoption process are the various publics of hospice? Knowledge of what stage of adoption the public is in is necessary to develop effective communication programs designed for a particular public. For example, the general public may only be at the "awareness" stage, while physicians may be at the "adoption" stage. Each requires a unique marketing communication message if the communication is to be effective.

Opinion Leaders

Opinion leadership is the degree to which an individual is able to informally influence other individuals' attitudes or overt behavior in a desired way with relative frequency (Rogers and Shoemaker, 1971). In general, opinion leaders possess characteristics different from their followers. For example, they tend to have greater exposure to mass media than their followers; they are more cosmopolitan; they have higher social status than their followers; and they are more innovative (Rogers and Shoemaker, 1971). Relevant questions include: are there opinion leaders within the various market segments of hospice? If so, how can they be identified? What characteristics do they possess? What media do they attend to? What influence might they have on the diffusion of the hospice concept?

Evaluative Criteria

Evaluative criteria are those specifications used by the consumer to compare and evaluate products, brands, services, and ideas. They can be either objective or subjective. Two important characteristics of evaluative criteria include the strength of the criterion and the number of criteria used in reaching a decision (Engel, Kollat and Blackwell, 1973). One might ask: what criteria do the various publics use to evaluate care for the terminally ill and how important are these criteria? Knowledge of evaluative criteria can aid in the development of effective hospice services. For example, evaluative criteria used by physicians to evaluate hospice care may be very objective and rational, while the evaluative criteria of patients and family may be subjective and emotional. Health care administrators must recognize and deal with sometimes polar sets of evaluative criteria. This, in turn, dictates the types of marketing communications aimed at the target markets of hospice, and the types of hospice programs that are developed in a particular geographic area.

Awareness and Attitude Measures

What levels of awareness of the hospice concept exist among the various publics--physicians, nurses, hospital administrators, and the general public? Are attitudes toward hospice favorable or unfavorable among its publics? How strong are their attitudes, and how resistant are they to change? Once questions such as these are researched, effective marketing communications programs can be developed that meet clearly defined objectives and strategies. If levels of awareness are low and/or attitudes toward hospice are unfavorable, marketing communications can be developed to raise awareness levels and stimulate favorable attitudes.

The questions posed indicate the need for marketing research in several important areas regarding the hospice concept. For any marketing communications to be effective the initiator of the communication must understand the audience to whom it is directed. In the case of hospice, it is possible to define several publics or target audiences. To market the concept of hospice

effectively to each of these publics, it is first necessary to understand the process by which innovations such as hospice are diffused among the population. This should also include: (1) an analysis of hospice opinion leaders, (2) the process by which an individual adopts such an innovation, (3) the criteria an individual uses to evaluate an innovation such as hospice, and (4) awareness and attitude levels toward hospice within its various publics.

Many new services launched in the non-profit sector, such as new academic programs and new health services, fail because market size and response have been overestimated or the services' configuration and marketing are poorly designed and handled (Kotler, 1975). Only when marketing communication is based on reliable consumer research can an innovation such as hospice be effectively diffused; this is contingent on the application of sound marketing concepts in the development of hospice care.

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IMPROVE THE HEALTH CARE MACRO-SYSTEM THROUGH MICRO-MARKETING:
A PHYSICIAN/MARKETER'S VIEWPOINT

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ABSTRACT

The macro-marketing system that links medical consumers, providers, regulators and payors is perhaps more complex and difficult to manage than those involved with traditional consumer or industrial products. The complexities of the health care macro-marketing system are characterized through four sectors. Sector 1 in the system is composed of the INITIATORS of medical technologies and innovation such as medical research centers, universities, and the pharmaceutical firms as examples. Sector 2, the SUPPLIERS in the system, adapt the technologies and commercialize them for application in the medical delivery systems. Sector 3, the PROVIDERS, apply technologies which are made available to servicing the needs of the consumer market. Sector 4 is the health care CONSUMER who is the recipient of the end product of the systemic output which ideally is being targeted to provide the necessary diagnosis and treatment. Some threads traverse the entire system, these are the flows of payment at all levels (the patient seldom pays) and government regulations which affect activity in all sectors of the system. The application of marketing systems' concepts has the potential to reconcile differences in health care delivery including such dilemmas as cost containment, distribution, and equality. As such, systems thinking can help redefine the issues in light of free enterprise and governmental roles, as well as provide a basis by which the health care recipient may participate in health care to a great extent.

The Health Care Macro-Marketing System

The health care marketing system is one rife with almost overwhelming complexities. From a public policy perspective, there is a growing acceptance of the idea that medical care is the right of all citizens despite their ability to pay. The government is playing an increasing role in filling gaps between providers and indigent consumers. Consumer information pertaining to modern medical practice is lacking in most areas. The competency of the personal physician is usually taken for granted, as the public has no means by which to assess training, experience and education. Thus, the macro-marketing system that links medical consumers, providers, regulators and payors is perhaps more complex and difficult to manage than those involved with traditional consumer or industrial products.

The complexities of the health care macro-marketing system are illustrated in **Figure 1**. Sector 1 in the system is composed of the INITIATORS of medical technologies and innovation such as medical research centers, universities, and the pharmaceutical firms as examples. Sector 2, the SUPPLIERS in the system adapt the technologies and commercialize them for application in the medical delivery systems. Sector 3, the PROVIDERS, apply technologies which are made available to servicing the needs of the consumer market. These providers take on many forms, they include: hospitals, HMO's, individual practitioners, etc. Finally, Sector 4 is the health care CONSUMER who is the recipient of the end product of the systemic output which ideally is being targeted to provide the

necessary diagnosis and treatment. Some threads traverse the entire system, these are the flows of payment at all levels (the patient seldom pays) and government regulations which affect activity in all sectors of the system.

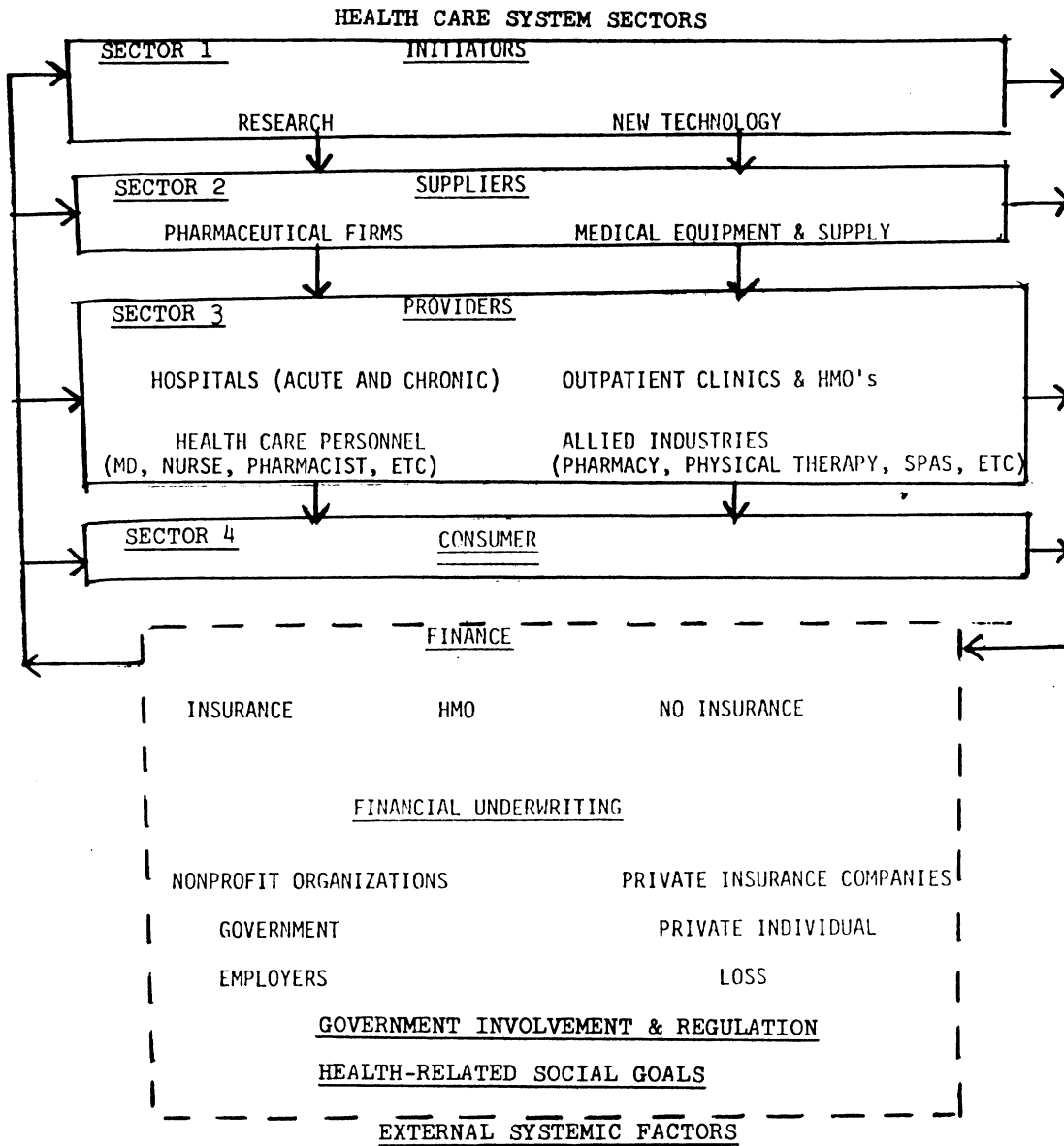
In discussing each of the Sectors and the way in which they operate, innovations originate from basic research and clinical trials. Often the advancing technology in nonmedical fields provides the impetus for the development of new applications in medicine. For example, the field of computerized tomography could not have emerged before sophistication in the computer and electronic fields provided the necessary hardware. Serendipitous discoveries by alert scientists have often opened the door to new breakthroughs that have a profound impact on all sectors of the health care system.

Health care equipment suppliers and pharmaceutical firms are intermediary steps between the innovators and practical applications. They invest a substantial amount of their profits on research and development of products that hold potential promise. They also devote a great deal of resources toward advertising in medical publications and television. Prescription medications are promoted by the use of personal sales in the form of representatives who call upon physicians and other health care personnel. The sales agent may attract the health care provider with a gift or social engagement. Recently, education of the health care provider by pharmaceutical houses has been a major effort. Persuasion of the physician that the product is effective and accepted by leaders in the field has received much emphasis. Visiting professors at many institutions are funded by contributions from pharmaceutical firms. Often articles from well-known figures in medicine are used to supplement product credibility and integrity.

The providers of health care range from a private practitioner, clinics, hospitals, or health maintenance organizations to faith healers and cult medicine. The way in which they provide health care is dependent on training and available medical supplies. A physician cannot order a diagnostic test or therapeutic modality which is not available to him. Furthermore, the educational experience of the provider may limit the services he or she is able to offer. A gastroenterologist trained prior to 1970 will have no experience in endoscopic retrograde cholangiopancreatography, for instance. Nurses who are not familiar with sterile technique and dressing protocols will not be able to safely assist in the delivery of parenteral nutrition. The cost and rate of technological advances has far outstripped the ability of the providers to administer up-to-date diagnoses and therapy. There is no medical center in the world that is able to provide all benefits of the latest technological advances.

The consumers of health care include nearly everyone in civilized society, except those who deliberately avoid intervention. Most of the United States population, however, is poorly qualified to judge the quality of care sought or received. The technological advances which have overwhelmed the providers of health care

FIGURE 1
ELEMENTS OF THE HEALTH CARE MACRO-MARKETING SYSTEM



exceed the understanding of the general public. The average consumer must, therefore, accept on faith the standard of care he or she receives as being the best available. Distrust of the medical profession has grown in recent years, leading many consumers to request second opinions or referrals to institutions with established reputations [17][18]. On the whole, however, the population is ignorant of most medical concepts, and are easy prey for unscrupulous providers of health care. Furthermore, they are willing participants in "fad" therapies that make unfounded promises.

The fuel which sustains the health care machinery includes private insurance companies, government programs, and direct payment from individuals. Organizations such as the Easter Seal Foundation or American Heart Association usually contribute to research of a specific disease or group of disease processes. These monies are most commonly funneled into research rather than patient care. HMO's derive funding from both patient and employer. Discrepancies arising from the fee requested by the provider, and that paid by a third-party carrier, are either compensated by individual patient supplements or deducted as a loss by the provider.

Systemic Disequilibrium in Health Care Markets

A superficial glance of the health care marketplace reveals a deceptively good balance between different sectors. Careful scrutiny, however, reveals significant imperfections at all levels. Funding of research is nearly always skewed toward a few, select major efforts, leaving other equally important areas with minimal support. Medical equipment suppliers (lumpy capital) offer instruments that are too expensive for small centers, reducing both diagnostic and therapeutic efficacy of the providers in that region. Rarely are all subspecialty areas represented in one community, resulting in gaps in care which are often filled by unqualified individuals. Consumers lack the knowledge to select appropriate medical care, relying on word-of-mouth, appearance of the health care facility, or other irrelevant and misleading criteria.

True competition rarely occurs in the medical profession. Despite increased numbers of physicians educated in the past decade, technology has produced new subspecialties requiring special expertise and knowledge, narrowing the capabilities of each provider. This is true not only for physicians, but also for nurses (nurse specialty practitioners), dieticians (diabetes, renal), pharmacists (drug interaction, special formulation), and others. Physicians with subspecialty training can always assume the role of a primary general practitioner if an overabundance of one subspecialty exists. Less adaptable medical specialties such as general surgery have suffered the most. There is a limited number of gallbladders, stomachs, and colons which require operative therapy, and a steadily increasing number of surgeons. Furthermore, many previously surgically treated diseases (such as peptic ulcer disease, gall stones, and colonic polyps) are becoming amenable to medical therapy. Operations done with minimal indications may actually lower the standard of health care instead of improving it.

Alternatives to market failure (lumpy capital, information gaps, and externalities in the health care industry) include taxation, regulation, and subsidies. The government is active in subsidy programs in an ever increasing manner. Indeed, plans for comprehensive health care insurance have become a major political issue. While proponents see this avenue as the only workable solution, the degree and means of implementation vary.

The regulation of health care is also progressing rapidly. Limitations on hospital beds and services, and more rigid accreditation standards dictate the quality and quantity of available services. The fee structure of insurance carriers and governmental reimbursement often defines the types of services offered, and absolute amount of compensation redeemable.

Attempts to upgrade medical standards through peer review, continuing medical education requirements, recertification, and new subspecialty boards have been of some success. However, the level of quality varies dramatically from one locale to another. Hence, peer review groups and continuing medical education requirements on a state or local level hold the best promise of regulation currently. These modes of regulation would ideally prevent the practice of sophisticated procedures and therapies by the unqualified practitioners. Legally, however, any licensed physician in most states has the prerogative (limited by hospital staff regulations) of performing cardiac or plastic surgery, or other sophisticated diagnostic or therapeutic modalities, regardless of previous experience or training.

The pharmaceutical industry has suffered by over-regulation. Often the introduction of new drugs which have great potential benefit is delayed unnecessarily by the arduous procedures of the Food and Drug Administration, when their efficacy and safety has been adequately proven in foreign trials. Many formulations are withheld from the market because pharmaceutical firms are reluctant to invest the time and money required to obtain F.D.A. approval. Drugs that are available are often overpriced because of the extensive research and clinical trials required prior to their introduction.

Of all economic models applicable to the health care industry, monopolistic competition appears to be the best suited to the current situation in the United States. Pure competition is impossible because of factors discussed previously in regard to market failure. A federal monopoly consisting of complete socialization of medicine is not an efficient alternative if the experience of historical models (Canada, United Kingdom) are to be considered.

Institutions of medical education usually fall outside the sphere of monopolistic competition. The cost, manpower, and facilities necessary to educate health care professionals remove these centers of learning from the competitive mainstream. On a volume basis, they are not a threat to oligopolies or the Health Maintenance Organizations, private practitioners, or others. They act as referral centers for unusual cases requiring the expertise of researchers and specialists not available in the commercial setting. They function at the periphery of the mainstream of medical care.

The Role of Micro-Marketing Strategy to Improve the Macro-System

Despite obvious differences between toothpaste or cameras and health care, the latter would surely benefit from historical marketing experiences gained from the former. While many health care personnel and agencies dislike the idea that medicine is a business, analysis of the medical marketplace reveals undeniable evidence to support this concept. Current inefficiencies can be reduced by treating the practice of medicine as a business, utilizing proven business principles for planning and problem solving. The failure to accept the tenet may lead to increased governmental control, a consequence which would have

an adverse impact on both the provider and the consumer.

In order to implement marketing principles, specific aspects of the product must be considered. The "marketing mix" traditionally applied to the business world, consists of price, product, promotion, and distribution. These four aspects of commercial marketing are appropriate to the health care fields as well. The product in this case, the service of health care, is defined by the available technology, as well as the needs of the target population. The latter has been defined by marketing research discussed earlier. For example, if the service area involved a predominantly black inner-city population, the focus of service might be in either sickle-cell anemia or hypertension. The advances in medical research and financial backing (government, private industry, philanthropists) would dictate the sophistication of care offered. The quality of health care personnel would be determined by medical certification boards and regional peer review boards. Feedback from consumers is accomplished by yearly random sample surveys and the U.S. Census report. Patient representatives and complaint offices, nonexistent in most hospitals ten years ago, are becoming instrumental in effecting changes [25].

The price aspect of the marketing mix is currently under increasing surveillance by government authorities. The cost of identical services may vary up to 100% within a given locale [26]. While patients are often price insensitive because of third-party payment, insurance carriers are very price sensitive and have initiated a major role in the market pricing scheme. Since patients may be unwilling or unable to supplement the standardized reimbursement fees of the third-party carriers, providers are often forced to accept their payment alone. This results in a relative consistency in the pricing structure. However, prices for services not covered by insurance (such as abortions, plastic surgery, out-patient visits) are relatively more competitive [19]. With the development of health care oligopolies (Humana, Hospital Corporation of America), and monopolistic competition, self-regulation of pricing may follow. Price elasticity is the key. This is certainly operational in communities of two or more competing hospitals. In smaller communities not large enough to support an oligopoly branch hospital, proprietary hospitals continue to administer care at a rate which their consumers consider equitable. Whether increasing federal controls will have an impact on this type of pricing remains to be seen.

Promotion is an essential element of the marketing mix. It has been shown repeatedly that the consumer attitude toward products is the most important factor in purchase behavior [2]. Promotion may be accomplished by publicity, advertising, and personal sales. The hospital is fortunate in having news media coverage for medical miracles. Physicians, nurses and pharmacists may also gain free public recognition because of unique or particularly effective practices.

Advertising has become an integral part of health care in recent years. Since the Supreme Court ruling in favor of advertising freedom for professionals, there is no legal impediment to this promotion technique [18]. However, strong sentiment against this measure still exists throughout the ranks of health care personnel. This viewpoint arises from the tenet that health care is not to be considered a business proposition. Consequently, physician advertisement is still largely confined to notices of service availability usually circulated only to associates, not to the public. Hospitals, especially investor-owned conglomerates, have developed advertising campaigns to attract both patients and physician staff members. Out-patient

surgery and immediate care emergency facilities in the Humana Corporation are examples of this ploy. A new wrinkle in the scheme is advertising to the patient. Prior to 1970, nearly all commercial efforts on the part of the hospital administration were aimed at the physician who would admit patients to their facility or utilize ancillary care and laboratory tests. Recently, however, numerous advertisements about unique services and tasteful facilities have been advertised to the consumer of health care. A steak and champagne dinner for the parents of the newborn and private rooms with individual toilet facilities are examples. While hospitals still devote most of their efforts to physician marketing, the trend toward consumer satisfaction is quite apparent [25]. There is a definite focus on non-physician referred consumer health, including evening clinics, emergency care, and outpatient surgical procedures. Within the health care fraternity, there is considerable advertising interplay. Pharmaceutical and medical equipment firms spend a substantial portion of their earnings on postal advertising to physicians and other persons responsible for purchase of their products. Gifts and gimmicks bearing commercial labels are ubiquitous in most hospitals and clinics.

Personal selling is currently the predominant mode of promotion in the health care industry. Public relations offices are often found in medium to large-size hospitals. Although it might be offensive to some to consider the physician's bedside manner to be a form of sales promotion, experience has shown that the personality, rather than the medical competency attracts patients most. Many new patients are referred from satisfied old patients. Public talks by physicians or participation in public clinics, immunization drives, or blood donor banks are important as well. The hospital may promote good will by contributing to public charities, allowing explorer scouts to meet within its premises, or holding public educational endeavors such as cardio-pulmonary resuscitation courses. Strictly speaking, the latter are personal selling techniques, but they operate on the same principles.

Distribution of health care availability is a major concern to the nation at large. Many rural communities face a critical shortage of health care personnel and facilities. Recruitment of medical students from such areas in the hope that they will return after training has met with little success. Legal battles are currently in progress in states such as Kansas, where scholarship recipients are required to practice in their area of origin. Within a given region, the distribution of services may be unequal and cost ineffective. In some cities, for example, hospitals located in close proximity offer the same services which could be handled more efficiently in either one or the other. Examples include computerized tomography, coronary angiography, and obstetrics. Other than governmental regulations, the only foreseeable solutions are cooperation, negotiation, and compromise. The operation of health care facilities in financially undesirable areas such as the inner city or rural region has traditionally been through governmental means at some level. Residency training programs are becoming more active in the health care of the indigent and isolated, a trend that shows considerable promise. Incentives such as free office space, equipment, salary, housing, and medical loan repayment have attracted many young and enthusiastic physicians to underdeveloped areas.

CONCLUSION

Historically, the health care industry has been considered outside the mainstream of business. However, there is good evidence that it would benefit from sound economic and marketing principles which have been developed and proven in the free enterprise system.

Several areas of health care deserve special consideration in marketing. Consumer education has been, and continues to be a fertile area in health care marketing. Campaigns to warn of the risks of smoking, alcoholism, and hypertension have been instrumental in disease prevention and early treatment. Health hazards are demarketed. In contrast to most products, the consumer is dissuaded from their use. Public information regarding self breast examinations, warning signs of illness, and immunizations has had a significant impact on the general national health.

Commercial firms have taken advantage of medical studies in marketing low cholesterol, high-bulk diet foods, and weight reduction plans. Health spas and exercise equipment have been promoted in record amounts. These products are commonly marketed using image techniques. They impart the picture of youth, health, and exhilaration.

While nonprofit and government-sponsored organizations have been dominant in health care education, hospitals and clinics have been involved as well. Free urine tests for diabetics, contraceptive information, and blood-pressure measurements have been offered as services to the community by many hospitals. Hospitals are also using video cassettes to explain disease states, procedures, and therapies to the patient.

Marketing concepts have the potential to reconcile differences in health care delivery including such dilemmas as cost containment, distribution, and equality. As such, they can help redefine the issues in light of free enterprise and governmental roles, as well as provide a basis by which the health care recipient may participate in health care to a great extent.

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AN EMPIRICAL INVESTIGATION OF THE RELATIONSHIPS
BETWEEN PERCEIVED RISK AND THE EXPERIENCE OF ORGANIZATIONAL BUYERS

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Abstract

This study investigated the relationships between perceived risk and job experience in an organizational buying context. Specifically, the study determined if organizational buyers with varying amounts of purchasing experience, perceived significantly different amount of risk, and considered some risk types and risk reduction strategies to be more important than others.

Introduction

A great deal of research has been generated on the concept of perceived risk since it was first introduced. While most of this research has been conducted in the context of consumer behavior, substantial amount of study has been directed toward organizational buyer behavior. These studies have focused on the identification of (1) the amount of risk perceived, (2) type of risk perceived, and (3) the risk reduction methods used. (Cardoza and Cagley, 1971; Levitt, 1967; and Webster, 1970). Additionally, some studies have attempted to identify correlates to these same areas (Cardoza, 1968; Copley and Callom, 1971; Sweeney, Mathews and Wilson, 1973; and Wilson, 1971). One such correlate which has received very limited investigation is the experience level of organizational buyers. Specifically, this study determined if buyers with varying amounts of purchasing experience perceived significantly different amounts of risk and considered some risk types and risk reduction strategies to be more important than others.

Conceptual Foundation

Perceived Risk

Raymond A. Bauer introduced perceived risk in 1960 when he proposed that consumer behavior could be viewed "as an instance of risk taking." In his original conceptualization, Bauer suggested that the perceived risk construct contained two primary structural dimensions: (1) Uncertainty; and, (2) adverse consequences. Donald F. Cox (1967), offered a more definitive description of these two dimensions when he noted that "the amount of perceived risk involved in any behavioral act is assumed to be a function of two factors: (1) The amount that would be lost (i.e., that which is at stake) if the consequences of the act were not favorable and, (2) The individual's subjective feeling or degree of uncertainty that the consequences will be unfavorable."

While both Bauer's and Cox's conceptualizations of perceived risk were in the context of consumer behavior, the construct is viewed by most organizational buying researchers as being comprised of the same two components, uncertainty and adverse consequences (Webster and Wind, 1972).

Uncertainty Component. Robinson, Faris, and Wind (1967), indicated that the industrial buyer is faced with two major types of uncertainty: (1) Uncertainty about the reactions of others to his decisions. This might be described as uncertainty concerning the consequences of his decisions. (2) Uncertainty due to lack of information concerning a) the actual expectations from his job, and b) the possible alternative courses of action.

Consequences Component. Webster and Wind (1972), noted that two types of consequences will be important determinants of the amount of risk perceived by the organizational buyer: (1) Concern about adverse consequences caused by a product's or vendor's failure to perform satisfactorily; and, (2) concern about the reactions of others to his decisions, the psychosocial consequences.

Experience

The experience construct has been studied in rather limited contexts in recent years. Yoram Wind (1970), related experience to industrial source loyalty while Hahn and Vana (1973), investigated the value structure of buyers with varying amounts of purchasing experience.

While the results of these studies provided valuable contributions to the organizational buying literature, they either defined experience differently than that used here or their study was not directly related to perceived risk. In this study, experience was operationalized as the amount of time, as measured in years, a buyer has spent performing the purchasing function.

Hypotheses

In terms of the experience of organizational buyers, Sheth (1973) noted that perceived risk is linked to experience by application of psychological learning theories. Extended, this suggests that as a buyer gains experience, job related proficiency and confidence should increase because of the learning that has taken place.

Combining the effect of varying amounts of experience with perceived risk further suggests that buyers low in experience should perceive a high amount of risk when making purchase decisions. Therefore, as an organizational buyer's experience increases, the amount of risk perceived should decline because of the learning that has taken place. It is also proposed that the amount of risk perceived will continue to decline until a buyer reaches some point or level of experience, at which time the amount of risk perceived will increase.

A partial and tentative explanation for these changes is provided by "the self-interest motive" of Thomas Hobbes (1887). Hobbes' thesis was that an individual (the buyer) tends to act in such a manner so as to preserve (current position) or enhance his own well-being (promotion, status, etc.), but not put himself in jeopardy (loss of job, status, etc.). This suggests that a buyer, at different points in his/her career, is in part motivated by the desire to improve or maintain his/her position based upon the probable success or failure of his/her purchasing decisions. It is further suggested that a buyer becomes more aware and/or concerned with purchase decisions which contain uncertainty and have the potential for rendering adverse consequences (e.g., the selection of a "new" vendor who offers potential cost savings) when he/she has the most to gain or lose.

Numerous authors, researchers, academicians, etc. have acknowledged the presence and importance of the Hobbesian viewpoint operating in organizational buying. Reed (1936), labeled "the self-interest motive" a form of

defensive behavior. Robinson, Faris and Wind (1967), referred to "the self-interest motive" as "the achievement motive" and noted that it may partially explain a portion of industrial buyer behavior.

Buyers, being human, seek to increase their chances for promotion, status, and recognition without taking too many risks. Moreover, it can be hypothesized that buyers tend to make those decisions which they perceive to have the best chances of improving their present situations . . .

In their discussion of purchasing's organizational structure and its subsystems, Webster and Wind (1972) noted:

The status system assigns persons to buying roles and defines behavior appropriate both in and toward those roles. The rewards system defines payoffs to the individuals for certain behaviors and decision outcomes and, most importantly, interacts with the authority subsystem of the buying organization might interact to determine rewards and punishments to organizational actors for taking the degree of risk implicit in a buying decision. It is often the case that the penalties for being wrong are perceived by organizational actors as greater than the rewards for being right.

In addition to the changes that occur in the amount of risk perceived by buyers with varying amounts of experience, it is proposed that the importance of various risk types and reduction techniques will also change as the buyer's experience level varies. The changes, like those just described, should be the result of experience, and associated changes that occur in a buyer's need hierarchy or motivational structure.

Based upon the preceding discussion, the following hypotheses were developed for testing:

H1: There is a curvilinear (U-shaped) relationship between an organizational buyer's level of experience and the amount of risk perceived by the buyer in a given purchase situation.

H2: In a given purchase situation, as an organizational buyer's level of experience increases, the importance of various types of risk will vary.

H3: In a given purchase situation, as an organizational buyer's level of experience increases, the importance of various types of risk reduction strategies will vary.

Research Design

The study's design included the use of two mailed questionnaires. Each questionnaire contained a description of one of two hypothetical purchasing situations. After dividing the sample population into two groups, each group was mailed one of the questionnaires. The situations used represented a new task buy and a modified rebuy type of purchase.

After reading a hypothetical purchasing problem, the buyer indicated the amount of certainty and danger he/she had perceived on a four-point Likert type scale. A measure of perceived risk was then obtained by multiplicatively combining the certainty and danger ratings (see Table 1). This technique is similar to that originally proposed by S. M. Cunningham (1967) and subsequently employed by a number of researchers. A review of the literature indicated that while other measures of perceived risk exist, this form of measurement is

the most widely used and accepted. In addition, Copley and Callom (1971) noted that, "This method has been assumed in the past to be reasonably indicative of the perceived risk variable."

TABLE I
CONSTRUCTION OF THE PERCEIVED RISK SCALE

CERTAINTY SCALE	weight	CONSEQUENCES SCALE (DANGER)			
		A Great Deal	Some	Not Much	None
		(1)	(2)	(3)	(4)
Very uncertain	(1)	1	2	3	4
Somewhat uncertain	(2)	2	4	6	8
Somewhat certain	(3)	3	6	9	12
Very certain	(4)	4	8	12	16

Respondents were then asked to respond to a series of statements representing the various types of risk and risk reduction techniques which had been identified in the literature. Risk types identified were the following: (1) Financial; (2) performance; (3) physical; (4) psychological; (5) social; (6) economic; (7) opportunity; (8) time. (Cardoza and Cagley, 1971; Copley and Callom, 1971; Cunningham, 1967; and Webster and Wind, 1972). These sources also cited five major risk reduction strategies: (1) Information acquisition and processing; (2) goal reduction; (3) investment reduction; (4) loyalty; and (5) decision avoidance. Four-point Likert-type scales were used to measure the importance of the various risk types and risk reduction strategies.

Because of the nature of the study's hypotheses, at least three experience groupings were required. The three experience groupings used were labeled low, moderate, and high. The low experience group was defined as having fifteen years or less of purchasing experience, while the high experience group was defined as having more than twenty-five years of purchasing experience. The moderate experience group was defined as having between sixteen and twenty-five years of experience.

Results

Respondents to the survey questionnaires were the members of six purchasing management associations in the state of Arkansas, Louisiana, Mississippi, Oklahoma, and Texas. A systematic random sampling technique was used in the assignment of the two questionnaires. Of the 1205 questionnaires mailed, 438 usable questionnaires were returned, representing a usable response rate of 36.3%. Table II presents a summary of respondents by experience level and purchase situation.

TABLE II
EXPERIENCE LEVEL SUMMARY OF RESPONDING BUYERS

Purchasing Experience (Years)	Purchase Situation		Total N
	NT	MR	
15 years or less	127	157	284
16 - 25 years	40	36	76
More than 25 years	38	40	78
TOTAL	205	233	438

The primary statistical method used to analyze the data was Analysis of Variance (ANOVA). Basically, ANOVA determines whether inferences about possible population differences are warranted on the basis of the analysis of sample data. This was accomplished by using the General Linear Models (GLM) procedure in SAS. The GLM procedure was used because it allows analyses such as ANOVA to be performed on data that have unequal cell sizes, such as that obtained in this study.

The ANOVA model examined in this study was the following:

$$Y_i = B_0 + B_1X_{i1} + B_2X_{i2} + B_3X_{i1}X_{i2} + E_i$$

In the model, X_{i1} is the purchase situation, X_{i2} is the level of experience, $X_{i1}X_{i2}$ is the interaction effect of the two independent variables, and E_i is the error term or the amount of variance unaccounted for by the model's predictor variables. The study specifically used a 2 x 3 factorial design; the study's independent variables were the hypothetical purchasing scenarios (one representing a new task buy and the other representing a modified rebuy) and the organizational buyer's level of experience (3 levels or categories).

Table III presents the results of an analysis of variance performed on the perceived risk scores of all respondents. A main effect for the purchasing scenario manipulation was found to be significant, $F(1,432 \text{ degrees of freedom}) = 23.64$, $p < .0001$. Subjects who read the new task buy scenario perceived significantly more risk (mean score of 5.27) than did the subjects who read the modified rebuy scenario (mean score of 7.00). This significant difference demonstrated the effectiveness of this manipulation in inducing differential amounts of perceived risk.

TABLE III
ANOVA RESULTS OF PERCEIVED RISK SCORES

Source	df	MS	F-Value
A (Type of situation)	1	345.26	23.64*
B (Experience Level)	2	49.74	4.79*
Linear	1	.77	.07
Quadratic	1	84.09	8.11
A x B (Interaction effect)	2	9.43	.91
Error	432	10.37	

*p .01

A main effect for the experience variable was also found to be significant, $F(2,432 \text{ degrees of freedom}) = 4.79$, $p < .0087$. The results of the Duncan's Multiple Range Test indicated that low and high experience buyers did not perceive significantly different amounts of risk (mean scores of 6.01 and 5.87, respectively). However, buyers with moderate experience perceived significantly less risk (mean score of 7.13) than the two other groups. Such a finding is consistent with the study's hypothesized relationship.

TABLE III CONTINUED
RESULTS OF DUNCAN'S MULTIPLE RANGE TEST
PERFORMED ON PERCEIVED RISK SCORES

EXPERIENCE LEVEL	TYPE OF PURCHASE SITUATION		
	NEW TASK BUY	MODIFIED REBUY	TOTAL*
Fifteen Years or Less	5.11 A	6.76 A	6.01 A
Sixteen - Twenty-Five	6.33 B	8.03 B	7.13 B
More than Twenty-Five	4.22 A	7.35 A	5.87 A
TOTAL	5.27 A	7.00 B	

Perceived risk scores range from 1 to 16, with 1 representing the highest amount of risk and 16 the lowest.

*Scores that do not share common subscripts differ from one another at the .05 level.

In order to determine whether the relationship between experience and the amount of risk perceived was linear or curvilinear (as hypothesized), a trend analysis was performed. A significant quadratic trend was found in the new task buy situation, $F(1,202 \text{ degrees of freedom}) = 6.67$, $p < .00105$. Although not significant at the .05 level, a marginally significant curvilinear trend was found in the modified rebuy situation, $F(1,230 \text{ degrees of freedom}) = 2.15$, $p < .1438$.

An analysis of variance was then performed on all risk type scores. Significant main effects for the experience variable (at the .05 level) were found for four of the ten types of risk. No significant main effect for the type of purchase situation or interaction effect was found. A summary of the results for which significant differences were found is presented in **Table IV**.

TABLE IV
RESULTS OF ONE-WAY ANOVA
PERFORMED ON RISK TYPE SCORES

RISK TYPE	SS	DF	MS	F	SIG of F
E - "Causing you to waste time or be inconvenienced by having to locate another source of supply"	5.36	2	2.68	3.38	.0348
G - "Creating problems or damaging purchasing's relationship with other departments"	7.84	2	3.74	4.13	.0167
H - "The purchase decision adversely affecting your job performance and evaluation"	6.96	2	3.48	3.83	.0224
J - "Embarrassment to your purchasing organization within the company"	5.94	2	2.97	3.38	.0349

The experience variable had three levels, therefore, three means, so Duncan's multiple range tests were conducted to determine which means were significantly different from the others. The results of these tests are presented in **Table V**.

TABLE V
RESULTS OF DUNCAN'S MULTIPLE RANGE TESTS
PERFORMED ON RISK TYPE SCORES

Risk Types - Label	Experience Level*		
	Low	Moderate	High
E - Time Loss	2.45 A	2.74 B	2.42 A
G - Social Loss	2.52 A	2.87 B	2.61 AB
H - Psychological Loss	2.72 A	3.05 B	2.76 AB
J - Social Loss	2.72 A	2.99 B	2.97 AB

*Importance scores range from 1 to 4 with 1 being most important and 4 the least important.

An analysis of variance was also performed on fifteen risk reduction strategies. Significant main effects for the experience variable were found (at the .05 level) for three risk reduction strategies. No significant main effect for the type of purchase situation or interaction effect was found. A summary of the results for which significant differences were found is presented in **Table VI**.

TABLE VI
RESULTS OF ONE WAY ANOVA PERFORMED ON
RISK REDUCTION STRATEGY SCORES

Risk Reduction Strategy	SS	DF	MS	F	SIG of F
B - "Arrange a visit to supplier's plant or home office"	6.06	2	3.03	4.87	.0081
M - "Depend on the reputation of the firm"	5.08	2	2.45	3.48	.0316
N - "Discuss the problem with buyers in your purchasing organization who may be more experienced or knowledgeable"	4.92	2	2.46	3.93	.0203

Table VII presents the results of the Duncan's Multiple Range Tests performed on the data to determine which

means were significantly different from the others.

TABLE VII
RESULTS OF DUNCAN'S MULTIPLE RANGE TESTS
PERFORMED ON RISK REDUCTION STRATEGY SCORES

Risk Reduction Strategy	Experience Level*		
	Low	Moderate	High
B - On Premise Visit	1.60 A	1.36 B	1.32 B
M - Reputation of Firm	2.26 A	2.11 AB	1.89 B
N - Internal Information	1.59 A	1.84 B	1.83 AB

*Scores that do not share common subscripts differ from one another at the .05 level.

Managerial Implications

Findings from this research have potential application to decision-making efforts of industrial marketing and purchasing managers. Some of the specific managerial benefits of the research are: (1) Improved selling efforts; and (2) increased efficiency in purchasing efforts.

Industrial marketing managers can improve their company's or product's competitive position through an increased understanding of the organizational buying process and individual buyer behavior specifically. This study has determined that a significant relationship exists between the organizational buyer's level of experience and perceived risk. It was found that buyers possessing low and high levels of purchasing experience perceive significantly higher amounts of risk than do moderately experienced buyers. Knowledge of this finding, combined with the identification of the most important types of risk and risk reduction strategies for each experience level group, should provide marketing managers an opportunity to adjust elements of their marketing mix to better meet the needs of the individual buyer. Such action should enhance the supplier's competitive position and/or facilitate their adoption as a source of supply.

The identification and understanding of the experience/perceived risk relationship should allow purchasing managers to improve the efficiency of the purchasing operation. Purchasing management could take several steps to ensure that such a relationship does not adversely affect the buyer's performance. For example, training sessions designed to facilitate the learning process of buyers low in purchasing experience could be conducted in such areas as vendor evaluation, value analysis, negotiation, etc. Special sessions could be conducted for all buyers that specifically address perceived risk, its potentially harmful effects on purchasing activities, and methods of coping with or reducing risk. For buyers possessing high levels of purchasing experience, purchasing managers could provide them with appropriate support (e.g., group decision-making or top management support in high risk purchase situations, frequent performance feedback, assignment to a lower risk area, etc.).

Knowledge of the experience/perceived risk relationship should contribute to the achievement of both the selling and purchasing organizations' goals. With a better understanding of the nature of the experience/risk relationship, appropriate steps could be taken by both organizations to ensure their continued success. With the costs of marketing efforts increasing at a rapid rate due to inflation, competition, regulation, etc., the marketing manager must ensure that the marketing mix being provided is the best possible. Likewise, with the cost of purchased items representing a major part of the finished goods' total cost, it is imperative for purchasing management to ensure that "optimal" purchase decisions are being made. Knowledge of the experience/

perceived risk relationship can contribute to the achievement of each of these objectives.

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How Different Buying Center Members Influence Different Purchasing Phases

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Abstract

This research examined both the composition of the buying center and the variation in the relative influence of those members throughout purchase phases. The results indicated that variation in relative influence of several buying center members was significantly related to the purchase phase. The results have important implications for the development of effective marketing strategies.

Introduction

One of the most prominent developments in the area of organizational or industrial buyer behavior in the past 15 years has been the development of buying process models (Laczniak, 1979). These attempts by researchers to present such models (Sheth, 1973, Webster and Wind, 1973) have provided frameworks for recent research efforts. Although these early models were not based upon a large body of empirical research, they did provide a comprehensive view of variables that may influence the purchasing decision process. While many variables are included in these models, two are hypothesized to be of major importance: the buying center and phase of the purchase process (Robinson, Faris, and Wind, 1967, Webster and Wind, 1973). These variables may have a significant impact on the amount of influence possessed by participants in the purchasing decision process. This concern is the basic rationale for conducting the study described in this article.

Research Purpose

The industrial buyer behavior literature yields few studies which have attempted to empirically examine the major constructs of the Webster and Wind (1973) organizational buyer behavior model. It appears that relationships between the major variables incorporated by Webster and Wind are relatively unknown. This study examines the relationship between two variables central to the model: the buying center and the purchase phase. Of particular interest is both the buying center composition and the relative influence of the various buying center members in purchase phases.

Thus, the general purpose of this research effort is to provide empirical validation for constructs in the Webster and Wind model. More specifically, the research attempts to identify the influence of various buying center members (e.g., purchasing; production; engineering; etc.) in four different purchase phases (need identification, establishment of specification, identifying buying alternatives, and supplier selection).

The following sections review previous research findings related to this study. Research related to the buying center is examined first and research concerning purchase phases is examined second.

The Buying Center

The Concept of the organizational buying center has been defined as "all organizational members involved in the purchase decision" (Webster and Wind, 1973, p. 17).

This definition was developed by recognizing that the purchasing agent is not the sole decision maker in most purchasing decisions. Therefore, as the specific purchasing situation varies, organizational members other than purchasing may exert considerable influence in reaching the final purchase decision. Accordingly, Bonoma and Johnston (1978) suggest that the purchasing agent has final authority in only 25-40% of all purchases, and Wind (1978) suggests that the responsibility for many buying decisions is frequently shared among two or more organizational roles. Determining which organizational functions may be involved in the buying center is made possible by reviewing previous research efforts in this area.

Strauss (1962) recognized that a purchasing agent's relationships are almost entirely lateral and involve dealing with other departments of approximately equal status. In Strauss' study, production, purchasing, engineering, and scheduling departments were identified as commonly involved in the purchasing process. Most importantly, Strauss' recognition that a purchasing agent's relationships were almost entirely lateral contributed to an understanding of the influence process.

Work by Duncan (1965) supported the above Strauss study by quantitatively analyzing lateral influences actually being exerted in the purchase decisions of 44 firms. Duncan grouped purchase decisions into three categories: what to buy, how much to buy, and from whom to buy. "What to buy" essentially reflects quality considerations such as the appropriate grade of raw material. "How much to buy" is basically an inventory consideration, and "from whom to buy" is a source of supply decision. Duncan's findings indicated that the relative amount of influence of each department does tend to vary as the purchase process passes through sequential phases. While Duncan's published research did not list all the organizational functions that were involved in the purchasing process, engineering, production, and purchasing were shown to be the departments exhibiting the most dominant influence.

Buckner (1967) also attempted to identify which organizational roles are involved in the buying center and found that the participants in the purchasing process varied at each stage of the process. It was also found that several groups of individuals shared responsibility at each stage and that responsibility rarely rested with a single individual. Purchasing, operating management, and general management were found to be most frequently involved in the purchase process.

A study conducted by Scientific American (1969) also examined which organizational roles played more than an occasional role in three purchasing stages of need determination, product determination, and supplier selection. The study indicated that involvement by corporate policy and planning, design and development engineering, production engineering, research, finance, sales, purchasing, quality control, and additional sources both internal and external to the company was common. Engineers, researchers, and purchasing agents were shown to participate in the process the most often.

Sources of influence on purchasing managers in the machine tool industry were studied by Meier (1972). His research indicated that the top manager of engineering exerted the most influence and that the top manager of production was second most influential. Such findings supported earlier research findings concluding that both the production and engineering functions are important members of the buying center.

Research by Cooley, Jackson, and Ostrom (1977) also supported these earlier studies. In this case, engineering was found to be dominant in product selection.

In a 1978 study by Wind, individuals were asked to rank the importance of ten organizational roles in each stage of the Buygrid Analytic Framework (Robinson, Faris, Wind, 1967) for the purchase of scientific and technical information. Wind's results suggest that in a large number of cases, the responsibility for many of the buying decisions is shared among two or more organizational roles. The purchasing manager and the research and development manager were the two most important roles.

Although the fact may have been intuitively obvious for many years, the above studies provided the first empirical evidence that the purchasing process is diffused throughout the organization. That is, purchasing is a complex process that involves many activities and organizational roles. Bonoma and Johnston (1978) have described the purchase process as a "negotiated settlement" among individuals both internal and external to the organization.

Purchase Phases

A second concept emphasized in the early models is the view of purchasing as a process composed of numerous decision steps or phases. One classification scheme identifies the following eight phases of the purchase process (Robinson, Faris, and Wind, 1967, p. 14):

1. Need recognition
2. Determination of solution characteristics
3. Description of solution characteristics
4. Search for sources
5. Acquisition of proposals
6. Evaluation of proposals: source selection
7. Selection of order routine
8. Performance evaluation

Although these eight phases are difficult to operationally differentiate, they do indicate that the purchasing process is actually composed of sequential decisions which may require different types of information at each stage. Therefore, it is possible that different organizational roles may be involved at each stage of the decision process. Although not all of the research studies discussed below have used the eight phases, the same idea has been employed by including sequential phases of some type.

Weigand (1966) examined the degree of purchasing responsibility as perceived by purchasing and other functional departments in six phases of the purchasing process. The six phases of the purchasing process included: 1) design of the product, 2) its performance life, 3) its cost of application, 4) naming the specific supplier, 5) assessing the engineering help available from suppliers, and 6) reducing rejects. Weigand's research indicated that the influence of purchasing varied significantly throughout the six phases.

Buckner (1967) also attempted to identify which organizational roles are involved in the various stages of the purchasing process. This study found that the participants in the purchasing process varied at each

stage of the process and that several groups of individuals shared responsibility at each state. Responsibility rarely rested with a single individual.

The study conducted by Scientific American (1969) also examined which organizational roles played more than an occasional role in three purchasing stages (need determination, product determination, and supplier selection). Involvement by many organizational members was common at various stages of the purchasing process.

Utilizing two purchasing phases in analyzing the relative influence of purchasing, production, and engineering departments, Cooley, Jackson and Ostrom (1977) found engineering dominant in the production selection decision and purchasing dominant in the supplier selection decision. Utilizing the eight phases proposed by Robinson, Faris, and Wind (1967), Doyle, Woodside and Michell (1979) found suppliers perceiving a significant variation in buying center membership throughout the phases of the purchase process.

Lacznik (1979) included four phases of the purchase process in the study of hospital purchasing. Although studying only 11 new buy purchases through 50 personal interviews, Lacznik found that the involvement of five organizational groups varied significantly throughout the four stages.

Although these studies employed different purchasing phases in their research design, results were consistent. Variations in both buying center membership and the relative influence of the participants in the purchasing process were found in the sequential buying phases. Since previous research utilized differing numbers of phases and found differentiating buying center members influence, it does not appear that the number of phases is critical. Instead, inclusion of multiple phases is sufficient to account for variation in both buying center membership and relative influence of these members. Therefore, inclusion of multiple phases in any organizational buyer behavior research endeavor is necessary to capture the dynamic nature of the industrial purchasing process.

Methodology

Purchase Phases

Each respondent in this study was presented with a brief description of one of the four phases used by Lacznik (1979) and was asked to evaluate the relative influence of buying center members for that phase. The four phases that were used are presented below and followed by their descriptions used in the study.

Need Identification - An important step in purchasing is identifying that a need exists. This involves all decisions related to need identification. Indicate how much influence each organization function possesses in identifying that a need exists...

Establishment of Specifications - An important step in purchasing is the establishment of specifications. This includes all decisions related to determining product specifications, desired quality level, etc. Indicate how much influence each organization function possesses in establishing specifications...

Identification and Evaluation of Buying Alternatives - An important step in purchasing is the identification and evaluation of buying alternatives. This includes all decisions related to evaluating possible buying alternatives such as competitive sourcing, bidding, blanket contracting,

etc. Indicate how much influence each organization function possesses in the identification and evaluation of buying alternatives...

Supplier Selection - An important step in purchasing is supplier selection. This includes all decisions related to supplier evaluation, supplier negotiation, and the final supplier selection decision. Indicate how much influence each organization function possesses in supplier selection in a modified rebuy situation.

In an attempt to provide a common frame of reference, each respondent was asked to assume that he/she was faced with the purchase of component parts. Component parts were defined as goods which become part of the final product, but need no further processing.

Each respondent was presented with one of the four purchase phases and was asked to evaluate the relative influence of eight organization functions for that particular situation. The eight organization functions were those identified in previous research as potential buying center members. They were purchasing, production, research and development, plant manager, quality control, marketing and sales, engineering, and the company president. Additionally an "other" category was included to allow for respondent flexibility.

The measurement technique used to measure relative influence was a 100 point forced allocation scale. Respondents were asked to allocate 100 points among the buying center members according to each member's (perceived) relative influence. A rating of 0 points

would indicate no influence while a rating of 100 points would indicate total influence. For example, if five functions were equally influential in reaching a particular decision, each function would receive 20 points. If two functions were involved and one held the preponderance of influence, the rating might be 80 points and 20 points, respectively. This technique has been used repeatedly to successfully measure attitudes, preferences, and power.

Lefton, Dinitz, and Pasamanick (1959) compared the use of the 100 point allocation with paired comparisons, Likert, graphic rating, and ranking techniques to measure influence in the health care industry. The 100 point allocation was comparable in terms of precision and reliability to any of the other techniques. Hughes (1971) used the 100 point allocation to measure attitudes in the study of brand preferences. Cooley (1976) used the 100 point allocation to measure the attributed influence of participants in the purchase process.

Sample

A mail survey sent to 329 purchasing agents in sixteen firms in the Northwest U.S. resulted in a total of 204 usable responses for a response rate of 62%, or 51 responses per purchase phase. The survey utilized a cross section of industry including both large and small firms, however, approximately 63% of the responses were from high technology firms producing technical instruments, computer related products, or advanced electronics. The remaining 37% of the responses were from both light and heavy manufacturing firms.

TABLE 1

Buying Center Member Relative Influence on Purchase Phase

Buying Center Member	Mean Influence Scores*				F Ratio	Critical F.01(2,204)
	<u>Purchase Phase</u>					
	Identification of Need	Establishment of Specifications	Buying Alternatives	Selection of Supplier		
Purchasing	30.0	26.7	45.1	54.8	24.9	3.80
Production	29.2	14.4	10.2	11.7	21.28	3.80
R & D	6.2	9.2	5.	4.4	2.09	3.80
Plant Manager	0.0	1.2	.7	0.0	2.44	3.80
Quality Control	6.3	6.7	7.0	5.9	0.22	3.80
Marketing	5.7	3.9	2.6	0.2	6.93	3.80
Engineering	22.3	38.1	29.4	23.0	7.96	3.80
President	0.0	0.0	0.0	0.0	0.00	3.80
Other	0.0	0.0	0.0	0.0	0.00	3.80
Total	99.7	100.2	100.0	100.0		

*Note: Data based on 100 point allocation across purchase phase. Relatively higher point scores represent relatively higher influence exhibited by a specific buying center member in a specific buying purchase phase.

Analysis Approach

The analytical technique deemed appropriate for analyzing the relationship between an interval dependent variable with four treatment levels was one way analysis of variance (ANOVA). ANOVA permitted the relative influence of each organization function to be analyzed across all four purchase phases; yielding an overall F statistic.

Results

Table 1 presents critical results of the survey. This table presents the mean scores of relative influence of each organization function in each phase of the purchase process. The ANOVA statistical tests are also reported.

The relative influence of four organization functions: purchasing, production, marketing, and engineering is significantly related to the phase of the purchase process. These four functions produced calculated F ratios that were larger than the critical value for $F_{.01(3,200)}$ of 3.80.

The purchasing function's influence is clearly related to the purchase process phase. Additionally, that relationship possesses a trend characteristic. The relative influence of the purchasing function increases as the purchase decision process passes through the sequential phases.

During the initial phases of need identification and establishment of specifications, much of the necessary information is beyond the responsibility or influence of the purchasing function. Therefore, other buying center members may possess relatively larger amounts of influence. For example, the production function may have responsibility for inventory control and, therefore possesses relatively large amounts of influence in the identification of need phase. Likewise, the engineering function can be expected to have technical expertise in the establishment of specifications phase and possesses large amounts of influence as a result.

During the identification and evaluation of buying alternatives phase, the relative influence of the purchasing function increases dramatically. The large increase in the phase is logical since these activities would be expected to fall largely within purchasing's area of responsibility. However, information necessary to complete this phase (such as projected usage rates and financing guidelines) may be possessed by other organizational functions. Therefore, other functional areas could still be expected to possess moderate influence.

The final purchase process phase, selection of supplier, exhibits a continued increase in purchasing's relative influence. This large amount of influence is expected since most of the information necessary to reach a decision has been gathered. The bulk of the remaining information necessary for decision making falls within the normal responsibilities of the purchasing function. This might include vendor analysis, supplier sourcing, and minority supplier development.

The relative influence of the production function peaks in the first phase, declines in the second and third phases and stabilizes in the fourth phase. The high influence of production in the first phase may be due to the production function's influence on inventory control and the resulting importance in the identification of need. Production's relative influence progressively declines, presumably due to less involvement in the latter phases.

Marketing's influence was somewhat surprising, although not illogical. The marketing function may generate orders for new types of products, thus creating a need, and provide technical information from customers regarding specifications. Although this influence is not large, it is relatively consistent and noteworthy.

Engineering's relative influence also exhibits trend characteristics. Engineering's influence peaks in the second phase and steadily declines in third and fourth phases. These results are as expected since engineering's technical expertise is important to the establishment of specifications. Engineering would also be expected to possess influence in the third and fourth phases by assisting in the evaluation of a supplier's production, design, and quality capabilities.

The relative influence of quality control remains approximately constant throughout the four phases. The relative influence of research and development is also generally stable with the exception of the second phase. Specifically, research and development possesses its greatest influence in the establishment of specifications. The plant manager, president, and other functions were shown to possess insignificant or no influence.

Implications

Although this research indicates that the buying center consists of five or six functional areas, dramatic changes in the relative influence of buying center members occurs throughout sequential purchase phases. The most significant implication of this finding lies with the development of effective industrial marketing strategies.

The industrial marketer must be aware of which organizational functions are most influential at each phase of the purchase process. A marketing strategy that focuses on just one or two organizational functions may be relatively ineffective. For example, although purchasing is very influential in the supplier selection phase, it possesses much less influence in the establishment of specifications phase. Changes in the influence distribution among buying center members can mean the difference between the success and failure of an entire industrial marketing program.

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PERSONAL PERCEPTUAL FACTORS IN ORGANIZATIONAL BUYER BEHAVIOR

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Abstract

Industrial buyer behavior literature emphasized the importance of personal perceptual factors. In this paper, the degree of congruence among product, self and company concepts were investigated. Differences in conceptual congruence based on size of the business firms were also identified. Implications of the research findings were discussed.

Introduction

During the past decade research dealing with industrial buyer behavior has greatly increased. The theoretical research studies in this area generally recognized the complex nature of organization buyer behavior process and the inherent methodological problems of researching such process.¹ However, in all the literature dealing with this topic area--both old and more recent--the central role played by the industrial buyers is very well recognized. Some of the early writings on this subject emphasized the significance of the psychological aspects of industrial buyers.² More recent organizational buyer behavior models incorporated the individual factors as a significant part of the proposed models. Thus, Webster and Wind observed: "In some respects, the individual buyer (or decider, or influencer) within the organization is similar to the individual consumer or household purchaser. Certainly the same basic mental processes, motivation, cognition and learning--are basic psychological processes that must occur in all buying behavior" (Webster and Wind, 1972). In a recent review article Sheth observed: "Since it has been learned that organizational buyers are as human as consumers, it is very likely that many of the common practices of mass advertising and promotion in regard to consumer behavior will be transferred to industrial buying behavior (Sheth, 1977).

¹For some of the early writings on this subject see: Duncan, Delbert J., "What Motivated Business Buyers", Harvard Business Review (Summer, 1950); R.F. Shoaf, "Here's Proof--The Industrial Buyer is Human", Industrial Marketing, May 1959 and H.G. Sawyer, "What Does the Industrial Buyers Emotional Involvement Mean to You." Industrial Marketing, May, 1959. For somewhat more recent writings see: Hector Lazo, "Emotional Aspects of Industrial Buying", in American Marketing Association Fall Conference Proceedings (1960); Louis E. Boone and Robert E. Stevens "Emotional Motives in the Purchase of Industrial Goods: Historically Considered," Journal of Purchasing, August, 1970; and Guy R. Banville, "Source Selection Motives of Industrial Buyers in Purchasing Residential Building Materials," Southern Journal of Business (July, 1970).

²See for example: Gronhaug, Kjell, "Participation in Organizational Buying: Some Conceptual and Methodological Problems," and David T. Wilson, Research Approaches to Multi-participant Decision Processes," in H. Keith Hunt, (Ed.) Advances in Consumer Research, Vol. V, Proceedings of the Eighth Annual Conference of the Association for Consumer Research, 1977.

In spite of such recognition and emphasis on individual factors, the industrial buyer behavior literature is devoid of any systematic empirical investigations of the relationship between industrial buyer psychological make up and the product he/she buys. Hence, the major purpose of this paper is to present the results of a research study dealing with the interrelationship between the industrial buyer self-concept and product-concept of the products he/she buys.

Statement of Hypothesis

Using Roger's definition of self-concept as quoted by Ruth C. Wylie, certain assumptions are made which provide a background for the hypotheses of this study.

According to Rogers, the self-concept may be thought of as "an organized configuration of perceptions of the self which are admissible to awareness. It is composed of such elements as the perceptions of one's characteristics and abilities; the ... concepts of the self in relation to others and the environment; the value qualities which are perceived as associated with experiences and objects; and goals and ideas which are perceived as having positive or negative valence" (Wylie, 1961).

Drawing upon the definition of the self-concept, the following assertions appear logical:

1. An industrial buyer, like any other human being, has a self-concept of himself. It is formed among other things, by his/her family background, education, level of experience, the size of his firm, reputation of his firm, his interaction with his peer group, superiors, buyers in competitive firms and salesmen.
2. In addition to his self concept, an industrial buyer has a company concept. This is based on the idea that most organization men must have a congruent image of their firm in order to work with it effectively.
3. In a dilemma between his loyalty to his personal goals and his company goals, an industrial buyer bases his purchasing decision on his personal goals if the risks are less. For example, in buying highly standardized products like office machines, since the risk of his judgment being questioned by his superiors is less, a buyer has considerable latitude to choose a product on the basis of his self-concept rather than his company concept.
4. Also, the degree of a buyer's self and product concepts, being consistent, may vary with the size of the organization. Buyers working with large firms may have a greater self-product concept congruence than buyers working for small firms.
5. Buyers who make their purchasing decisions on the basis of their company concepts will have a greater degree of company-product congruence. Such buyers may be called "company loyal buyers".

The problem of this study may be stated as follows: When price, performance, and service are similar, an industrial buyer is likely to make his purchasing decision on a non-objective basis. Furthermore, being

concerned with his self-enhancement and self-maintenance, he tends to make his final choices on the basis of his self-concept rather than his company concept. However, those who are highly loyal to their firm may exhibit a greater congruence between their company and product concepts than between their self and product concepts.

Thus, given a proper measuring technique which is valid, reliable, objective, and sensitive, and considering the assumptions which are made earlier, the following hypothesis is postulated for an empirical test:

In buying highly standardized products such as office machines, industrial buyers or purchasing agents exhibit greater congruence between the self and product concepts than their company and product concepts. This relationship may vary by size of the firm.

Research Methodology

To gather data for testing the above stated hypothesis, the semantic differential technique was utilized. The semantic differential furnishes a general descriptive model, but for each research, depending upon its objectives, the researcher has to establish his own set of bi-polar adjectives effective for his study.

From the list of fifty adjectives which were originally factor analyzed by Osgood and his associates for evaluative, potency, and activity features, it was decided to select the ten best which can be commonly used to evaluate an industrial buyer's self, company and product concepts. An experimental procedure has been adopted to determine the ten most common adjectives. Two groups of business majors at a State University in Southeast U.S. were selected as subjects for the experiment. They were given a mimeographed sheet consisting of fifty adjectives listed in the first column, forty blanks in the second column, thirty in the third column, twenty and ten in the fourth and fifth columns. The blanks were to be completed by the students.

The students were instructed to assume themselves to be purchasing agents of some well-known company and from the list of fifty adjectives then choose the ten best which describe their concept or image. The method of selection yielded a forced choice of the final ten in order of sequence. Thus, the students had to think about their company and pick forty adjectives from the fifty given in the list. Next, they chose thirty from the list of forty. This procedure was continued until they obtained the ten adjectives which they felt best described their firm.

Using a similar procedure, the ten adjectives which best described a particular product which the purchasing agent has recently purchased were selected. Last, using the same procedure ten adjectives were selected to use in determining how they feel about themselves.

Thus, a total of thirty adjectives, some of course being duplicates, were found. Out of these, ten adjectives were finally selected on the basis of their high frequency of occurrence. Following Osgood's classification, the ten adjectives selected for the experiment were categorized as follows:

<u>Evaluative:</u>	<u>Potency:</u>	<u>Activity:</u>
GOOD	STRONG	SHARP
VALUABLE	HEALTHY	ACTIVE
PLEASANT		FAST
HONEST		
BEAUTIFUL		

Opposite adjectives were attached to each of the ten adjectives.

Utilizing the above ten adjectives, a questionnaire was constructed for surveying the industrial buyers. The major objective of the questionnaire was to obtain the necessary information from the office equipment buyers with regard to their self, company, and product concepts. Three sets of semantic differential scales using the ten bi-polar adjectives set on a seven-point scale were designated. For data processing convenience and for added attraction, each concept scale was printed on a different color paper. In order to avoid "order bias", the order of the adjectives was randomly placed. For the same reason, when mailing the data sheets the order of colors was changed for every fifty members in the list. Eight objective questions were interspersed on the data sheets. The purpose of these questions is twofold: First, to obtain additional information about the buyer in regard to the kind of business he is in, the size of the firm by employees, his educational background, the number of years on the job, and his designation. This information will also verify the fact that the industrial buyers represent a cross-section of firms. Secondly, by inserting the questions between the concept evaluation sheets the attention of the respondents was distracted from the bias effect. The questionnaire was pretested with a group of fifteen buyers working for fifteen different firms in a Southeastern city.

For purposes of constructing a national sample, the Chairman of the Office Equipment Buyer Group of the National Association of Purchasing Management was approached. With his cooperation a list of 300 office equipment buyers was obtained. These buyers represented a good cross-section of firms in the United States. One hundred and eighty responses had been received accounting for sixty percent of the initial mailings. However, only 141 responses were considered usable which is almost fifty percent of the original mailings.

Data Analysis and Research Findings

The data obtained utilizing the semantic differential technique may be analyzed via various statistical methods. Choosing statistical tools for analysis depends on the objectives of the researcher. For this research Osgood's D measure is used to evaluate the similarities among several concepts as judged by an individual or a group. The smaller the D score between two concepts, the closer the concepts are considered to be in meaning. A D score of zero therefore indicates complete congruity. On the other hand, the larger the D score, the farther apart in meaning the two concepts are (Osgood, 1957). In this study, the D measure is employed to evaluate the congruence that exists among buyers' company-product (D_1), self-product (D_2) and self-company (D_3) concepts. Utilizing D_1 , D_2 and D_3 to evaluate the effects of the size of firm, two types of analyses were performed. First, D scores of large, medium and small firm buyers were analyzed. Second the D mean score differences are tested for significance using non-parametric measures.

D Score Analysis

A. Individual D Score comparison. Of sixty-four large firms buyers, thirty-three indicated company-product congruence, twenty-five, self-product congruence, and six buyers had equal values for their D_1 and D_2 . Thus, it appears that among large firm buyers, company-product congruence is dominant.

Among sixty-six medium sized firm buyers, thirty-two buyers indicated self-product congruence; thirty company-product congruence; and four had equal values for their D_1 and D_2 scores. The medium sized firm buyers, thus, showed a marginal preference for self-product congruence.

Of eleven small firm buyers, seven indicated company-product congruence and four showed self-product congruence. Although company-product congruent buyers exceed the self-product congruent buyers, the sample size is not large enough to draw meaningful conclusions.

Thus, by actual numbers, large firm buyers show company-product congruence; medium sized firm buyers, self-product congruence; and small firm buyers show company-product congruence, these relationships, however, have shown considerable change when the average D values of buyers from these three groups are compared.

B. Comparison of D_1 and D_2 averages. Table 1 presents D averages of large, medium, and small firm buyers. According to Osgood, the difference between two D averages for a group should be at least .50 to be considered as statistically significant at the .05 level (Osgood, 1957). The D_1 (company-product) average of 3.7588 for large firm buyers shows only a minor difference from the D_2 (self-product) average of 3.7469. Since this difference of .0119 is not significant, the large firm buyers indicate about equal self-product and company-product congruences.

The medium sized firm buyers' D_1 average of 3.8401 compared to the D_2 average of 3.9156 shows only a difference of .0755, and this is not statistically significant. Thus, medium sized firm buyers too indicate about equal self and company-product congruences.

Small firm buyers' D_1 average of 2.9379 is .5173 less than their D_2 average of 3.4552. Utilizing Osgood's criterion, as stated earlier, this difference is statistically significant at the .05 level. The small firm buyers thus tend to demonstrate greater company-product congruence.

In summary, large medium sized firm buyers did not show significant differences between their D_1 and D_2 averages suggesting that both large and medium sized firm buyers on the average considers their self and company-product identification to be about the same. Small firm buyers, however, showed significant difference between their self-product and company-product congruence. Since their D_1 mean is smaller than their D_2 mean, they show greater company-product congruence.

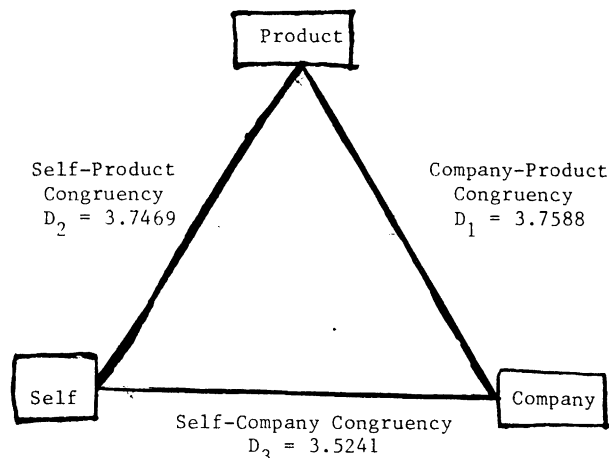
C. Comparison of D_3 (self-company) congruence. In all three sizes of firms, a majority of buyers exhibited greater self-company congruence than company or self-product congruence. Furthermore, self-company congruence appears to be inversely related to the size of the firm. Thus as shown in Figures 1, 2 and 3, the D_3 relationship seems to decrease as the size of firm increases suggesting that large firm buyers tend to exhibit less self-company congruence than medium and small firm buyers. This comparison is made by considering the D_3 values of large, medium, and small firm buyers. When compared to D_1 and D_2 values of buyers in each classification, the D_3 values appear to be invariably smaller.

Table 1

Self-Product, Company-Product, and Self-Company Congruences of Large, Medium, and Small Firm Buyers

Size of Firm	N	Company-Product (D_1)	Self-Product (D_2)	Self-Company (D_3)
Large	64	3.7588	3.7469	3.5241
Medium	66	3.9156	3.8401	3.4458
Small	11	2.9379	3.4552	3.1505

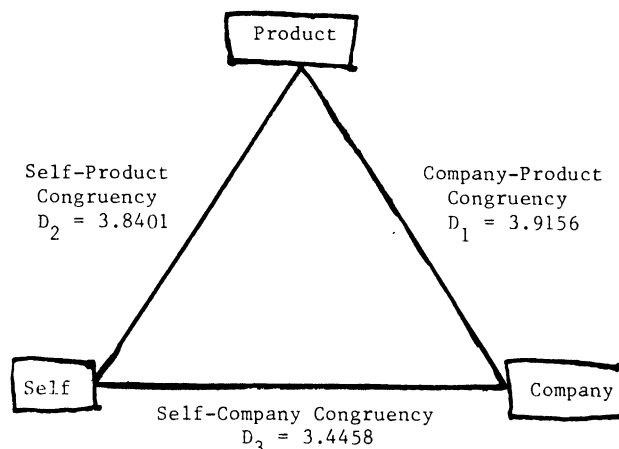
Figure 1
Self, Company, and Product Concepts of Large Firm Buyers^a



^aD mean values are obtained from Table 1.

Figure 2

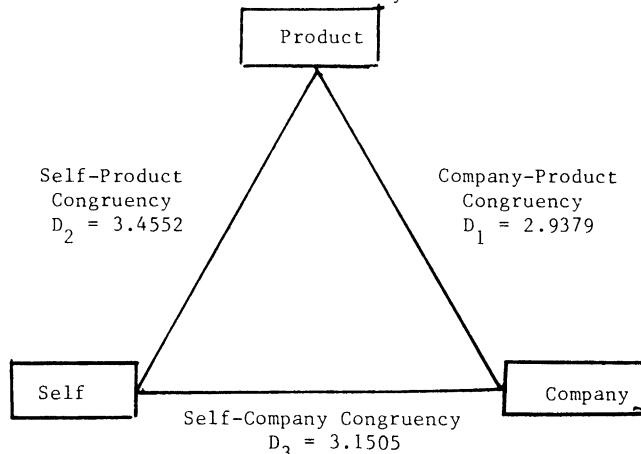
Self, Company, and Product Concepts of Medium Firm Buyers^a



^aD mean values are obtained from Table 1.

Figure 3

Self, Company, and Product Concepts of Small Firm Buyers^a



^aD mean values are obtained from Table 1.

Figures 1, 2 and 3 illustrate the over-all picture of all congruency relationships among buyers by size of their firm. These figures are self-explanatory. For large and medium sized firm buyers, Figures 1 and 2 are almost the same in all three dimensions, i.e., D_1 , D_2 , and D_3 . For small firm buyers, however, Figure 3 depicts all three D mean values as less than those of large and medium sized firm buyers. This is reflected in the relatively smaller size of Figure 3.

D Mean Score Differences

According to Osgood, since the distribution of D is not known, non-parametric tests such as Wilcoxon's T and Mann-Whitney U may be substituted for the usual normal curve statistics such as Student's t or Chi-square. Non-parametric tests do not assume any distribution with regard to data. For this reason, they are considered to be less powerful than the t or Chi-square tests. It has become necessary to use these tests at this juncture because of the unknown nature of D distribution.

Two types of non-parametric tests are used: (1) Wilcoxon's T, and (2) Mann-Whitney U. Both these T and U distributions approach the normal distribution as the sample size increases. For a sample size greater than twenty, both T and U statistics lend themselves to normal Z transformation. With reference to the data, the D values of large, medium, and small firm buyers have to be tested for significant differences. Since these tests are to be conducted for the same group, Wilcoxon's T is used. This is a non-parametric substitute for the t-ratio matched pairs analysis. The second series of tests are to be conducted for differences among the D values of large and small, large and medium, and medium and small sized firm buyers. Since these tests are between two independent samples, Mann-Whitney U test is used.

1. Results of the T tests. Table 2 presents the results of Wilcoxon's T tests. According to these analysis, it is found that there are no significant differences between D_1 and D_2 , D_2 and D_3 , and D_1 and D_3 values of large firm buyers. The medium sized firm buyers too did not show significant differences between their D_1 and D_2 , and D_2 and D_3 values. However, their D_2 (self-product) and D_3 (Self-company) congruence scores show a significant difference at the .01 level. The Z_T value for this is 3.56. Small firm buyers display greater company-product congruence than their self-product congruence indicating a significant difference either between their D_2 and D_3 or between their D_1 and D_3 values.

Thus, the results of T tests indicate significant differences between D_1 and D_2 only among small firm buyers. This finding, however, must be cautiously viewed because of the small sample size of this group of buyers.

2. Results of the U Tests. Table 3 presents the results of the Mann-Whitney U tests. These tests are conducted to find whether large, medium, and small firm buyers differ in their D_1 , D_2 , and D_3 relationships.

Comparison between large and small firm buyers showed significant differences in their D_1 and D_3 values at the .05 and .10 levels. Large and medium sized firm buyers, however, did not show significant differences in their D_1 or D_3 values, but showed significant difference between their self-product congruence scores. Medium and small firm buyers showed significant differences at the .01 to .02 levels on all three congruency measures.

Thus, the differences among large, medium, and small firm buyers in the degree to which the buyers perceive congruence between self-product, company-product, and self-company concepts are shown to be significant in six

Table 2
Results of Wilcoxon's T Tests

Firm	N	Matched Pairs	D_1-D_2	D_2-D_3	D_1-D_3
			Z_T Values ^a		
Large	64	40	.60	1.22	.98
Medium	66	40	1.23	3.56***	1.02

			T Values		
Small	11	9	23**	16	10

**Significant at .02 level
***Significant at .01 level

^aFor sample size greater than twenty, Z transformation is used.

* * * * *

Table 3
Results of Mann-Whitney U Tests^a

Firms	$N_1 + N_2$	Company-Product (D_1)	Self-Product (D_2)	Self-Company (D_3)
Large-Small	77	1.88**	1.15	1.70*
Large-Medium	130	.92	2.89***	.62
Medium-Small	75	6.01***	3.01***	2.03*#

*Significant at .10 level
**Significant at .05 level
*#Significant at .02 level
***Significant at .01 level

^aSince N is greater than twenty, Z transportation is used

* * * * *

of the nine comparisons. Four of the six significant comparisons involve medium sized firms as is shown in Table 3 and also illustrated in Figures 2 and 3.

Implications of the D Score Analysis

Figures 1, 2 and 3, as shown earlier, present the summary information obtained from the analysis of D scores of large, medium, and small firm buyers. As evident from the analysis, only small firm buyers tend to show differences in their D values while little difference is shown among the D values of large and medium sized firm buyers.

The fact that small firm buyers are more company-product congruent needs an explanation. Perhaps, small firm managements closely supervise the purchasing decisions of their buyers rather than their counter-parts in large medium sized firms. Because of this, the small firm buyers might always show a greater concern over how their

decisions of their buyers rather than their counterparts in large medium sized firms. Because of this, the small firm buyers might always show a greater concern over how their decisions are evaluated by their managements. Furthermore, the data also indicates a relatively greater self-company congruence among small firm buyers. It is conceivable that an individual working for a small firm can more or less see how well his performance plays a crucial part in the success of his firm. On the other hand, an executive of a larger firm is perhaps too specialized on his particular job and therefore may fail to realize his contribution to the success of his firm as clearly as the small firm executive does.

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A PROBLEM IN INDUSTRIAL MARKETING MANAGEMENT:
THE OVER-UNDER PHENOMENON

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Abstract

Managers at all levels are called upon to give subjective estimates of the probability of occurrence of events (e.g., in PERT, in setting of sales targets, etc.). The over-under effect is a phenomenon which causes people to over-estimate the probability of occurrence of events with relatively low objective probabilities and under-estimate probabilities of events with relatively high objective probability of occurrence. Therefore, it becomes necessary for the decision analyst to know the relationship between objective probabilities and subjective estimates, and whether the favorability of the outcome may change this relationship.

In this paper, the over-under phenomenon has been studied for neutral, favorable and unfavorable outcomes. The main contribution of this paper is the inclusion of a theoretical justification for the existence of the effect and its dependence on the favorability of the outcome.

Introduction

Decision making, under conditions of uncertainty, is a major part of managerial activity. PERT Analysis, the setting of targets of various kinds, marketing mix decisions, are but a few examples of such decisions, in which the subjective estimation of probability plays a major role. Although such subjective estimation is not restricted to Industrial Marketing Management, its importance in industrial marketing cannot be underestimated.

Obviously, irrespective of the sophistication of the decision analysis performed by managers or researchers, the results can only be as good as the subjective estimates used as an input to the model or process. Therefore, it becomes exceedingly important to be able to refine these estimates of probability provided by managers or experts in the field. As the literature in utility theory explains, when a decision-maker assesses the subjective probability of the occurrence of some event, we find that the assessment is individual-specific, and we can describe this individual as risk-averse, risk-seeking, or neutral. Similarly, the assessment of probabilities depends, in general, on the individuals perception of the situation.

To summarize the previous paragraphs, any refinement of subjective estimates of probabilities used as input to a decision-analysis procedure, will help to improve significantly the quality of the results. The assessment of probabilities is individual-specific and situation-specific and so must be researched in the appropriate context. The objective of this paper is to provide a method to help refine the estimation of subjective probabilities to be used in managerial decision-making.

The over-under effect is a phenomenon which has been found to occur under a variety of conditions in which people consistently over-estimate the probability of

occurrence of events with relatively low objective probabilities and under-estimate probabilities of events with relatively high objective probabilities of occurrence. If this phenomenon does in fact exist, it has implications for Decision Analysis under Uncertainty because the decision-maker is continuously called upon to make subjective assessments of the probability of occurrence of events, which by the over-under effect, will not be equal (in general) to the actual objective probabilities. It is therefore necessary for the analyst to know the relationship between the objective probability and the subjective estimate of the manager (or the person in the field -- e.g., the salesman) who makes the estimate on the basis of the information available to him.

Further, if this effect is different, depending upon whether the outcome (the probability of which is being estimated) is seen as neutral, favorable or unfavorable, it again has implications for the decision analyst because he must know the objective-subjective probability relationship corresponding to the type (degree of favorability) of outcome anticipated. In the 'real world' of decision-making, it is very likely that an outcome of an event will have favorable or unfavorable connotations attached to it. Though the over-under phenomenon has been studied by a number of researchers (Preston and Baratta (48), Attneave (53), Howard (63), McGlothlin (56), Griffith (49), etc.), there has been little more than a passing reference to the phenomenon under conditions of favorability or unfavorability. Therefore, the need was seen for such a comparative study. This study is not intended to derive a mathematical relationship between subjective and objective probabilities under different conditions of favorability but rather to show that the favorability of the outcome may well prove to be an important variable in the determination of the subjective-objective probability relationship.

Objective

The objectives of this study are therefore:

- (i) To show the existence of the over-under effect.
- (ii) To study the over-under phenomenon under conditions of neutral, favorable and unfavorable outcomes.

The hypothesis is that the relationship between subjective and objective probabilities will be different if there is a favorable or unfavorable connotation to the outcome, rather than a neutral connotation.

Methodology

The Questionnaire

To study the over-under phenomenon with Neutral outcomes, the respondents (the sample is described in the next section) were asked to give their subjective estimates of the frequency of occurrence of words of different letter lengths (in a typical New York Times editorial) and this was compared with the objective frequency of occurrence. The actual question asked is

given in Appendix A (Qs. 1-4). The group of respondents being a well-read, literate group residing in New York City, it appears to be a valid assumption that the amount of information the subjects had, on which to make the estimates, was considerable.

To study the effect under conditions of favorable and unfavorable outcomes, the task was somewhat more difficult. The approach used was to offer a succession of favorable and unfavorable hypothetical gambles and ask for an estimate of how much the subject would be willing to pay to buy the favorable lottery or to get rid of the unfavorable lottery, as the case may be. The actual questions asked are reproduced in Appendix A (Qs. 5-9 for favorable outcomes and Qs. 10-14 for unfavorable outcomes). From this, the subjective probability estimates assigned to the outcomes by the subjects were computed (Shown in Appendix B). This computation was possible by assuming (i) a Subjective Expected Utility criterion of choice and (ii) a linearity assumption of utility, i.e., in the \$1 - \$6 range of gains or losses offered, utility is a linear function of the dollar amount. [$U(\$X) = K \cdot X$; for all $-\$6 < X < \6] These assumptions are intuitively acceptable and have been found to be empirically validated in a number of previous studies. A sample computation is given below.

For a favorable outcome:

Subjective probability of \$5 gain = p
and subjective probability of \$1 gain = $(1-p)$

Then, by the above assumptions, the subjective expected utility

$$S.E.U. = p \cdot 5 + (1-p) \cdot 1$$

\therefore The amount that the subject would be willing to spend for this lottery (his subjective response),

$$X = p \cdot 5 + (1-p) \cdot 1$$

$$(1) \therefore p = \frac{X-1}{5-1}$$

Equation 1 yields the subjective probability for each response X . A similar computation can be done for unfavorable outcomes. At the end of the questionnaire, two questions were thrown in just for interest, to assess subjective probabilities of very rare, and very favorable (winning the New York State Lottery) and very unfavorable (being struck dead by lightning) events. The actual questions asked are reproduced in Appendix A (Qs. 15 and 16).

The Sample

The experiment was conducted on a sample of Ph.D. candidates in Business. This has the advantage of homogeneity, but leaves the study exposed to the criticism of external reliability. This is not a serious drawback, however, since the purpose of the study is to study the over-under phenomenon, and not to derive an empirical relationship generalizable to the U.S. Population. The effects of the phenomenon is, in general, a function of the group and is not easily generalizable anyway.

Another problem associated with using Ph.D. candidates is that they attempt to perform expected value calculations. The instructions emphasized that they should not do this. In spite of this, two respondents did so for a few answers. However, their rough calculations on the answer sheets and their exact answers pointed

them up clearly and these two sets of responses were discarded. To reduce the likelihood of respondents making computations rather than give subjective responses, the questions were read out to them with the numbers given to the respondents. (Pre-tests showed that the respondents' comprehension of the questions were markedly higher when the questions were administered in this manner.) This gave the opportunity to control the time allowed for each question and therefore prevented the computation of expected value of the gamble.

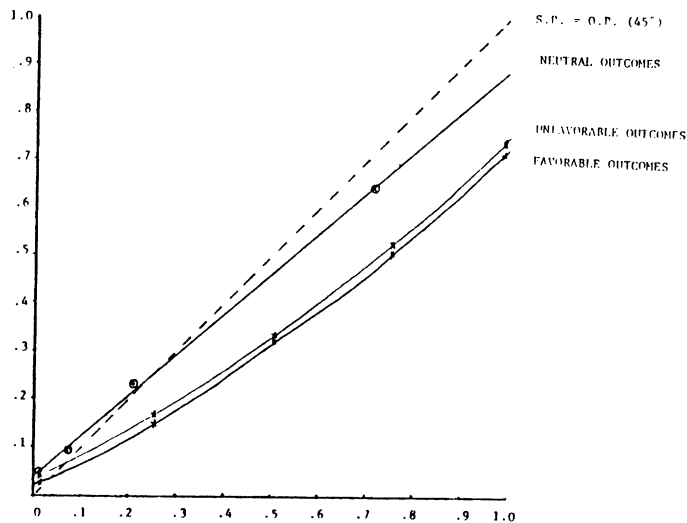
Results

The results are given in Appendix B. **Figure 1** shows the results for neutral, favorable and unfavorable outcomes. The graphs for neutral outcomes is as expected. It shows the existence of the over-under effect. (Relatively low probabilities are over-estimated and relatively high probabilities are under-estimated.) The intersection with the 45° line, where subjective probability = objective probability, is at $p = 0.20$, which is consistent with the results of past researchers (Preston and Baratta (48), Attneave (53)).

The curves for the favorable and unfavorable outcomes are, in fact, different from the one for neutral outcomes, as was hypothesized. Therefore, it does appear from this experiment, that the over-under effect is considerably modified by the favorability/unfavorability of the outcome.

Summing up this section, it seems clear that (i) the over-under effect exists for all three types of outcomes; and (ii) there is a difference in the over-under effect for neutral events as contrasted to unfavorable and favorable outcomes. In the next section some possible theoretical underpinnings will be discussed, which may explain why this phenomenon occurs.

FIGURE 1: RESULTS



Theoretical Underpinnings

Although the over-under phenomenon has been studied by a number of researchers, there are few references to the theoretical reasons behind this effect. (Notable among these is Nelson's Adaptation-Level Theory which

show that the intersection point will be at the geometric mean; and Attneave's arguments for it to be closer to the arithmetic mean). In this section we shall attempt to provide some theoretical underpinnings to the observed phenomenon. It is not intended to develop an entire theory but merely to give a theoretical understanding of the phenomenon and possible reasons for its existence.

If there were no over-under effect, the relationship between subjective (S.P.) and objective (O.P.) probabilities would be the 45° line as shown in **Figure 2a**, i.e. $S.P. = (O.P.)$, where the slope of the line = 1. Now, let us examine the effects that cause this relationship to change to $S.P. = a + b(O.P.)$ as shown in **Figure 2b**.

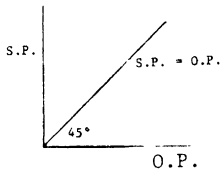


FIGURE 2a

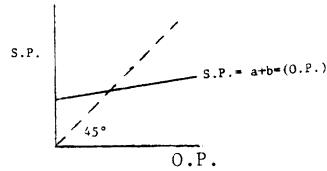


FIGURE 2b

There are two distinct effects:

- a. **The 'a' Effect:** This causes the value of S.P. at $O.P. = 0$ to be something other than zero -- a positive value 'a'. At very low probabilities, the estimator cannot bring himself to say that the probability is in fact so low. This is a "play-it-safe" effect or the "possibility" effect. In the estimator's mind, there is always a "possibility" of the effect occurring, which clouds the issue of how probable it in fact is.
- b. **The 'b' Effect:** If the 'a' effect were the only effect there would be no reason to believe that the line would not shift upwards parallel to the original line i.e., the new line would still have a slope 1. However, there is another effect which causes the estimator to "devalue" the experience he has in terms of objective probabilities. We can call it the "devaluation" effect. It is a result of not giving a 100% weightage to the accumulated experience in the estimator's mind. This may be an unconscious effect or a deliberate lack of effort to draw on the mental data available because of the effort involved. It results because of not placing total reliance on past experiences (which closely approaches objective probability). The slope of the line, therefore, is no longer 1 (100%) but is devalued by a factor 'b' (<1).

The net effect of the 'a' effect and the 'b' effect is to change the form of the line from $S.P. = 1(O.P.)$ to $(S.P.) = a + b(O.P.)$ as shown in Figure 3.

As we mentioned in the Introduction, the decision analyst would find it useful to know the relationship between objective probabilities and subjective estimates under conditions of neutral, favorable and unfavorable outcomes. For a particular manager or group of managers who are called upon to give subjective estimates of the probability of occurrence of events (e.g., PERT and other planning procedures), the analyst may find a particular relationship which he can use in his computations. Alternatively, he may find (as is sometimes suspected) that the manager is behaving more "rationally" (his S.P./O.P. line is closer to the 45° line) for unfavorable outcomes and so can pose the problem to him as an event with an unfavorable outcome. These are just one or two of the applications possible. In any event, it has been shown that it is useful for the decision analyst to be cognizant of this phenomenon under conditions of neutrality, favorability and unfavorability.

Appendix A

The Questionnaire

Instructions

1. In all following questions which mention the toss of a coin, it is a fair coin that is referred to, i.e., the probability of a Head or a Tail coming up in each toss = 1/2. Naturally, if there are two consecutive tosses (we assume independent tosses) the probability of two consecutive head = 1/4 or, in other words, to get on Head in one toss is more likely than to get two Heads out of two Tosses which is much more probable than getting six Heads in six Tosses.
2. In no question are you expected to calculate any "Expected Value." You are requested to put down your impression or feeling. There is no "right" answer to the question - the right answer is your subjective feeling.
3. You are given 5 - 10 seconds to answer each question. Naturally, this will not give you time to make any calculations, as you are not expected to do any. So please listen to the question carefully and note down your subjective response.

Qs. 1 - 4

In the average 1000-word paragraph in the New York Times editorial, how many words would you expect to find of length 1-6 letters?

Word Length (# of letters in a word)	# of such words in an average 1000 word paragraph
1. 1 - 6	
2. 7 - 9	
3. 10 - 12	
4. ≥ 13	

1000

Q.5: You are offered the option of buying a lottery which has the following characteristics: A fair coin is flipped. If it comes up Heads, you win \$5; if it comes up Tails, you win \$1. What is the maximum amount for which you will be willing to buy this lottery?

Qs. 6-9: are of the same type, only each has a different probability of a win. The details are tabulated in Appendix C.

Qs. 10-14

Q.10: Somehow, you find yourself in the possession of an unfavorable lottery: A coin is tossed once. If a Head comes up, you will have to pay me \$6. If a Tail comes up, you will have to pay me \$1. The only way you can get out of this situation is to pay someone to take it away from you. What is the maximum amount you will be prepared to pay to get rid of it?

Qs. 11-14: are of the same type, only each has a different probability of a \$6 loss. The details are tabulated in Appendix C.

Q.15: What is the probability of your being struck dead by lightning?

Q.16: What is the probability of your winning the New York State Lottery (if you buy a ticket)?

1. F. Attneave, "Psychological Probability as a Function of Experimental Frequency", Journal of Experimental Psychology, 81-86 (1953).
2. R. Griffith, "Odds Adjustments by American Horse-Race Bettors", American Journal of Psychology, 290-94 (1949).
3. T. Howard, "The Relation Between Psychological and Mathematical Probability", American Journal of Psychology, 335 (1963).
4. W. McGlothlin, "Stability of Choices Among Uncertain Alternatives", American Journal of Psychology, 604-615 (1956).
5. M. Preston and P. Barratta, "An Experimental Study of the Auction Value of an Uncertain Outcome", American Journal of Psychology, 183-193 (1948).

APPENDIX B: RESULTS

(Means for all respondents)

	Word Length	Subjective Prob. of Occurrence	Objective Frequency
1.	1 - 6	0.6408	0.713
2.	7 - 9	0.2304	0.209
3.	10 - 12	0.0892	0.070
4.	≥ 13	0.0396	0.006

Event	Favorable Outcomes		Unfavorable Outcomes		Objective Probability
	Computed Subj. Prob.	Computed Subj. Prob.	Computed Subj. Prob.	Computed Subj. Prob.	
1H in 1 Toss	(5) .3333	(10) .3400	(10) .3400	(5) .3333	.5000
2 Hs in 2 Tosses	(6) .1438	(11) .1708	(11) .1708	(6) .1438	.2500
6 Hs in 6 Tosses	(7) .0250	(12) .0333	(12) .0333	(7) .0250	.0156
Anything but 2Hs in 2 Tosses	(8) .5132	(13) .5373	(13) .5373	(8) .5132	.7500
Anything but 6Hs in 6 Tosses	(9) .7277	(14) .7383	(14) .7383	(9) .7277	.9844

	Subj. Estimate	Obj. Prob.
15. Lightning	2.58×10^{-5}	1×10^{-6}
16. New York State Lottery	1.085×10^{-4}	$.3 \times 10^{-6}$

IMPROVING RISK ANALYSIS IN UNSTABLE POLITICAL CLIMATES

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Abstract

This paper presents intervention analysis as a technique to forecast the rate of change in the growth of real Gross National Product in countries which have experienced unstable political climates as an indicator of marketing opportunities. Intervention models were constructed and analyzed in relation to the impact of political or intervening events in ten countries. Operational strategies appropriate to certain events and their classifications were clearly indicated.

Introduction

Econometric forecasting processes in the service of international marketing/strategic planning almost always assume that the uncontrollable environmental variables are constant for the period under analysis (Parsons & Schultz, 1976). Sales response models based on such assumptions may suffice for the stable, mature markets, but their employment is questionable in Africa, Asia, Latin America, and parts of Europe. Unstable or developing countries are susceptible to abrupt political disturbances and turning points which have significant impact on national economic trends. In such environments political factors cannot be treated realistically as constants. Traditional techniques, incapable of incorporating a quantification of such a variable, have required the decision-maker to handle the impact of political events subjectively and separately.

Intervention analysis, offers the possibility of improved risk analysis to those decision-makers who must operate in the international arena (Box & Jenkins, 1976, Box & Tiao, 1975). This article discusses a prototype study which examined the potential application of intervention analysis to the task of providing an econometric model sensitive to exogenous political-managerial events.

Background

Developing countries frequently have relatively unstable political climates but offer substantial marketing opportunities. They range from booming nations like Brazil to backward countries such as Chad or the Maldives. Some, such as the Middle East oil exporters, even have higher per capita incomes than European countries, but normally "North" and "South" are broadly synonymous with "rich" and "poor" or "developed" and "developing" (Brandt, et al, 1980). Many of the less developed countries, especially those classified as middle-income developing countries, show the highest prospects for growth over the next decade. Their average growth rate through 1990 is estimated to be close to 6% per year (Acharya, 1979). This general statement of growth prospects aggregates those countries which will achieve growth above 6% with those which will experience economic contractions. The process of distinguishing the winners from the losers is particularly difficult considering the impact that political events can have on forecasts of trends within these economies. The importance of developing countries to international marketing corporations is due to two major factors; economic growth in developing countries tends to be synonymous with marketing opportunities, and economic

growth reduces resistance in developing countries to marketing efforts by foreign or multinational corporations (Keegan, 1974).

The technique of intervention analysis has been shown to be applicable in those cases where discrete exogenous state variables could be isolated (Box & Tiao, 1975; Wichern & Jones, 1977; Levy, Klein & Johnson, 1978). Each state variable is studied with respect to its effect in past (known) situations and a model is constructed which reflects the variable under analysis across time. Each model is used as an independent scalar series either for regression analysis or some other forecasting technique. Such models may have many forms e.g., exponential or linear, either increasing or decreasing.

This study tested the hypothesis that the impact of certain political events would cause characteristic reaction patterns in real growth in Gross National Product (GNP). These quantifiable patterns could provide a tool capable of forecasting the direction and magnitude of changes in many economic environments in which multinational corporations operate.

Data Collection and Analysis

Initially twenty countries sharing the classification of "unstable political states" were selected for analysis based upon available data and geographic diversity. Real GNP growth was seen as the best series for securing a dynamic picture of their economic attractiveness to those engaged in international business (Robock, Simmonds, Zwick, 1977). Data availability for even this single series was disappointing, and a number of countries were dropped from the analysis due to inadequate data.

The ten countries chosen for further study on the basis of available data were: Chile, Greece, India, Indonesia, the Phillipines, Portugal, Rhodesia, South Africa, South Korea and Spain. Rate of annual real GNP growth from 1950-1977 were smoothed to discount random disturbances in the GNP series and to reflect turning point impact. A three-year non-weighted moving average was constructed from the data obtained from the Agency for International Development and the International Monetary Fund. The average was placed on the initial time period as it was hypothesized that intervening events would have the most impact in the year of occurrence and less in the following two. Actual GNP values were not used due to scaling problems in comparing event reactions across national boundaries. With the decision to use percentage change in GNP, smoothing became even more important considering the increased volatility of the percentage change in the smaller economies.

The smoothed series were analyzed in relation to an in-depth study of the countries' histories over the twenty-five year period. Political turning points and intervening events were pinpointed for each country by analyzing each historical event and its impact on the political structure. Only those events which were seen

as having a mid- to long- term impact on the national economy were considered. The following events were identified as visibly affecting the rate of real GNP growth: Rise and Reign of a Strong Leader, Decline of a Strong Leader, Internal Strife, Elitist Power Struggles, Socialistic Pervasion, and Military Seizure.

Rise and Reign of a Strong Leader

A figure of national prominence emerges who is able to control power groups in his country and capable of mobilizing the population in support of his policies.

The rise of Premier Constantine Karamanlis to a position of power in Greece is one example of this event. Following his resignation and reinstatement in 1958 the country experienced a period of rapid development and reconstruction. His influence continued to be felt until a series of elitist plots began in 1964. Karamanlis returned to power in 1974 and the large parliamentary majority won by his party once again exemplified his position as a strong leader.

Another example of such an occurrence can be seen in India during the period 1964-1969. National allegiance and support grew as Indira Gandhi rose to a position of national prominence and became Prime Minister in 1966.

General Suharto, head of the Indonesian army, rose to power following an attempted coup by the pro-Peking Communist party in 1965. Suharto was named president in 1968. Stability and tranquility continued almost unbroken through 1975. Despite the national oil company scandal and two coup attempts in 1976, Suharto was elected to a third five-year term by the People's Consultative Assembly in 1978.

General Park Chung Hee became chairman of the ruling junta in South Korea in 1961. He was formally elected president in 1963 and a 1972 referendum provided more presidential powers and enabled him to be reelected an unlimited number of times. During his reign Korea achieved major gains toward industrialization and higher living standards.

Decline of a Strong Leader

As the leader loses his influence and control due to poor health or advanced age, the political system enters a period of uncertainty with concomitant economic instability.

In 1961 rumors of Jawaharlal Nehru's deteriorating health began to undermine his position as a strong leader of India. The process of decline concluded in 1964 when Nehru suffered a stroke from which he never fully recovered.

Speculation regarding General Francisco Franco's ability to retain absolute power in Spain was aroused in 1971 and 1972 with decrees which entrusted his powers to Prince Carlos (1971) and provided for a successor (1972). The Movimiento Nacional, a Francoist organization enjoying a monopoly of political power, was not disbanded until 1977.

Internal Strife

This term describes the conflict between the masses and the group or individual in power as evidenced by civil disobedience or armed rebellion.

The formation of the Republic of South Africa in 1961 faced massive Black opposition. The policy of apartheid supports racial segregation; resistance from Blacks, Coloreds, and some White groups continually submerges

and resurfaces with varying degrees of intensity.

The 1970 constitution of Rhodesia provided for a republic, a president, and a prime minister, but failed to give Black Rhodesians full representation. Negotiations between the government and Black groups failed to prevent confrontations and bloodshed until Black majority rule was firmly instituted.

Elitist Power Struggles

Groups represented in high levels of the governmental structure vie for control. Dispersed centers of power prohibit hegemony by any one group. The general population is not heavily involved.

Greece experienced such a period of political maneuvering from 1964-1966 and again from 1972-1974. Members of opposing juntas jockeyed for power first to displace Karamanlis and in the second instance to overthrow the dictatorship of Colonel George Papadopoulos.

India experienced similar disruption in 1969 when the leading Congress party split. Political groups struggle for control until 1977 when the opposition parties united in the Janata coalition to loosen the Congress party's grip on the national legislature.

Socialistic Pervasion

Attempts to substantively change the economic structure are directed toward extensive redistribution of wealth and government ownership of productive resources. The intensity of the occurrence ranged from gradual change to sharp redirection.

Gradual change toward socialism was characteristic of the Magsaysay experiments in the Phillipines during the period 1951 through 1958.

The year 1968 signalled an end to Premier Salazar's reign in Portugal. Except for a brief intermission under General Spínola in 1974, the country came under increasing influence from the left. A series of nationalizations occurred in 1975. Free elections the following year gave the Socialist party a parliamentary plurality.

In 1970 a self-styled Marxist named Salvador Allende Gossens became president of Chile. The Allende government engaged in widespread nationalizations and attempted socialist economic programs.

Military Seizure

A military junta imposes an oligarchical power structure bending towards government direction over privately-owned economic factors.

The military takeover led by Colonel George Papadopoulos in 1967 provides one example. In this case, power was consolidated under a dictatorship. While the Papadopoulos regime survived until 1973, it was effectively stymied in 1971 by opposing groups.

In 1973 a military junta seized control in Chile in the midst of chaos to "exterminate Marxism." The trend of nationalizations was halted and foreign investment and the formation of capital were encouraged.

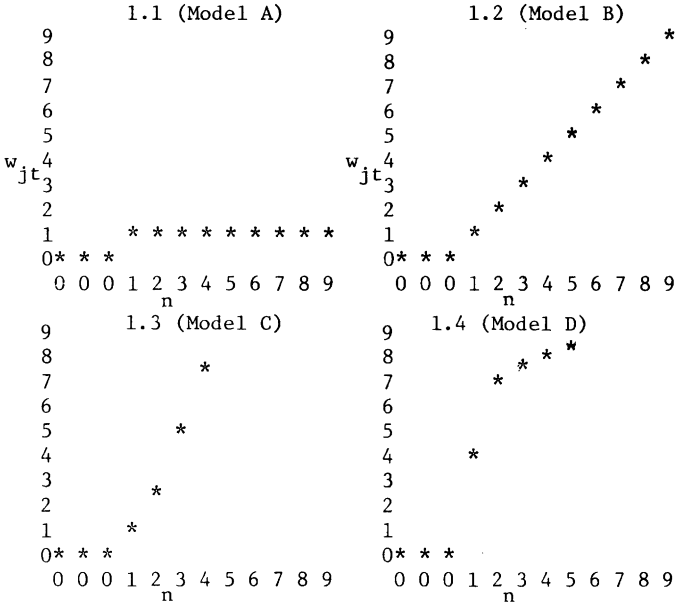
Model Construction

The intervening events themselves were modeled as to their effects on the predicted series. Each intervening event has two components; a (0,1) variable (s) to show the existence of the intervening series, and the

function of the event over time (t) according to its expected effect. Each of these events was placed into the general regression model. The step model, which is referred to as Model A is shown in **Figure 1.1**.

FIGURE 1

Intervention Models



A linear model is shown in **Figure 1.2**, which may be increasing or decreasing depending on the sign of its regression coefficient. The appropriate function is:

$$f(x_j) = w_{jt} s_j \} t$$

where

$$\begin{aligned} w_{jt} &= n \\ n &= 1, 2, 3, \dots, N \end{aligned}$$

This model is an arithmetic model and is labeled Model B.

A Geometric model, Model C, is shown in **Figure 1.3**, and may be increasing or decreasing also depending on the sign of its regression coefficient. Its appropriate function is:

$$f(x_j) = w_{jt} s_j \} t$$

where

$$w_{jt} = w_{jt-1} + n - 1 \text{ where } n \neq 0$$

An exponentially decreasing change model, Model D, is shown in **Figure 1.4**. This model may be increasing or decreasing depending on the sign of its regression coefficient, and its appropriate function is:

$$f(x_j) = w_{jt} s_j \} t$$

where

$$w_{jt} = S + w_{jt-1} + c_j (w_{jt-1} - w_{jt-2})$$

and

$$S = \begin{cases} 1 & \text{where intervention } x_j \text{ occurs (e.g.} \\ & \text{where } s \text{ goes from 0 to 1)} \\ 0 & \text{otherwise} \end{cases}$$

and

$$0 < c_j < 1$$

The general linear model used in the analysis was of

the form:

$$Y(t) = a + b_t(t) + \sum_{j=1}^J \left[b_j f(x_j) + B_{sj} s_k \right] \} t + e$$

where

$f(x_j)$ represents the model of the independent variable

$$x_j \text{ and } f(x_j) = w_{jt} s_j \} t$$

where

$$s_j = \begin{cases} 1 & \text{if } x_j \text{ exists in time period } t \\ 0 & \text{otherwise} \end{cases}$$

and

w_{jn} represents the nth element in the series of the intervening event x_j , $n = 1, 2, 3, \dots, N$

$a = Y(0)$ intercept

b_{xj} = regression coefficient for the independent variable model $f(x_j)$

b_i = regression coefficients for other variables

t = time period

e = error term

A number of models were constructed for the intervening variables: fitting the general model described above.

A simple step change is modelled through the use of the (0,1) variable s signifying the existence of an intervening event and its resulting independent series. In this case,

$$f(x_j) = w_{jt} s_j \} t$$

where

$$w_{jt} = s_j \text{ if the regression coefficient } b_j = 0.$$

Obviously this model requires experimentation to determine the appropriate value for c_j and S . In this paper two values for S were chosen, 1 and 4, and trials were run with c_j equal to .25, .5 and .67. In general, $S=4$ and $c_j = .67$ were found to give good results and were used for all six cases where Model D produced a closer fit of predicted versus actual than the other models. It is possible that the results could have been improved by allowing c_j to vary for each j , but it was felt that this was not appropriate due to the small number of cases in attempting to draw general influences.

Testing, Results and Analysis

Each variable was represented by all modes in various combinations in a series of step-wise multiple regression runs in order to determine which model exhibited the highest correlation to the dependent GNP series. Model D was superior for the Rise and Reign of a Strong Leader, Decline of a Strong Leader, Elitist Power Struggles, and Military Seizure. Model C was best for Socialistic Pervasions and Internal Strife.

Following the individual country regression analyses, all of the countries were placed into a single series order to interpret the general or average effect of the events. The dependent variable was Percentage Change in GNP, and the independent variables were year, s_j the (0,1) series existence variable, and the $f(x_j)$ coefficients for each intervening event.

Model C's application must be viewed with some caution since there is no level or bound which is indicated for the effect of the intervening variable. Such a bound

must exist, however, as it is patently impossible for the series to extend to infinity. A bound was not found in the analysis, probably due to the short length of time that the series Socialistic Pervasion and Internal Strife were present in the subject countries.

All of the regression results were significant at the .025 level.

The two regression coefficients for each event, b_{s_j} and b_{x_j} were combined to produce a composite coefficient, b_j . This coefficient is particularly interesting with respect to its sign, since the anecdotal nature of the data prohibits general statistical conclusions. The b_j represents the value of the intervening event's effect on the dependent series in the first year of its effect (i.e., the year of its occurrence). Three of the events exhibited a negative b_j , the Rise and Reign of a Strong Leader (-1.36), Military Seizure (-3.30), and Elitist Power Struggles (-1.49). One event's coefficient was zero, Decline of a Strong Leader. Two events showed positive coefficients, Socialistic Pervasion (2.59), and Internal Strife (2.16).

It appears that when the growth rates are declining, a strong leader may emerge, a military takeover may occur or elitist plots may take place. When the growth rate is increasing, the time is ripe for leftist emergence and the fomentation of internal strife. It must be remembered that the coefficients represent the effects on the change in the GNP growth rate and not the GNP itself so there is no indication as to the absolute value of the GNP growth. The negative coefficient may take place on either positive or negative growth rates as may the positive coefficients.

The model of the Rise and Reign of a Strong Leader can be viewed in conjunction with the Decline of a Strong Leader model. Since the Rise and Reign was determined by Model D, it experiences an initial steep rise with the emergence of the strong leader, then tends to level as the strong leader's reign attains maturity. When the change in the growth rate is nil, the Decline of a Strong Leader model may be applicable, as that is the starting point for the Decline of a Strong Leader. This appears to be consistent, although the fit is fortuitous. "Rightist" military takeovers and "Leftist" power assumptions appear to be at the opposite ends of the scale. As the growth rate falls rapidly, military seizures are evident whereas when the growth rate is rapidly increasing, socialist tendencies appear. Elitist Power Struggles and Internal Strife seem to be on a continuum since they are separated only by arbitrary definitions. Internal Strife has a high positive coefficient whereas Elitist Power Struggles is highly negative. Falling growth rates may cause conflicts between power groups to surface, but broad based civil disobedience apparently is more favored when the economy is good and individual attention may be focused on issues other than economic survival.

The b_{x_j} coefficient is significant by itself in that it shows the direction of change caused by the intervening event. The Rise and Reign of a Strong Leader occurs when the growth rate is negative (-1.36) but has a positive impact (.82). The Decline of a Strong Leader has a negative impact (-.65). Elitist Power Struggles occur when the growth rate is negative (-1.49) and have a negative impact on that growth rate (-.25). Internal Strife occurs with a positive growth rate (2.16) but has a negative impact (-.36). Socialistic Pervasion occurs when the change in growth rate is positive (2.59), but has the effect of lowering the growth rate per year (-1.41). On the other hand, military seizure takes place when the growth rate is negative (-3.30) yet causes the rate to increase per year (1.80).

Predictability from the multiple regressions was high suggesting that the technique of intervention analysis can be employed to indicate the magnitude and direction of the rate of change in real GNP growth in the presence of certain political events. Only one country, Spain (.65), had a coefficient of determination below .85 and four countries, Indonesia, Rhodesia, Portugal, and South Korea were .95 or better. Determination of the turning point and identification of the model to be involved at that point are the responsibility of the international manager.

Single Company Verification

The second stage of the analysis involved testing the model types in relation to the sales performance of a multinational corporation within the subject countries. This was accomplished by means of a regression analysis which compared a three-year moving average of the change in the company's total sales with a similarly smoothed measure of rates of real GNP growth in each of eight countries over a period extending from 1973-1977. The data available came from Chile, Greece, India, Indonesia, Philippines, Portugal, Spain and South Africa.

The company's sales correlated highly with real GNP growth as adjusted by the intervention parameters, indicating the appropriateness of the smoothing technique. The F-test for significance was 17.22, the multiple r was .94111, and the degrees of freedom were 9/20 indicating a high degree of predictability. For the single company tested, the implication was that some risk encoding for developing nations was definitely possible for the intermediate term (2-5 years) planning period.

Conclusions

A classification of unstable environments by existing and emerging model types will allow corporations to commit pre-emptively vis-a-vis the competition resources and risks to countries holding promise while phasing out or moderating exposure in troubled economies. The study supports the following operational strategies:

Favor, in terms of critical resource allocation (capital, people, and funding) and risk exposure, those countries moving toward or maintaining the Rise and Reign of a Strong Leader and the Military Seizure Models.

Phase out or moderate risk allocation to countries going toward the Decline of a Strong Leader, Internal Strife, Elitist Power Struggles or Socialistic Pervasion Models. Moderation may be chosen provided that the managerial base has inherent staying power to sustain the company during the periods of social/political upheaval with Elitist Plots and Decline of a Strong Leader since these can be expected to be short-term and are bounded. The other two may be bounded but the determination of those bounds is beyond the scope of this research.

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IMPORT DECISION MAKING: WHAT FACTORS
INFLUENCE U.S. IMPORT MANAGERS?

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ABSTRACT

International marketing is viewed by many as a subject of serving the interest of exporters and as a tool of overseas sales. Equally important is the importing side of the international marketing equation. This paper explores the purchasing behavior of U.S. import managers by identifying major determinants of their import decisions.

INTRODUCTION

In theory as well as in practice, international marketing should be a tool available to both exporters (sellers) and importers (buyers). Therefore, international marketing should include the study of importing process and importing management. Unfortunately, however, a lot has been said about exporting but little attention has been given to the importing side of the international marketing equation. It appears that international marketing is viewed by many scholars as well as practitioners as a subject of serving the interest of exporters; a tool that deals with problems of overseas sales and profits in the global marketplace.¹

Kotler and Levy (3) point out that "Marketing in its entirety is cast in the role of a seller subject" (1973, p. 54) and they strongly emphasize that marketing should include more studies in the buyers' side. The same argument can be made in the field of international marketing.

Objectives of this paper are multifold, but emphasis is placed on the purchasing behavior of U.S. import managers by identifying major determinants of their import decisions. In addition, the paper attempts to serve the following: to open an avenue for further research on the importer's side of the international trade equation and to improve the current knowledge of industrial/organizational buying behavior.²

METHODOLOGY

The study data employed in this paper are a portion of an on-going research project dealing with determining information requirements for multinational corporations. 155 responses (managers) were selected from the data file according to the pre-determined selection criteria. The criteria include: (1) Managers who deal primarily with import decisions, (2) imports of general consumer goods, and (3) imports from either Western European (WE) nations or developing countries

(LDCs), or both. The sample firms selected for this paper were largely from California³ and Nevada.⁴

The questionnaire used for data collection was concerned with import decision information based upon eight import-product related variables and seven import-service related variables. These variables were the ones identified as important by a group of managers (panel) who were interviewed before the survey instrument was developed, and are shown in Table 1. Respondents were asked to rate their use of each of the variables on a five point Likert-type scale ranging from "most frequently use" (5) to "rarely use" (1). It should be noted that in an attempt to eliminate the possible influence of ethnocentric differences in certain products of certain countries (for example, French perfume, German automobiles, Swiss watches, British suits, Brazilian coffee, etc.), respondents were asked to rate the scale for decisions on the following consumer products: (1) footwear (leather/non-leather for men, women and children); (2) toys (all types); (3) clothing items (men's shirts/women's blouses) and (4) China ware. Because of sample qualification requirements (Western and LDC import origins), a probability sample was not attempted. Rather, a judgment sample was used to collect a representative cross section of these classifications.

The European and the LDC-origin firms were classified on the basis of their import dollar volume proportions. For example, if a firm imported one or more of the four given products and more than 70 percent of these consumer products were imported from Western Europe, the firm was classified as a member of the Western Europe group (WEC). Also, care was exercised in identifying the "LDC import managers" from within the Western European firms, and vice versa. Seven managers from the WE firms and three managers from the LDC firms were reclassified due to their import speciality area.

Of the 155 respondents in the sample, eighty-three in the WE group and seventy-two in the LDC group were identified. The LDC group represented countries in Asia and Latin America.

The basic statistical instrument used in this study is multivariate discriminant analysis. Analysis were carried out by the Clyde-Cramer approach using the Wilk's Lambda criterion (1, 2, 5).

³ California International Business Directory, 1980-1981 (Importers Section).

⁴ Nevada Industrial Directory, 1980-1981 (Import/Export Firms).

¹ For example, see special issue of Journal of International Business Studies, Spring/Summer, 1978.

² Import purchasing for manufacturers, wholesalers, retailers or brokers is an organizational buying. Yet, import decision making process has received little attention in the study of organizational or industrial buying behavior.

HYPOTHESES

Linder introduced an "income-gap" model which offers an explanation of trade among industrial countries (4). Linder's proposition is that the most influential factors in trade are per capita income differences and internal demand which determine the range of a country's imports and exports. This "income-gap" model seems to support the hypothesis that the larger the income gap between countries, the less the trade activities, and vice versa, that countries with high per capita incomes will demand high quality, expensive, name-brand products. Linder's model seems to be consistent with the actual pattern of world trade and Vernon's model.

In an attempt to explain the behavior of U.S. exports of manufactures, first Vernon (6) and then others (7) have used the concept of the product life cycle in developing a four-stage model: (1) U.S. production and export monopoly in high income and labor-saving new products; (2) other industrial countries start to manufacture the product whose design and production is now standardized; (3) foreign producers displace U.S. exporters in the remaining export markets; and (4) U.S. imports products which are no longer new and have low production costs abroad.

In an attempt to relate the empirical findings of the present study to the existing international trade theories and models, the following hypotheses were generated to be tested in the study:

- H1: When importing from industrialized countries in Western Europe, U.S. importers will rely more on the non-price variables (product style, brand name, quality, etc.) in determining their import decisions (the Linder model).⁵
- H2: When importing from LDCs, U.S. importers will rely heavily on the price variable in determining their import decisions. (Product Life-Cycle Model)

FINDINGS

Overall Relative Use of Variables

Before the testing of hypotheses, overall relative use of import decision variables as rated by managers as a group was measured. Table 1 shows the mean scores of the five point scale for the entire study sample.

TABLE 1
IMPORT DECISION VARIABLES WITH
MEAN SCORES AND RANK (n=155)

Variable (order as listed in questionnaire)	Mean Score	Rank
1. Brand recognition	2.27	14
2. Ordering/shipping procedures	3.74	5
3. Style/feature	2.64	11
4. Timely delivery	4.12	1
5. Packaging	2.38	13
6. Method of payment	3.56	8
7. Price	4.09	2
8. Dependability for long-term Supply	3.86	4
9. Marketability (domestic demand)	3.34	9

⁵An assumption based upon the more comparable standards of living and income-gaps between U.S. and developed Western European countries.

TABLE 1 (cont.)

Variable	Mean Score	Rank
10. Promotion	2.39	12
11. Safety	2.12	15
12. Length of association	3.60	7
13. Uniqueness (ethnical/cultural appeal)	2.66	10
14. Transportation costs	4.02	3
15. Quality	3.69	6

As seen from Table 1, the price variable was rated as second in importance to "timely delivery." Safety was the area of least importance for respondents. This is an interesting finding because toy products are one of the four consumer products under study and the safety aspect of the toys has been, and still is, a controversial issue in the U.S. One possible explanation of this finding, however, can be found in the fact that most of the toys imported from Europe were traditional dolls and practically all toy items imported from LDCs (mainly from Asia) were "stuffed or plush" toys which have little or no danger to children.

Perhaps the most interesting and significant point to note by examining the mean score differences is the result of the sub-group comparison. As shown in Table 2, although not statistically significant, there appears to be a considerable degree of difference in the sub-group mean scores, 2.89 for the "product-oriented variables" and 3.61 for the "service-oriented variables," product-oriented variables were relatively stable in terms of rate of change in these variables as compared to the service-oriented variables. This is because unexpected problems and changes occur constantly in the service-oriented fields and that there are no proven methods of predicting the magnitude and directions of these changes. A high degree of uncertainty is involved in these variables which in turn require non-routine, management by exception decisions for efficient import management. It was also found that "timely delivery" was the most frequently mentioned problem area by the respondents. In light of these findings, therefore, the high scores on those variables are not surprising.

TABLE 2
GROUP COMPARISON:
PRODUCT-ORIENTED vs. SERVICE-ORIENTED VARIABLES
(n=155)

Variable	Group Mean Scores*
A. Product-Oriented Variables:	2.89
Brand recognition	
Style/features	
Packaging	
Price	
Marketability (Domestic demand)	
Uniqueness (Ethnical/Cultural appeal)	
Safety	
Quality	
B. Service-Oriented Variables:	3.61
Ordering/shipping procedures	
Timely delivery	
Method of payment	
Dependability for long-term supply	
Product promotion	
Length of association	
Transportation costs	

* The mean difference test between the groups is not statistically significant at $\alpha=0.05$.

Western Europe and LDCs Group Analysis

Although the overall relative use measures indicate some preferences of the importance of variables in terms of ranking, it would be misleading to conclude that such measures generally represent U.S. import managers' decisional behavior. In fact, it would be meaningless to draw conclusions about import purchasing behavior unless further analysis is conducted.

As discussed earlier, one approach is to investigate the use behavior of the decision variable between managers of firms which import mostly from Western European countries and those who buy mostly from LDCs for specified consumer product items. Discriminant analysis was used for this comparison, and the results are shown in Table 3. For the overall discriminant model, the Wilk's Lambda criterion (Λ) for the two groups was .811, which is significant at the .001 level. The multivariate null hypothesis that the two groups had similar import decision behavior can not be regarded as not tenable.

TABLE 3
THE IMPORT ORIGIN GROUP DISCRIMINANT ANALYSIS
(n=155)

Variables	Standardized Discriminant Function Coefficients*
1. Brand recognition	-.379
2. Ordering/shipping procedures	.243
3. Style/features	.119
4. Timely delivery	.639
5. Packaging	.008
6. Method of payment	.184
7. Price	.701
8. Dependability for long-term supply	.498
9. Marketability	-.003
10. Promotion	.015
11. Safety	.001
12. Length of association	.198
13. Uniqueness (ethical/cultural appeal)	.019
14. Transportation costs	.401
15. Quality	.391

$\Lambda = 0.811, P < 0.001$

This program of multivariate discriminant analysis scans all variables and then selects those which contribute most to the separation of the predefined managerial groups. The important points in the use of this tool in this methodology for the determination of 'information requirements' are: first, the discriminant functions are chosen in such a way as to minimize within - group variance relative to between - group variance; second, to determine the order of importance of the variables, discriminant functions are normalized so that their variance in each of the groups is unity; third, only statistically significant discriminant functions are used. Finally, the extent of usefulness of a given discriminant function coefficient depends not only upon the reasonableness of the variables selected and the percentage of discriminable variance for which this function-coefficient accounts, but also on the group mean vectors in the discriminant space (the extent of the 'distance' between the group means of the separated groups). For this purpose, the group mean vectors are analyzed to identify which management groups differently perceive each class of variables.

An examination of Table 3 also reveals that the largest contributor to group separation along the discriminant function is the "price" variable (coefficient value of .701) followed by the "timely delivery" (.639), the "dependability for long-term" (.498), "transportation costs" (.401), "quality" (.391), and "brand recognition" (.379). The "ordering/shipping" variable also has a relatively high coefficient (.243). It should be noted here that this discriminant vector does not identify which of the two group managers regards these variables as important and use frequently for their import decision making. In order to identify the group differences with regard to variables, reference must be made to the group mean vectors and standard deviations, which are shown in Table 4.

TABLE 4
THE IMPORT ORIGIN GROUP MEANS
(AND STANDARD DEVIATIONS)
(n=155)

Variables	Western Europe (n=83)	LDCs (n=72)
1. Brand recognition	2.89 (.78)	1.67 (.81)
2. Ordering/shipping procedures	3.05 (.84)	4.41 (.56)
3. Style/feature	3.15 (1.03)	2.14 (.98)
4. Timely delivery	3.73 (.99)	4.48 (.84)
5. Packaging	2.14 (.88)	2.65 (.97)
6. Method of payment	2.96 (.95)	4.13 (.85)
7. Price	3.35 (.83)	4.81 (.99)
8. Dependability for long-term supply	3.11 (.71)	4.60 (.75)
9. Marketability (domestic demand)	3.49 (.84)	3.17 (.91)
10. Promotion	2.44 (.90)	2.31 (1.12)
11. Safety	2.21 (.51)	2.04 (.97)
12. Length of association	3.23 (.82)	3.96 (.93)
13. Uniqueness (ethnic/cultural appeal)	2.43 (1.51)	2.92 (.76)
14. Transportation costs	3.70 (1.19)	4.34 (1.12)
15. Quality	4.32 (.71)	3.04 (.94)

Table 4 shows that the mean value on the price variable by managers who import from LDCs outstrips with an almost perfect score of 4.81 (S.D. .99), the other group where the WE group managers have a mean score of 3.35 (S.D. .83). Of the variables that contribute significantly to the group separation (Table 3), the LDC group tends to rely heavily on the variables of price, the long-term supply condition, transportation and timely delivery while the WE group tends to rely more on the variable of brand, quality and to some extent on the style variable of the products.

Thus, there is strong support for the hypothesized relationships between the decision variables import managers use and the area from which they import for the given consumer product lines.

CONCLUSION

This paper focused on U.S. importers' decisional behavior. Emphasis was placed on determining the import decision variables used by U.S. import managers and variations between predefined groups in making import decisions for specified types of consumer products. Based on existing trade theories and models, hypotheses were generated and tested for this pilot study. Hypotheses tested were: U.S. import managers rely more on non-price variables for their import

purchasing when the import origin is industrialized Western Europe (H_1); while the price variable is the main determinant for purchasing decisions when the import origin is LDCs (H_2).

Undoubtedly, import groups differ in composition not only from country to country and from company to company, but also among products. Therefore, making generalizations beyond this pilot study is unwarranted until further replication can be accomplished. Several major implications, however, can be highlighted. There is strong support for the hypothesized relationship between import variables and import origins. The import origin group difference between the WECs and the LDCs with regard to the variable use behavior is significant with $\Lambda = 0.811$, $P < 0.001$. The variables perceived to be relatively important for the WEC group's purchasing decisions were identified as quality, style, brand name and other non-price features while price, long-term supply stability and ordering/shipping were perceived to be relatively important by the LDC group. Delivery time and transportation were perceived as highly important by both groups; however, there was a significant difference in the LDC's heavy use of these variables in contrast to the WEC group. Another interesting finding was the high degree to which all respondents relied on the service-oriented variables rather than product-oriented variables for their import decisions.

Another significant finding from the study is the identification of most critical on-the-job problems confronting purchasing managers in small firms. Late deliveries, often caused by both export makers and the purchasers' own firms, were perceived to be the major problem. This finding (late deliveries) coincides with the fact that U.S. import managers regard the service-oriented variables more important than the product-oriented variables as shown in [Table 2](#).

Moreover, these findings add to the existing body of knowledge in international trade which has tended to emphasize export strategies at the expense of understanding how decisions are made concerning problems related to import management. Another significant contribution to the literature is that this pilot study provides a foundation for further replications which will better allow a comparison of import purchasing decisional criteria with those employed for domestic-industrial group buying decisions. Further studies of a comparative nature will serve to improve the theory of the firm's purchasing behavior. In view of the fact that future marketing will be a "global marketing," it would seem that the "time is right" to emphasize a balance between the import and export sides of the marketing equation.

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INSIGHTS INTO THE STRUCTURE AND PRACTICE OF MARKETING RESEARCH
IN A SOCIALIST STATE: THE POLISH EXPERIENCE

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Abstract

This paper describes the structure and focus of marketing research in the Polish socialist state at two levels of operation: (1) centralized activity, as typified by the Institute of Internal Trade and Services, the nation's leading marketing research unit; and (2) enterprise level activity, illustrated by PREDOM/POLAR, Poland's state enterprise for manufacturing refrigerators and washing machines for the domestic and foreign markets. By comparison with western standards, the Polish marketing infrastructure is not highly developed, and its traditions are recent. The focus of contemporary marketing research is influenced by the economy's bureaucratic organization and resulting rigidities in marketing structures and practices, and by the interests and special competencies of the nation's small number of specialized marketing research groups.

Introduction

During recent years the western popular press has given increased attention to economic conditions within Poland, and in particular, to market supplies of consumer goods and the resulting impact on consumer well-being. At the same time, professional bodies of marketing academicians and practitioners have brought forward only limited descriptive and analytical studies related to contemporary marketing structures and practices in Poland and other central and eastern European states. This is particularly true concerning the structure and practice of marketing research.

Walters' (1975) study noted that "Poland's trade system has evolved into a modern marketing system." However, it did not directly consider the role of marketing research in that system, and it seems heavily dated by recent developments in Poland. Mayer (1976) provided a useful system for comparing and contrasting free enterprise economies with traditional socialist economies, and along with Hanson (1974) described some distinctions among the socialist countries *vis-a-vis* the development of marketing practices. Similarly, King (1980b) addressed the growing discrepancy between traditional socialist philosophy and contemporary advertising practices in Poland. However, none of these efforts gave more than passing attention to the status of marketing research.

However, a separate study by King (1980a) reviewed and summarized the findings of several recent marketing studies conducted by Polish researchers concerning consumer shopping time in Poland. These studies, based upon large scale survey and consumer panel research, covering a range of topics such as the use of private automobiles in shopping, queuing time, and consumer evaluation of the stock of retail shops, suggest that the practice of marketing research is better developed than western professional literature and popular opinion indicate.

The purpose of this paper is to describe, if on a highly selective basis, the structure and focus of marketing research at two levels of operation in the Polish

socialist state. First, attention is given to centralized activity, as typified by the work of the Institute of Internal Trade and Services in Warsaw, the nation's premier marketing research organization. Second, enterprise-level activity, illustrated by experiences of PREDOM/POLAR, the state enterprise which manufactures refrigerators and washing machines for both the domestic and export markets, is described.

The paper is intended to provide a preliminary statement rather than a definitive, comprehensive statement about the structure and focus of Polish marketing research. The authors recognize that the reader might find greater interest in the results of an industry-wide study of marketing research practices throughout Poland, or in a Polish-American comparative analysis of types of data collected and uses made of the data. However, the present effort is limited to developing the more selective and preliminary (but hopefully informative and precise) statement noted above. In addition to the researcher's usual limitations of time, cost and space, this effort was further constrained by a paucity of relevant scholarly literature, by the obstacles inherent in exploring aspects of an economic system which is philosophically and structurally different from one's own, and by the political sensitivities which one might anticipate, particularly in the current situation. Even so, the following observations should prove instructive to the marketing academician or practitioner interested in evolving marketing practices in socialist economies.

Polish Marketing Research - An Overview

Interest in market and consumer research in Poland developed largely during the 1960's, although there is ample evidence of the conduct of marketing research previously. However, in 1967 the government made the study of market phenomena obligatory for all trade organizations. Various research units, including the Institute of Internal Trade, The Institute of Economy of Services and Small Production, and research institutes of universities and other higher schools (primarily technical universities and academies of economics) previously had promoted scientific research of market and consumption problems, either on their own initiative or on instruction of central authorities or economic units involved in manufacturing and the trades. However, those investigations did not constitute a uniform, coherent system of research. By the late-1970's a new organization for conducting marketing research and influencing consumption patterns was introduced, combining some of the previously scattered activities.

The Institute of Internal Trade and Services

The central role in the new organization of Polish marketing research is played by the Institute of Internal Trade and Services, which is the leading unit in conducting research and the coordinating body for both nationwide and local area studies. The Institute was established in 1976 by the government of the Polish

People's Republic (Decision Number 27 of the Prime Minister, April 12, 1976). It was formed by the merger of two existing research organizations, the Institute of Internal Trade and the Institute of Economy of Services and Small Production.

The Decision which established the new Institute defined its objectives, areas of activity, and basic organizational structure. The Institute's goal is to conduct research efforts consistent with the national economic development program, and in particular:

- (1) Organizing and conducting research in the areas of organization and management of the trades and services, economics of the trades and services, their operating techniques, and market and consumption-forming activities;
- (2) Elaborating and disseminating new information related to the trades and services, resulting from editorial and documentary research conducted by the Institute's staff;
- (3) Editing and disseminating popularized publications, reports, translations, etc., as well as cooperating with the institutions originating these materials;
- (4) Publicizing the results of completed research, and cooperating in introducing the findings into practice;
- (5) Organizing scientific conferences and symposia, seminars, lecture, exhibitions, etc. on subjects related to trade and services activities;
- (6) Cooperating with high schools and other scientific institutions and trade and services organizations within Poland and abroad;
- (7) Issuing opinions and "experts' reports" concerning problems of domestic trade and services;
- (8) Participating in national and international organizations concerned with the marketing of goods and services;
- (9) Improving the professional and scientific skills of the Institute's staff;
- (10) Participating in the process of teaching and developing personnel in behalf of internal trade and services; and
- (11) In general, keeping abreast of relevant scientific development, both domestically and abroad, related to the Institute's areas of activity.

The Institute works toward these goals through its own research staff, through cooperation with higher schools and institutes concerned with trade and the services, and through use of experiences of representatives of trade enterprises. It is managed by a director, who is assisted by deputy directors responsible for trade research, service research, and for supporting the research process. The Institute has an advisory board called the "Learned Council," created by the Minister of Internal Trade and Services. This 30-member body is composed of members of the faculties of institutions of higher education, prominent representatives of trade and service, and others concerned with economic performance. In addition, the Institute's director has a consultative organ, the "Institute's Council," composed of heads of the Institute's units and representatives of social and political organizations.

The Institute has established a separate section for market research and consumption-formation, including

both central and local units. The central units include the Department of Market Research and Consumption-Formation and the Center for Cooperation with Consumers. Local units, which serve the marketing research needs of regions and "macroregions", are located in Katowice, Poznań, Szczecin, and Warsaw. With the creation of four additional local units in the next few years, each of Poland's eight macroregions will be served directly.

During 1979 marketing studies were conducted for the first time within the new system. Responsible authorities generally agreed that the revised organization and newly introduced studies stood the test of experience. The Institute conducted 64 marketing research investigations, including 47 which focused on instruction of economic units within Poland's domestic trade and services structure, and 17 which contributed to the national five-year program of scientific investigation. Overall, 14 of the studies involved routine (or recurring) testing, 25 were non-recurring in nature, and 22 concerned product quality, which was treated as a distinct category of research.

Routine (or recurring) studies of national market phenomena included the following:

- (1) A Computer System for Short-Term Forecasting - Using econometric models, the Institute has developed an automated forecasting system for use by the Ministry of Internal Trade and Services. Each quarter this system yields short-term forecasts for 140 consumer products.
- (2) Monthly Regional Market Situation Reports - Monthly and quarterly market situation reports are prepared presently for three districts (Katowice, Szczecin, and Poznań) and one macroregion. The Institute plans to expand this activity to all eight microregions within the next few years.
- (3) Consumer Opinion Studies - The Institute now collects consumer opinion data concerning changes in the market situation through the use of consumer panels. According to plans for this new undertaking, a nationally representative panel of consumers will be polled at six-month intervals. Partial results from the initial study in Poznań in 1979 were met with extensive interest within and beyond scientific, trade, and governmental circles. The consumer panel program was to be fully launched during 1980.
- (4) Market Analysis Based on Business Conditions - The Institute systematically collects quarterly data from the significant economic, industrial, and commercial units concerning supply and demand conditions for about 200 products, consistent with the product list used in short-term forecasting and market situation reporting previously noted in items (1) and (2) above. Preliminary investigation has already been carried out, and full-scale studies are scheduled for the early-1980's.
- (5) Market Reports by Industry Branch - Based upon data collected by the Institute from a nation-wide shop panel, reports will be made quarterly to interested economic units concerning the market situation for household appliances, radio and television equipment, and furniture items.

Non-recurring studies conducted by the Institute focus on such problems as industry branch forecasts, product-specific market supply, and consumer preference. Typically these studies are made at the request of economic units (enterprises, etc.). The following examples illustrate the range of non-recurring studies undertaken

recently by the Institute: "Forecast of Poultry Consumption through 1990," "Influence of Retail Prices on the Demand for Leather Goods," "Consumers' View of the Market Supply of Children's Articles in Daily Use," and "The Household-Market Supply of Detergents and Cleaning Agents."

Product quality research is undertaken principally by the Laboratory of Organoleptic and Utility Research, and partly by the Institute's Department of Consumer Opinion. This research may be concerned with prototypes of goods, or with products already on the market. Testing consists of evaluation by selected consumers or of utility tests using panels of experimental households.

Another significant function of the Institute is consumer education. While this is not a marketing research activity, it is worth noting that the Institute is active in seven basic family and household problem areas: family feeding, equipping households, clothing, family and household hygiene, rest and relaxation after school and work, meeting the material needs of children, and help in household management for women who work in large industrial plants. During 1979 in support of these programs, the Institute produced more than 25 brochures, 33 television programs, more than 50 expositions, 3400 demonstrations, and several recordings and slide presentations. Also during 1979 the Institute published 35 consumer information books with a combined printing of 1,264,000 copies. These activities provide excellent opportunities for disseminating the Institute's marketing research findings, and for implementing some of the actions which it suggests.

Finally, the Institute disseminates marketing research findings through its professional publications program. A substantial journal, Roczniki Instytutu Handlu Wewnętrznego i Usług (Annals of the Institute of Internal Trade and Services) is published quarterly. Two series of publications, Biblioteka Instytutu Handlu Wewnętrznego i Usług (Library of the Institute of Internal Trade and Services) and Opracowania i Materiały (Works and Materials), report the findings and scientific contributions of original research in the domestic economy. Bibliographical listings and analyses of Polish and foreign economic literature appear in Przegląd Dokumentacyjny z Zakresu Handlu Wewnętrznego i Usług (Documentary Review of Internal Trade and Services). Elaborations based on foreign sources, intended to acquaint Polish trade leaders with theoretical works of prominent non-Polish scientists and with experiences and practical solutions to operating problems of foreign enterprises and institutions, are published in Handel Na Świecie (Trade in the World). The Institute distributes its materials through its own Section of Publications and Dissemination.

Marketing Research at the Enterprise Level

Probably western marketing academicians and practitioners are even less familiar with the organization and operation of marketing research at the enterprise level than at the central level in the socialist state. In order to provide better insight into the conduct of marketing research at the "individual firm" level, the following description of the activity at PREDOM/POLAR is provided.

PREDOM/POLAR, located in Wrocław, is the dominant state enterprise concerned with the manufacture of refrigerators and washing machines for household-level use. Its annual rate of refrigerator production is about 600,000 units. Within the Polish refrigerator market PREDOM/POLAR faces competition from another organization, "Silesia," which produces about 130,000-

140,000 units annually. Also, Soviet-built units are available in Poland. It is estimated that PREDOM/POLAR holds about 55 percent of the domestic market, and the Soviet product has about 28 percent.

In view of PREDOM/POLAR's refrigerator-manufacturing capacity of about 775,000 units annually, and given the relatively saturated domestic market for the product, international markets are important. About 80 percent of the organization's exports go to western countries, from which payment is received in badly needed convertible currency. PREDOM/POLAR produces some units which are sold under the Philips brand name in Western Europe. Some thought has been given to entering the American market, possibly through manufacturing for private branding, although no decision has been taken regarding this possibility. It is felt that a private-branding contract for 100,000 or more units annually could make excessive demands on the organization, which presently utilizes 75 to 80 percent of its plant capacity.

Data are not available to establish a norm for the structure and practice of marketing research at the enterprise or other operating level in Poland. However, based upon discussion with enterprise-level managers in several consumer-goods manufacturing industries, as well as with central planning authorities, it is probable that PREDOM/POLAR ranks among the more progressive organizations in terms of having established a formal, systematic program of marketing research. Consequently, the following description of the organization, staffing, and research program of a single firm should be viewed as illustrative of the better marketing research operations in Poland, rather than as typical of Polish firms generally.

Marketing research activity is centered in PREDOM/POLAR's marketing department, which was established in January 1980. This department has a staff of five professional persons including the manager, a specialist in methodology, a new-product development specialist, a test-marketing specialist, and a planner-coordinator. Except for the manager, all marketing staff members are young women with little post-education experience. Expansion of the department staff to include four additional professional members is planned for the near future. Presently, sales department personnel have primary responsibility for PREDOM/POLAR's advertising efforts, in coordination with the marketing department. As the latter unit grows and matures, it expects to assume wider responsibility, including management of the advertising program.

The principal types of marketing research activities engaged in by PREDOM/POLAR are outlined in **Table 1**. Even before the formal marketing department was established, the firm collected information concerning existing levels of household appliance ownership and the unmet demand for them within the Polish market, and on a very selective basis in export markets. These types of data presently are developed within the marketing department systematically at 12-to-18 month intervals, depending upon the organization's need for the data. Essentially, this information is used by management in forecasting demand, discovering new market opportunities, and directing internal research-and-development activity.

One other form of marketing research which has been conducted by PREDOM/POLAR for the past ten years or longer is consumer preference research. This information, collected twice each year, aids management in determining its promotional program and channels of distribution to be used. The scope of this research is widening, and during the past two years motivation

TABLE 1

MARKETING RESEARCH ACTIVITIES AT PREDOM/POLAR

<u>Type of Marketing Research Activity</u>	<u>Markets Covered</u>	<u>Primary Use(s) of the Research</u>	<u>Frequency</u>	<u>How Long Conducted</u>
1. Present level of appliance ownership (household-level)	Domestic & Foreign	To forecast aggregate demand.	Annually	Past 10 yrs.
2. Unmet demand	Domestic & Foreign	To discover new market opportunities, and to direct R&D at PREDOM/POLAR.	As needed (12-18 months)	Past 10 yrs.
3. Motivation analysis	Domestic & Limited Foreign	To establish and modify product features to adapt to consumer needs; to use in planning promotional campaigns; to set optimal export prices.	18-24 mo. cycle	Past 2 yrs.
4. Analysis of product/price ratio	Domestic & Foreign	To set optimal product line in order to create desired image; to modify product features; to define level of export prices.	Every 2-3 months	Past 2 yrs.
5. Consumer preference research	Domestic	To determine means of promotion; to help in influencing preferences; in selecting channels of distribution.	Twice annually	Traditionally, but increased
6. Test marketing	Domestic	To aid in go/no-go decisions for new products already developed	As needed	Past 2 yrs.
7. Current sales and inventories in the retail shops	Domestic	To control distribution of goods territorially; to balance supply according to regional demand; to determine how intensive promotion should be; to indicate price changes and new product introduction times.	Monthly	Past 2 yrs.
8. Long-range forecasting	Domestic	To aid in planning capital investments; to direct and "pace" R&D activities; to plan purchase of adequate supplies for production; to set sales objectives; to balance future sales and demand.	Biannually	Past 7 yrs.

analysis has been initiated on an 18-to-24 month cycle. This information will be used to help the organization develop and modify product features so that they will better meet consumers' needs. Also, it is expected to provide data useful in developing promotional campaigns. Similarly, test-marketing activity, which will be conducted "as needed," was initiated by the marketing department two years ago.

Also, the organization now routinely conducts a "product-price" ratio analysis at least quarterly. Data generated by this activity, which includes the domestic and export markets, are used to establish the "optimal product line" which will support the image desired by PREDOM/POLAR's management, essentially through product-feature modification and adjustments in export-pricing levels.

Until recently, PREDOM/POLAR received information about wholesale inventory levels of its product types routinely from the senior domestic trade organization, but it had no knowledge of retail shop inventory levels or sales rates. During the past two years, the marketing department has begun systematic monthly collection of this missing information. These data are intended to minimize territorial misallocation of goods, and to more nearly match supply with regional market demand. The information will be useful in determining how intensive the organization's promotional efforts should be, in addressing the question of price changes, and in timing the introduction of new products to the market.

Finally, the marketing department staff is responsible for developing the organization's biannual long-range demand forecast. Management uses these data in taking a wide range of decisions, including the planning of capital investments, directing and pacing research-and-development activities, in assuring adequate supplies of materials to support planned production levels, in setting sales objectives, and in attempting to achieve a market balance between demand and sales.

While one gains insight into socialist marketing thought and practice by learning the types of research data which are collected routinely and occasionally, it is also instructive to consider the types of research which are conducted less intensively at the enterprise level. For example, the following areas of marketing research receive comparatively little, if any, attention.

First, research of export markets has been minimal due to several organizational limitations. Studies of export markets must be conducted by PREDOM/POLAR in cooperation with "Uniwersal," which is the official foreign trade enterprise concerned with sales of household appliances among other products. However, "Uniwersal" and PREDOM/POLAR are supervised by different governmental ministries, the former by the Ministry of Foreign Trade and the latter by the Ministry of Machinery, resulting in some bureaucratic obstacles. Also, the cost of researching foreign markets is relatively high. Even so, PREDOM/POLAR's export objective may force substantially increased attention in

this area soon. The firm now ships about 20 percent of its physical volume to foreign markets, but it hopes to increase this share to 40 percent by the mid-1980's.

Second, PREDOM/POLAR's research of distribution channels and pricing within the domestic market is relatively underdeveloped. Few intermediaries (trade enterprises) exist between the manufacturer and consumer, and these few are multidivisional in structure, typically selling all over the country. As a rule, their distribution policies cannot be influenced directly by PREDOM/POLAR, and attempts at indirect influence are complicated by the fact that the intermediaries are responsible to the Ministry for Internal Trade, while the manufacturer is responsible to the Ministry of Machinery. As a result, before PREDOM/POLAR could establish its own network of retail shops, it would be necessary to win approval of the Ministry for Internal Trade.

Also, the established procedure for distributing goods to the trade in Poland is quite different from that in the United States, where sales tend to be made on an "individual order" basis. Within the Polish market PREDOM/POLAR signs agreements with the four principal trade enterprises, covering the quantity and types of products to be shipped each month. These agreements are made at least seven months in advance of their effective dates, resulting in considerably reduced flexibility in supplying goods to the trade, even though the agreements are not always precisely met.

Concerning price changes, the individual Polish organization has much less influence than does its American counterpart. In Poland the manufacturer notifies the state price commission of the maximum retail price which it proposes, and the commission has the power to disapprove the proposal. This procedure is time-consuming, and the structure is rigid. As a result, relatively little attention is given to researching distribution channels and pricing in the domestic market.

Third, promotion research is rarely done, possibly because the role of promotion in the past has been underestimated. PREDOM/POLAR's media schedule for a recent year illustrates advertising's limited intensity in the domestic market:

- (1) Newspapers - Advertisements of about one-quarter page size were placed in each of six newspapers in five major Polish cities.
- (2) Magazines - One to four advertisements, usually half-page color ads, were placed in each of five weekly and one monthly magazine.
- (3) Outdoor - Limited outdoor ads were used, mostly in stadium locations.
- (4) Radio - The medium is rarely used.
- (5) Television - The medium is not used.
- (6) Brochures and Pamphlets - These materials are typically used at trade shows and during promotional campaigns.

While this advertising schedule is light by American standards, it is relatively heavy by comparison with other Polish industry groups (King 1981). However, the efficiency of PREDOM/POLAR's advertising program remains essentially unmeasured, although marketing staff members speculate that it is low.

Conclusions

Although Polish marketing research remains underdeveloped compared to the American experience, substantial organizational gains have been made even in the past five years. Trained personnel of the Institute of Internal Trade and Services are in place and in close contact with the Polish business, educational, and governmental communities. The Institute seems to be an excellent choice for leading in the development of a marketing research infrastructure in Poland.

Even so, troublesome issues such as the following suggest that the effective impact of marketing research in Poland in the near future may be severely limited. Given current conditions in Poland, it is quite possible that marketing research activity may be dramatically reduced in the name of "economy." Or, widespread shortages of consumer goods may fix managerial attention even more firmly on production issues, a familiar problem to marketing personnel in Poland. When the current situation is rectified, there remains the problem of bureaucratic conflicts, with the potential for results ranging from delays in implementing actions supported by marketing research, to outright rejection of those actions. Further, there is room for doubt that marketing research findings will be readily implemented at the operational level, even when they are officially supported, in view of the pervasive production orientation and in the absence of a much stronger system of individual incentives than presently exists in manufacturing and trade enterprises. Finally, should marketing research achieve widespread acceptance, the gigantic task of educating research practitioners and marketing managers who will use this new information remains.

Still, once the current economic situation is brought under control, the Polish consumer's best hope may rest in the earliest possible implementation of strengthened, systematic, sensitive and pervasive marketing information systems. In this regard, developments of the past five years give cause for optimism.

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THE EUROPEAN ECONOMIC COMMUNITY:
ONE MARKET, TEN MARKETS- OR TWELVE?¹

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Abstract

This paper addresses a question that has been subject to debate for several years: to what extent can marketing strategy be standardized across the EEC-member-states, as a result of the "common" market that they have formed?

Introduction

Since the signing of the Treaty of Rome in 1958, the European Economic Community has come to be one of the most widely studied phenomena in world history. Whether viewed as an experiment in socio-political unification or in the creation of a mammoth market, the attention paid the Community by academics and others is well warranted.

The EEC is the largest trading bloc in the world, and can claim the largest concentration of wealth and technical expertise outside North America. Its population, at about 270 million, is larger than those of the U.S. and Canada combined. Finally, as of 1979 its GDP (\$2,395 billion) topped that of the U.S. (\$2,370 billion) for the first time.

As could be expected with such a major undertaking, the degree of success of European unification is a subject of continuous debate. Supporters of the EEC concept point to several factors as proof that, against insurmountable odds, the Community has made rapid and substantial progress. These include the abolition of tariff barriers, the resulting intra-EEC trade boom, the soon-to-come European passport, and the freedom of movement of people, services and capital across national boundaries.

On the other hand, critics cite the vastly differing inflation rates among EEC nations, the decline in economic growth rates (from 4.5% between 1964-1974 to 2.2% between 1974-1980), the budget quarrels between the U.K. and the EEC, and the currently rising manifestations of protectionism, as only a few examples of the overall futility of attempting to create a truly unified Europe.

This debate is important not only from a socio-political or economic perspective, but also from a marketing one. For several years, marketing authors have discussed the question of whether the EEC can be seen as one large market or as several distinct, national sub-markets (e.g. Botthof 1966; Baker and Ryans 1972; Dunn and Yorke 1974; Esslen and Sjogren 1974; Ball 1976).

The question is a significant one. Its implications for marketing strategy for any firm attempting to enter or expand in the European market are vast. Should a company employ a standardized or a differentiated product and/or promotion strategy? Does success in one country guarantee success in another? In packaging and

advertising, should one stress or play down the fact that product X is already sold in several European countries? Will a skimming price strategy work as well in Italy as it already did in Belgium?

These and other similar issues have been addressed frequently in the literature. The purpose of this paper is to present an alternate viewpoint which is substantially different from those that have been advanced in the past. This consists of two main elements:

- a. That the key question is not as much one of "one common or ten national markets". Rather, that the EEC can be better understood and approached as "one common, one 'Euro' and ten national markets".
- b. That the one vs. many markets problem may have different solutions, depending on the particular product(s) that is being considered.

The remainder of this paper consists of four main parts. The first discusses the possibility of viewing the EEC as one common market and examines the factors that facilitate intra-European trade. The second provides an overview of inter-country differences and discusses the strategic adaptations that are necessary for successful entry in individual markets. The third presents the case for the need to consider a twelfth entity which will be called the "Euro" market. The Euro market is seen as different from both the individual country-markets and the EEC common market. Finally, the fourth section combines the conclusions of the previous three and provides a product taxonomy in view of the resulting twelve European markets.

Methodology

This paper is based on the partial results of a larger study that was conducted between April and October 1981. Findings in this paper are derived from three basic sources:

- a. An extensive review of published articles on the EEC.
- b. An analysis of secondary information obtained from academic and trade publications, governmental statistical agencies, and private information agencies (e.g. marketing research and consulting firms from six European countries).
- c. A total of 47 in-depth, semi-structured interviews with government officials and business executives. Of this total, nine interviews were conducted in North America and 38 in Europe. Given the broader scope of the study, findings from the interviews are incorporated in the discussion and not reported separately.

The Case for a European Common Market

One of the original tasks of the Treaty of Rome was the abolition of tariff and trade barriers across European frontiers. Implementation of treaty provisions resulted in a boom of intra-EEC trade. At present, fully 51% of all EEC-member imports and 52% of all exports are accounted for by trade among the EEC

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partners. As well, in its first two decades, the Community's trade with the rest of the world mushroomed. Both imports and exports rose tenfold from \$23 to \$227 billion and from \$22 to \$221 billion, respectively.²

The effects of trade liberalization in Europe have not been lost to North American business executives. In a 1972 study (Baker and Ryans), multinational company managers indicated that the common market had had beneficial effects on trade both within and outside Europe. Sales increases to EEC members, non-EEC markets, and the U.S. were reported by 63%, 25% and 6% of those interviewed, respectively.

Similar results were reported by interviewees in the present study. Most of the business executives in the sample attributed their firms' very presence in many countries --not to mention the concomitant increases in sales volume-- to the lack of trade barriers in Europe. Some of the many factors that make the EEC a truly "common" market are discussed below.

The Work of the Pan-European Institutions

The main EEC institutions are the Commission, the Council of Ministers, the Parliament, the Court of Justice, and the Economic and Social Committee. Their functions and tasks have been discussed in detail elsewhere (Esslen and Sjogren 1974; Noel 1979). While ultimate decision making authority rests with the Council of Ministers, the most visible institution is the European Commission. Its task is to make proposals for action to the Council regarding implementation of the Treaty of Rome provisions, and to oversee the functioning of the Community in general.

Over the years the Commission has been involved with countless issues, several of which are dealt with in more detail below. In the main, its proposals aim at policy harmonization throughout the Community. For example, a recently adopted proposal concerns an EEC-wide symbol that will mark all food products that have been approved for distribution throughout the member states.

From a marketing standpoint, the implications of policy harmonization are substantial. Beside allowing freer intra-European trade, a common policy can present significant new marketing opportunities. A recent example is the sale of laser-marking equipment by a Canadian manufacturer to several European packaging firms. This was the direct result of new EEC regulations requiring "best before" dates on many consumer food products throughout the Community (Citizen 1981).

The Harmonization of Laws

The efforts to create a pan-European legal system have generated several advances in the last few years. These include:

a. Anti-trust and merger legislation. This is based on the concept of "abuse of dominant position" as set forth in Articles 85 and 86 of the Rome Treaty (Mazzolini 1973).

b. Non-tariff barriers. In the past decade alone, the Commission has introduced 180 regulations in this area.

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Greece joined the EEC in 1981, thus statistics of the Community do not include that country unless otherwise noted. Unless referenced separately, all EEC statistics are taken from the EUROSTAT publications cited as Table sources.

Of these, 130 deal with industrial goods and the remainder mainly with food products. Another 60 directives are under consideration at this time (Euroforum 17-7-79).

c. The right of establishment. Legislation in this area stipulates that a firm may operate in any EEC state, as long as it is legally incorporated in one member-nation. While national governments may still limit the kinds of firms that can operate within their boundaries, such laws must not be discriminatory. In other words, they must apply equally to "domestic" and "foreign" (other-EEC) companies.

d. The right of sale. As in the preceding case, a product which meets the legal standards in one member-state has an almost automatic "license" to sell in any other EEC country. Again, national laws limiting the sale of certain products must not discriminate against "other-EEC" producers.

Similar Marketing Systems

Business executives responding to this survey pointed out the marked commonalities of marketing infrastructures across the EEC. For instance, the degree of concentration in retailing in several countries tends to be very similar. Giant retailers, such as Carrefour and Mamoth (France), Tesco and Safeway (U.K.), Ahold (Holland) and Taenglemann (Germany) control large portions of several fast-moving, consumer goods sectors. Typical concentration ratios for a single retailer range between 10-30% of all retail sales for some product categories in most countries. An example is the aerosol deodorant market in France: a handful of "hyper-marches" control 38% of the market, a small number of large self-service outlets control an additional 47%, and the remaining 15% is shared by thousands of small grocery and drug stores (Désodorisants...1981).

Almost all (89%) of the business respondents in this study pointed out that similarities in trade structure usually result in similar behavior patterns by merchants across Europe. In turn, this facilitates the tasks of developing standardized distribution strategies, sales force training, personnel transferability, and the like.

A similar situation, though to a somewhat lesser extent, exists in the advertising sector. As early as 1973, there were 400 branches of U.S. advertising agencies in Western Europe (Dunn and Yorke 1974). In light of their usually multi-country operations, it is not surprising that most respondents in this survey indicated a preference for using multinational over local agencies, where possible. This factor, coupled with a general similarity in media structures (for some exceptions, see the discussion that follows) make it possible for international executives to develop some standardized approaches to advertising in Europe.

Common Consumer Protection Laws

Several countries still enforce individual consumer protection laws. Nonetheless, harmonization efforts have yielded substantial results. The Commission has successfully proposed common rules regarding labelling, food additives, defective product warranties, and the like (e.g. Euroforum 5-10-79). As well, European consumers are represented at the EEC level by the Bureau Européen des Unions de Consommateurs, which often advises the Commission on consumer protection matters.

Similar Human Needs

Finally, it is important to note the existing similarities amongst consumers in various countries regarding certain basic consumption needs. Culture may introduce substantial variations in consumer behavior, especially regarding products that are culture-sensitive (e.g. furniture, dress, and art). On the other hand, some products are significantly less sensitive to cultural variations, thus lending themselves to cross-country standardization. Examples include disposable diapers (Pampers), batteries (Duracell), candy (Rowntree), razor blades (Wilkinson-Sword) and pens (Bic), all of which are successfully marketed throughout Europe.

The Case for Ten Distinct Markets

Despite the general trend toward unification and harmonization, consumers in the ten EEC nations have maintained their individual characteristics. In marketing terms, there are three general areas where inter-country differences are the most striking. These include uncontrollable environmental factors, consumption patterns, and the marketing practices that result therefrom.

Environmental Variables

Among others, these include differences in demographic, geographic, and economic factors. The last two have been discussed extensively in the literature (e.g. differences in inflation rates, unemployment, and economic growth) or are fairly obvious and thus easy to observe (e.g. climatic differences between the Mediterranean and North Sea nations). However, some other differences have only received cursory attention.

Table 1 includes various key demographic statistics for the EEC, and compares them to the U.S. Generally, it has been assumed that demographic trends and facts are similar throughout Europe. This assumption may be correct in the case of lower birth rates, rising female participation in the labour force, population aging, and so forth. For instance, the first three columns in **Table 1** show the similarities in age breakdowns (with the notable exception of Ireland) both within the EEC and between it and the U.S.

The similarities stop when a more detailed analysis of available statistics is performed. For example, **Table 1** also shows vastly differing population density and primacy (population of largest city as a proportion of the five largest city total) rates among EEC countries. An example of the marketing implications of such differences becomes obvious when these are compared to the data in **Table 2**.

TABLE 2
HOME-TO-WORK TRANSPORTATION MODES

	FOOT	BICYCLES, MOPEDS, MOTORCYCLES (% OF COMMUTERS)	PUBLIC TRANSIT	CAR	OTHER
GERMANY	16	9	48	24	2
FRANCE	18	16	43	17	6
ITALY	22	18	37	19	3
HOLLAND	8	35	41	12	4
BELGIUM	11	16	50	21	2
LUX.	19	8	45	24	5
U.K.	19	6	46	28	1
IRELAND	23	10	44	20	4
DENMARK	10	25	48	13	3
GREECE	NA	NA	NA	NA	NA
U.S.A.	NA	NA	NA	NA	NA

For example, the high density and primacy rates of the Netherlands and Denmark result in high usage rates of bicycles, mopeds and motorcycles as a main transportation mode for commuting between home and work. The marketing implications of such differences do not stop at the obviously different market sizes that such factors result in. Also affected may be various other product categories ranging from rainwear (in high bicycle usage countries) to car stereo systems and cassettes (in high car usage countries). As well, the same product may be perceived differently in one country vs. another (e.g., bicycles are "transportation" in the Netherlands but "recreation" in Germany).

As well, statistics on Household Size, Divorce Rates,

TABLE 1
EEC: SELECTED DEMOGRAPHIC CHARACTERISTICS

COUNTRY	AGE			POPULATION DENSITY (X/km ²)	PRIMACY RATE (%)	HOUSEHOLD SIZE (%)				DIVORCE RATE (X/'000)	LABOUR PARTICIPATION RATES (AGES 15-64)	
	-15	15-64	65+								M	F
						1	2	3-4	5			
GERMANY	20	65	15	247	29	29	28	33	9	1.8	85	48
FRANCE	23	63	14	98	52	22	28	35	15	1.2	84	51
ITALY	23	64	13	188	37	13	22	44	22	0.2	82	30
HOLLAND	24	65	11	338	33	17	25	37	20	1.6	83	33
BELGIUM	21	65	14	323	56	19	30	35	16	1.3	84	44
LUX.	20	67	13	138	NA	16	27	41	16	NA	NA	NA
U.K.	22	63	15	229	71	18	31	36	15	2.4	92	55
IRELAND	31	58	11	47	7	14	21	30	35	2.6	92	34
DENMARK	22	64	14	118	66	23	30	35	12	2.6	90	63
GREECE	23	64	13	71	75	11	21	45	22	0.4	83	30
U.S.A.	23	66	11	23	NA	21	31	33	16	NA	NA	NA

Source: Basic Statistics of the Community (1980) and Social Indicators for the EEC (1980).

and Female Participation rates vary widely within the EEC. Again, the differences are not limited to matters of market size for products such as single-serving prepared foods in countries with a high proportion of single-households.

For instance, Italy and Greece have the lowest divorce rates and the highest ratios of three- and four-member households. The opposite is true in Germany, where single-person households are about as many as those with three or four members. Thus strategic marketing adaptation would not only be necessary due to varying market sizes, but also because of the social implications of the above factors (e.g., better social acceptability of single-living in Germany than in Italy).

Consumption Patterns

Varying degrees of consumption are only partially the result of the demographic composition of a population. Other important factors include income, climate, and culture. Regardless of their origin, distinct consumption patterns point to substantial differences among the ten EEC markets. Some examples are shown in **Table 3**, part (a).

A cursory review of this table reveals substantial diet differences from one country to the next. Further, these statistics tend to conceal even more fundamental variations in diet-related traditions and habits. Thus beer will require different marketing strategies in Greece (where it is considered a refreshment) than in the U.K. or Germany (where it is entertainment-related).

Finally, part (b) of **Table 3** shows the work-time required to buy selected consumer items in the EEC countries. This is a well known and frequently used measure of market potential, and as such it need not be discussed here. What must be noted is its implications regarding consumer perceptions. A product's position on the "luxury-necessity" continuum will largely determine the nature of the marketing approach to be used in a given market. For example, to purchase a deep freezer

consumers in Denmark, the U.K., and France, need to work for 56, 106, and 116 hours, respectively. Ownership rates per 100 households of the same product vary accordingly from 54 (Denmark), to 37 (U.K.) and 26 (France).

Marketing Practices

Partially because of the above differences, marketing practices among EEC countries differ substantially. In some cases it is possible for the new, incoming firm to influence marketing variables towards more similarity --therefore, more simplicity. For example, mass marketing technology, introduced mainly by transnational firms, was frequently mentioned by respondents as one of the underlying factors that lead to retailing concentration throughout Europe.

In other cases, the firm has no choice but to adapt to individual market conditions. Respondents identified at least four such areas: advertising media, copy, distribution channels, and price/cost structures. In some countries (e.g. Belgium) television advertising is not available. While outdoor advertising is generally common, there exist at least 50 different board and poster sizes through Europe. In terms of copy, Dunn and Yorke (1974) have pointed to the differences in the way that advertising executives in Europe perceive the effectiveness of various approaches. The percentage of executives that believe in the effectiveness of "soft-sell advertising" is a case in point: Netherlands 13%; Germany 19%; U.K. 23%; Belgium 30%; France 48%; and Italy, 60%.

While concentration ratios tend to be similar, other distribution-related practices vary. For example, France boasts at least 45 wholesale commercial centers, an institution which (with the exception of food products) is virtually unknown in countries such as Greece and the Netherlands. Of France's 45 centers, only 12 handle food products. The remainder specialize in various categories including footwear, toys, and electronic products.

TABLE 3
SELECTED CONSUMPTION CHARACTERISTICS

	(a) CONSUMPTION OF FOOD PRODUCTS					(b) WORK-TIME REQUIRED TO PURCHASE...		
	GRAIN (as flour)	POTATOES (KG/HEAD/YEAR)	VEGETABLES	WINE (LITERS)	BEER	DENIM JEANS	DEEP FREEZERS (HOURS:MINUTES)	COLOR TV
GERMANY	68	83	72	24	148	5:19	63:52	144:51
FRANCE	77	84	114	98	45	9:50	116:19	301:57
ITALY	123	40	150	91	14	NA	NA	NA
HOLLAND	61	83	82	12	77	6:09	68:16	NA
BELGIUM					135	5:49	91:55	193:21
LUX.	71	101	102	18	132	4:59	74:58	187:05
U.K.	71	91	96	5	119	NA	106:27	215:41
IRELAND	91	113	84	3	126	NA	NA	NA
DENMARK	67	65	59	12	114	NA	56:11	200:41
GREECE	114	59	139	42	19	NA	NA	NA
U.S.A.	60	36	96	NA	NA	NA	NA	NA

Source: Basic Statistics of the Community (1980) and Social Indicators for the EEC (1980).

Consumption patterns also influence distribution channels. For instance, wine is distributed on a mass-basis in France, where frequent consumption places it in the "convenience" category. Distribution is more selective in the U.K., Denmark, and other markets where wine consumption is significantly lower (see Table 3).

Finally, labour costs, consumer expectations and incomes, and a number of other factors have a substantial impact on costs and prices. In turn, this results in substantial variations regarding the availability of funds for investment in marketing activities.

The Case for the Euro Market

The "Euro" market consists of a substantial and growing number of consumers who are known as the "New Europeans". The comment offered by an EEC official who was interviewed for this study may best explain this new consumer, as well as the EEC itself: "the EEC is not equal to or larger than the sum of its parts. It is different than the sum of its parts". Generally, it would appear that besides performing its unification task, the EEC has developed a culture of its own. Manifestations of the emergence of the new culture exist everywhere. Some examples follow:

a. In one of his first speeches, new French President Francois Mitterand referred to the need to view the EEC as "a community of social problems". This is a significant departure from the traditional "common market" view. In recognizing the commonality of the social problems that European nations are faced with, Mitterand cut across national boundaries based on a social or life-style criterion, rather than on a technical (market) one.

b. The European Commission has taken steps to make possible the Europe-wide incorporation of business firms, with registration at the EEC level. Again, this is a significant departure from past practice. Previously, EEC laws were only "directed" by the Commission, while implementation and administration rested with national governments. Instead, the new incorporation law will operate "above" national governments, thus shifting the center of power from them to the EEC core.

c. It is expected that satellite-controlled, pan-European simulcasting of television programs (and advertisements) will become a reality by 1983. Advertising executives that responded to this study indicated that this facility will be used mostly in reaching the cosmopolitan class of the New Europeans.

d. The traditionally used term "EEC" is not encountered as frequently anymore within Europe, whether in verbal or written form. The term "European Community" is more often used. The difference is subtle but substantial. Before, citizens of a given country considered themselves nationals of that country, tied with other nationals for the purpose of facilitating commerce and improving their material standard of living. Now, these "citizens of Europe" find their national affiliation a matter of lesser importance than that of their allegiance to the largely intangible European Community. The next few paragraphs discuss the New Europeans in a little more detail.

Deschampsneufs (1973) points to several characteristics of the Euro market. The New Europeans tend to develop and share a common "Euro-jargon", thus using language as a cultural unifier. They travel across national boundaries as easily as within their "own" countries. More importantly from a marketing perspective, they

exhibit an eclectic buying behavior. Under a "common market" concept, one would assume that consumers would not be cognizant of or interested in a given product's country of origin. As long as a product is readily available at a reasonable price, as a result of trade barrier reductions, the common market consumer might well be interested in it.

By contrast, the Euro consumer, regardless of nationality, is aware of the national origins of products and chooses those that come from the most reputable country. Thus the New Europeans prefer Dutch cheese, Danish butter, French women's clothes, Italian men's fashions, and German home appliances. In some ways, this type of consumer behavior represents a certain popularization of buying habits that had long been exclusive to the European aristocracy (Deschampsneufs 1973; also interviews from this study).

Though not for marketing purposes, some characteristics of the Euro consumer have been measured by the central EEC statistical bureau (Eurostat). A 1980 community-wide study classified Europeans into seven types of regions based on the respondents' feelings about the prosperity, quality of life, etc., of their respective regions (Europeans 1980). All seven regions cross national frontiers. Of the seven, four exhibited the strongest support for European unification (rates of 69-77%). The first three are mainly industrialized regions (e.g. the industrial areas of Cologne in Germany, Alsace in France, Milano-Torino in Italy, Copenhagen in Denmark), and were found to contain large concentrations of New Europeans. Profiles of the latter typically included higher incomes, better education, generally white-collar occupations and slightly more leftist political tendencies than consumers in other regions.

The fourth region that reported strong European support (77%) is more representative of the traditional common market concept. Included here are the poorer regions of North-western Ireland and Southern Italy. Support for the EEC in this case is attributed more to the "savior" image of the common market than to socio-political considerations that dictate the attitudes of the Euro consumer.

Finally, the bi-annual "Eurobarometer", a public opinion survey in the EEC, provides additional insights into the New Europeans. Table 4 shows the varying degrees of support for Europeanism depending on a leadership rating of respondents. The rating is based on empirical measures of political involvement and the propensity of individuals to act as opinion leaders for others.

Characteristics of European "leaders" are very similar to those of the New Europeans. In addition, leaders are better informed, read more magazines and newspapers, lean more to the left of the political scale than non-leaders, and so forth.

It is interesting to note that business executives that were interviewed in this study seemed to be aware of the presence of the Euro market, and some have already used it in segmentation exercises. They pointed out that, until the emergence of this market, it was virtually impossible to engage in trans-European segmentation. For instance, "upper-lower class" consumers were found to have more differences than similarities between Paris and Marseilles, --not to mention across different countries. On the other hand, the presence of the Euro consumer (whose characteristics are operationalized along lifestyle variables) enables trans-national firms to establish some common consumer

characteristics on a cross-border basis.

TABLE 4
SUPPORT FOR THE EEC

COUNTRY	GENERAL SUPPORT FOR EUROPEAN UNIFICATION		SUPPORT FOR OWN COUNTRY'S MEMBERSHIP IN EEC	
	N-L	L	N-L	L
BELGIUM	50	88	37	82
DENMARK	32	47	23	35
GERMANY	56	80	39	83
FRANCE	68	76	46	54
IRELAND	44	78	42	68
ITALY	69	91	60	83
LUX.	74	90	78	90
HOLLAND	64	81	64	73
U.K.	47	65	12	28
GREECE	NA	NA	NA	NA
EEC	60	80	41	63

Note: "N-L", Non-Leaders; "L", Leaders.

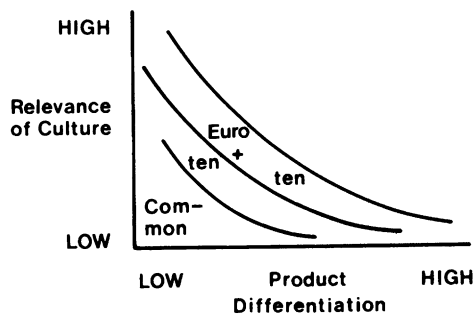
Source: EUROBAROMETER, June 1980.

EEC: How Many Markets?

Given the preceding discussion, the answer to this question has to be an eclectic one. That is, the degree to which marketing approaches can be standardized will depend on, and differ according to, several factors. Based on interviewee responses to this study, and on the preceding discussion, the most important variables are the relevance of cultural differences and the degree of product differentiation in a given product class. The two variables, and the resulting marketing approaches, are portrayed in Figure 1 below.

FIGURE I.

STRATEGIC MARKET CHOICE AND DETERMINANT FACTORS



A common market strategy may be employed in cases where product differentiation and the effect of culture on buyer behavior are low. Examples of such products include photographic film, detergent, toothpaste, and air fresheners.

For differentiated products with a medium-to-high level of cultural sensitivity, a ten-market strategy will have to be employed. Mass market clothing, home appliances, and automobiles, on the one hand, and diet-related items (e.g. canned meat or fish), on the other,

are examples of products in this case.

Finally, products that carry significant status, social, or cultural connotations may find unique opportunities in a separate "national" market --the Euro consumer. The types of products that may appeal to this market cover the entire range of product classes, from fast-moving, convenience goods (e.g. cheese) to high-priced, specialty items (e.g. designer clothing). What differentiates this market from the "common" and "differentiated" ones is the target consumer's lifestyle, as discussed above.

The Euro consumer purchases product or brand X because of its origin and because of its pan-European character. The "common market" consumer would prefer product Y if it were produced locally by a domestic firm; if he or she buy product X, they will do so in spite of its origin and its pan-European character, and possibly for reasons of cost, wider availability, or better technical performance. That is to say, the "common market" consumer considers only the technical aspect of the EEC (no tariffs or custom duties, hence lower prices for possibly better goods). By contrast, the Euro consumer sees "Europeanism" in a product as a benefit in itself.

Therefore, the producer has a choice which largely depends on his own objectives. His products can be positioned as either "common" or "Euro" ones. In the first case the product itself can be standardized but promotional appeals may have to vary. The product's saleability would be based mostly on technical product attributes and it may be necessary to avoid "origin" references in promotion, so that the consumer's nationalistic feelings are not offended. In the second case, a Euro-market strategy will probably stress both the country of origin, in support of product performance, and the pan-European product position, in support of its relevance to the Euro consumer's lifestyle.

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DOCUMENTATION AND LOGISTICS ISSUES IN EXPORTING FIRMS

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Abstract

This paper examines documentation and logistics problems in exporting firms and identifies some specific firm and individual factors which could account for variation in both usage of facilitating agencies and exporter's perception of these agencies' contribution to the logistics and documentation process.

Issues related to the "mechanical aspects" of exporting are paid little attention by export analysts even though they play a critical role in the export process. Distributing products to foreign markets is complicated by the need for extensive documentation and a variety of supporting functions which may include arrangements for financing, freighting, insuring, packaging and warehousing (Baylis 1976; Foster 1980). Improper documentation can cause shipping delays, involving increased inventory costs, additional handling, carriage and demurrage charges, and customer dissatisfaction (Crowe 1980). It may also result in substantial fines being imposed, goods forfeited through seizure by local authorities or, in some cases, loss of sales because of goods being returned (Crowe 1979).

It is not surprising then that prospective exporters and exporting firms view the export logistics function and its accompanying documentation requirements as a major problem area (Weekly and Bardi 1975; Rabino 1980; Murphy 1980). Since coping with these issues requires specialized knowledge and competence that may not be present within the firm, some writers see it acting as a major deterrent to engaging in exporting (Jones 1980; Foster 1980). Firms have tended to respond to such problems by either setting up in house facilities, hiring outside agents or, in some cases, using indirect channels or institutions which relieve them of the responsibility of handling export "mechanics" (Brasch 1978; Cao 1981). Freight forwarders, export management companies and Webb-Pomerene Association are generally regarded as the major agencies available to simplify the export logistics task (Terpstra 1978; Keegan 1980). The activities of these agencies can be quite extensive often going beyond fulfilling export tasks and may involve the provision of freight consolidation, warehousing insurance, packaging and labelling services (Brasch 1978; Cao 1981).

In spite of the relevance of both documentation and supporting logistical functions to the exporting firm, little is known about how they are handled or the way in which they affect the usage of facilitating agencies. This paper examines these issues with the intention of identifying specific firm and individual factors that can best account for the variance in exporters perception of the contribution outside agencies make to the documentation process and to conducting the export function.

Some Tentative Propositions

An examination of the exporting logistics process suggests that such factors as the type of channel entry used, the number of countries exported to, firm export intensity, size of the firm and awareness of documentation problems by the export decision-maker can contribute to both the documentation dilemma and the usage of outside agencies.

Type of Channel Entry

The use of indirect channels to export markets is considered as the most effective way of avoiding the logistics problems of exporting (Terpstra 1978; Brady and Bearden 1979; Keegan 1980). Foreign purchasing agents, export brokers, distributors, representatives and merchants, combination export managers, Webb-Pomerene Associations and foreign freight forwarders are among the variety of institutions which take on the specialized task of distributing goods to the foreign markets for the exporting firm (Keegan 1980). Alternatively some firms who have achieved a sizeable scale of export activity may internalize the logistic function through the setting up of an export department and establishing direct channels to the foreign market (Terpstra 1978).

Number of Countries Exporting To

While firms engaging in repeated exports to one or a small number of countries may achieve economies by conducting their own export processing, this tends to be more difficult when they are faced with the additional logistics burden resulting from the different requirements of multiple export markets (Tattersson and Wood 1980). In addition, firms may find it economical, even in the case where in-house export logistics facility exists, to utilize the services of outside agencies for the occasional export transaction with a foreign market.

Firm Export Intensity

Export intensity in the context of this study has two dimensions. Firstly, it is used in the traditional sense (export sales/total sales) indicating the extent of the firms dependence on exports and secondly, as a measure of exports transaction activity. In the first instance firms showing a higher commitment to export activity are more likely to institutionalize facilities for export documentation processing. However, where exporting is still considered a marginal firm activity, judged on the basis of number of orders shipped rather than on volume of exports, usage of outside agencies would appear to be an appropriate strategy.

Firm Size

Although it is logical to expect that the services of facilitating institutions are more likely to be used by the smaller firm, the evidence suggests that larger firms use such services as often as small firms (Brasch 1978). Number of employees would seem to be the best measure for size since it is a better proxy for the available human resources to assist in the exporting process than such criteria as firm sales or assets (Reid 1982).

Awareness of the Documentation Problem

Since exporters would be intuitively sensitive to the problems involved in sending goods to foreign markets, their knowledge of developments which can simplify such activity is likely to affect the ways in which they use facilitating export documentation services and how they regard the documentation process. Among the more significant innovations in this area are the activities of the National Committee on International Trade Documentation (NCITD) which is engaged in both simplifying export documentation procedures and developing the

Cargo Interchange System (CARDIS) aimed at reducing transit time and providing adequate shipping information (Baylis 1976).

The above are likely to be the major handling factors implicated in handling export orders and are regarded as the most relevant variables to be considered in an explanation of the importance that documentation and logistics activity have in the exporting process.

Methodology

Data was secured through the use of mail questionnaires sent to export decision makers in 95 exporting firms drawn from the New York State Industrial Directory (1979). The survey was conducted during February-March 1981 period and was restricted to those Central New York firms which manufactured fabricated metal products (S.I.C. 3400-3499) and machinery (S.I.C. 3500-3599). The selected industries are among the most export intensive in the area, and offer both a diversity of product mix and manufacturing firms.

Variables Used

The dependent variables were concerned with measuring (a) the perceived importance of documentation in exporting (DIMP), (b) the perceived importance of outside agencies to the logistic function (PIMD), and (c) the perceived contribution of these agencies to the ease of export documentation (PCON). These variables and their operationalization are shown in Exhibit I. The high split-half reliabilities of the dependent variables PIMD ($\alpha=.78$) and PCON ($\alpha=.91$) both composite measures, along with their item content indicates valid and appropriate measures.

Exhibit I: DESCRIPTION OF DEPENDENT VARIABLES

<u>Variable</u>	<u>Measure Operationalized</u>
Perceived contribution of outside agencies to ease of export documentation (PCON)	single item, 5-point scale
Perceived importance of outside agency to export documentation (PIMD)	eight items, 5-point scale ⁴ as above (banking assistance, shipment consolidation, document processing, goods tracing, shipping arrangements, consulate preparation, goods pickup, other.
Perceived importance of documentation in foreign sales (DIMP)	eleven items, 5-point scale as above (packing list, bill of lading, export declaration, certificate of origin, delivery instructions, dock receipt, carnet, bank drafts, drawback.

¹ (1=contributes negatively; 2=does not contribute; 3=contributes slightly; 4=contributes moderately; 5=contributes substantially)

² (1=not used; 2=unimportant; 3=slightly important; 4=important; 5=very important)

The nine predictor variables measured type of channel used (XCHAN), decision maker's familiarity with documentation developments (NCITD, CARDIS), export intensity

(XVAL, XORD, XPERM), number of countries exported to in last year (NCNT), number of employees (NEMP), annual gross sales (SALSV). All variables were assigned interval values with the exception of XCHAN, which was a dichotomy measure (dummy variable) and SALSV and NCNT which were represented as ratio measures. A description of the predictor variables is provided below.

Exhibit II: DESCRIPTION OF PREDICTOR VARIABLES

<u>Definition</u>	<u>Coding</u>
Familiarity with Trade Documentation committee, NCITD	4 point scale (1) not known to (4) very familiar
Familiarity with Cargo Data Interchange System (CARDIS).	as above
Average value of each export shipment (\$) (XVAL)	(1) <1000, (2) 1000-1999, (3) 2000-3999, (4) 4000-7999, (5) 8000+
Nos. of monthly export orders shipped (XORD)	(1) <5 (2) 5-9, (3) 10-19, (4) 20-29, (5) 30-39, (6) 40-49, (7) >50
Export sales/total sales (XPERM)	(1) 0-10% to (7) 60%+
Nos. of export countries, NCNT	
Nos. of current employees (NEMP)	(1) <100 to (7) 600+
1980 sales (\$ million) (SALSV)	(1) <1M to (5) 8M+
Type of channel used to export market (XCHAN)	(1) Direct (2) Intermediate (Dummy Variable)

Results

Twenty-six usable questionnaires were received from seventy-eight firms who were currently exporting, an effective response rate of 33.3%. While there was little evidence of a response bias by industry grouping, larger firms showed a proportionately higher response rate than would be expected (see Table I). About 50% of the firms were direct exporters and the same proportion had gross sales of \$2 million or more. Export sales accounted for less than 20% of total sales for eighteen respondents.

Table I: DISTRIBUTION OF FIRM'S RESPONSES (Industry and Size)

	Respondents	Non-Respondents	Total
Fabricated metal (SIC 3400 - 3499)	58%	52%	54%
Machinery manufacture (SIC 3500 - 3599)	42%	48%	46%
< 100 employees	46%	56%	53%
100-400 employees	31%	29%	29%
> 400 employees	23%	15%	18%

The firms shipped on average between 5-9 export orders per month having a mean value of between 4000-8000 dollars. About thirty-five percent exported to eight or

more countries. Outside agencies were perceived as (1) making a very high contribution to ease of export documentation (PCON = 4.4; sd=1.02), (2) being important to the logistics function (PIMD = 3.6; sd = 1.27). Decision-makers generally agreed that export documentation was important in conducting and closing foreign sales (DIMP = 3.6; sd=1.51).

The documentation and shipping process were perceived as the most important functions that outside agencies served (Table Iia) and the standard documents required to export goods such as commercial invoices, packing list, bill of lading and export declaration were all regarded as the most important for conducting foreign sales (Table Iib). Such specialized documents as carnets, drawbacks and export functions as freight load consolidation and pick-up and delivery activity were regarded as either unimportant or not used. This result is not surprising given that the above documents are only used for selected markets and such functions as load consolidation, would tend to be highly specific to the nature of the firm's export involvement. Most respondents were unfamiliar with either the National Committee on International Trade Documentation or the Cargo Data Interchange System (NCITD = 1.5, sd = .99, CARDIS = 1.3, sd = .84).

Table Iia: IMPORTANCE OF OUTSIDE AGENCY (PIMD)

FUNCTION	RANK	MEAN RESPONSE	
Export Document Processing	1	3.450	High
Carrier Bookings	2	3.368	
Goods Tracing	3	3.158	
Consulate Preparation	4	2.950	Medium
Bank Assistance (Letter of Credit)	5	2.90	
LCL Consolidation	6	2.889	Low
Pick-up & Delivery	7	2.00	
Other	8	1.444	

Table Iib: IMPORTANCE OF DOCUMENTS IN EXPORT SALES (DIMP)

DOCUMENT	RANK	MEAN RESPONSE	
Commercial Invoice	1	3.789	High
Packing List	2	3.789	
Bill of Lading	3	3.737	
Export Declaration	4	3.722	Medium
Delivery Instructions	5	3.526	
Dock Receipt	6	3.353	
Certificate of Origin	7	3.222	Low
Bank Draft	8	3.167	
Credit Risk Documents	9	1.882	
Carnet	10	1.563	
Drawback	11	1.275	

Regression Analysis

The relationships between predictor and dependent variables were tested by means of stepwise multiple regression procedures, since the objective was identification of those predictor variables that made the greatest contributions to accounting for the variation in the dependent variables. The variables "familiarity with Cargo Data Interchange System" (CARDIS) and "firm aggregate sales (SALSV)" were excluded from the regression analyses because of their high intercorrelation with a number of other predictor variables.

For example, "Familiarity with Cargo Data Interchange System" was highly correlated with familiarity with

National Committee on International Trade Documentation (r=.84). Similar correlations were observed between firm aggregate sales and the variables, export shipment value (.69), number of monthly export orders (.62), number of countries exporting to (.70) and number of employees (.76) (see Table III). Moderate multicollinearity between "number of countries exporting to" (NCNT) and "export shipment value" (r = .51), number of export orders shipped (r = .68) and "percentage of export sales to total sales" (r = .51) was ignored and that variable (NCNT) along with the remaining predictors were included in the regression analysis.

TABLE III: CORRELATIONS BETWEEN PREDICTOR VARIABLES

NCITD	CARDIS	SVAL	XORD	XPERM	NCNT	NEMP	SALSV
.84							
.06	.10						
.03	-.02	.28					
-.03	-.11	.44					
.00	-.07	.51	.68	-.59			
-.11	-.04	.27	.33	.07	.27		
-.02	-.03	.69	.62	.39	.70	.76	
-.32	-.17	-.02	-.03	.16	-.12	-.04	-.14

The predictor variables were more successful in explaining the variation in "perceived importance of outside agency to export business (PIMD)" (adj. R² = .24) and in "perceived importance of documentation in foreign sales, DIMP" (adj. R² = .29) than in accounting for the variance in "perceived contribution of outside agencies to ease of export documentation, PCON" (adj. R² = .08) (Table IV).

TABLE IV: REGRESSION RESULTS (standardized betas)

Dependent variables	PCON	PIMD	DIMP
<u>Predictors</u>			
NCITD	----	----	-.31***
XVAL	-.27	.29***	1.33**
XORD	----	-.48***	.61**
XPERM	----	.18	----
NCNT	.43	.36**	-.31*
NEMP	----	.34**	1.27*
XCHAN	----	-.13	-.48***
F value	2.583***	2.471***	2.21***
adj R ²	.08	.24	.29

* p ≤ .01; ** p ≤ .05; *** p ≤ .10.

---- variables not entered in analysis

Discussion of Findings

Outside Agencies and Ease of Export Documentation

The number of countries a firm exported to was the only significant variable (p ≤ .05) accounting for the variation in perceived contribution of outside agencies to ease of export documentation. This supports the proposition that the extent of export market diversification is an influential factor in whether firms used outside agencies or not for documentation processing.

While the value of the export shipment did not emerge a significant variable (p ≤ .10) the negative sign of the coefficient indicates an inverse relationship between this predictor and the dependent variable. It is possible that the relationship between use of outside services and shipment value is likely to be confounded by country-specific factors.

Outside Agencies and the Logistics Function

The larger the firm (nos. of employees) the more likely it was to perceive the services of outside agencies as important to the export logistics function ($\rho \leq .05$). Although this size measure was highly correlated with total firm sales (.76) it showed no relationship with export intensity (.07) as indicated by export sales/total sales. This suggests that total sales may be an intervening variable or that type of employees may be a more appropriate measure.

In contrast the greater the number of export orders shipped on a monthly basis the less likely the firm was to perceive the contribution of an outside agency as important to the mechanics of shipping goods abroad. A likely explanation for this result is that the firm has accumulated learning experience from regular shipping of exports as a consequence of using in-house facilities. Neither value of export orders, percentage of export sales/total sales, number of countries exported to or type of export channel used were found to be significant contributors in explaining the variance in perceived importance of the outside agency to the logistics function ($\rho \leq .10$). There is indicative evidence, however, judging from their Beta values, that these variables play a minor role in the evaluation of the contribution that outside agencies make to export logistics.

Importance of Documentation to Exports

Five predictor variables, average value of export shipment, number of employees, type of channel used ($\rho \leq .01$), number of export orders shipped ($\rho \leq .05$) and familiarity with documentation developments ($\rho \leq .10$) accounted for 29% of the variance in perceived importance of documentation to foreign sales.

Most of these variables would appear to be related to extent of export activity suggesting that more involved exporters do find export documentation a critical issue in foreign sales. The inverse and significant relationship between usage of direct channels and perceived importance of documentation ($\rho \leq .01$) raises the interesting issue of whether such activity is not seen as crucial when the firm has a direct presence in the foreign market or whether it is regarded as part of "normal business" and thus not regarded as a salient issue. The negative impact of "knowledge of documentation" variable ($\rho \leq .10$) is contrary to what would be expected. Since a large number of respondents were unfamiliar with current developments in documentation, this specific finding should be treated with caution.

Conclusion

Although this study is of an exploratory nature with obvious limitations, the findings are of importance to the export literature, the firm and policy makers. It confirms the importance of outside agencies in the exporting process. The results indicate that usage of outside agencies for providing documentation assistance is of particular relevance to firms engaged in multiple foreign markets. Such institutions, however, seem to play a more extensive role in the logistics function than in the mere easing of export documentation.

The evidence supports the view that as the transaction costs for exporting become higher, because of increased shipments, firms are more likely to internalize such activity. From the perspective of the firm this suggests that although the use of intermediaries and outside services may be the easiest way to enter foreign markets careful analysis of the transaction costs

involved in their use may point to more realistic trade-offs between this approach and the establishing of in-house facilities as export involvement develops.

While firms are obviously concerned about documentation and logistic problems, export decision-makers are unaware of current developments in the documentation and logistics area that are likely to be of relevance to them. Policy makers concerned with solving the documentation dilemma should bear this in mind and pay more attention to efforts made to increasing awareness among exporters as to the activities of those agencies involved in that exercise. Although it is not known to what extent problems with the mechanics of exporting are perceived as major impediments to exporting, this study suggests that outside agencies represent an appropriate solution for non-exporting firms faced with such difficulties.

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TELEVISION ADVERTISING: USES OF INFORMATION IN THE
U.S. AND LATIN AMERICA

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Critics of current marketing practices complain that consumers do not have adequate information on which to base decisions. These information deficiencies, it is argued, result in higher prices, "artificial" brand differences and a stress on product attributes that represent no real value to consumers. Further, there appears to be widespread controversy between marketers and critics as to the usefulness of information communicated through advertising, especially television advertising.

John Clement, former Canadian Minister of Consumer and Commercial Relations, has described as "amazing" the number of broadcast commercials that contain no facts or worthwhile information. (2) Robert Pitorsky, former head of Consumer Protection for the FTC has stated:

The forms of advertising which are essentially noninformative in character may raise questions as to their fundamental fairness, and their conformity with traditional economic justifications for advertising upon which a free and reasonably informed choice may be made (5)

A recent review of worldwide regulations affecting advertising by Boddewyn concluded that an increasing number of nations are reacting against current advertising practices and beginning to develop strong consumer protection rules. (1) Included among these regulations are pressures to increase the information content of advertisements and to decrease the influence of emotional appeals that go beyond fact and reason. Against this background of controversy it seems appropriate to reexamine the role of information content of television advertisements in international marketing.

The purpose of this paper is to contribute to these discussions by evaluating the information content of Latin American television advertising and to make a comparison with similar findings in the United States and Australia. Specifically, this paper reports the results of an operational replication of two earlier empirical studies of the information content of television advertising. The first study, conducted by Resnik and Stern, reported on the information content of U.S. television advertising. (6) The second study, by Dowling, repeated the first study in Australia. (4)

Method

Stern and Resnik's operational definition of useful information contained 14 criteria which a buyer might use in a purchase decision process. [Table I](#) presents a list of these criteria. The criteria represent factors identified as information cues which could be used in intelligent decision making.

Table I

Criteria for Classification

1. Price-value
2. Quality
3. Performance
4. Components or contents
5. Availability, i.e. distribution
6. Special offers
7. Taste
8. Nutrition
9. Packaging or shape
10. Guarantees or warranties
11. Safety
12. Independent research
13. Company research
14. New ideas

Source: Resnik and Stern

Two judges separately content-analyzed each advertisement according to their answer to the question, "Does this advertisement communicate any of the criteria listed in [Table I](#) about the product, service, or institution?"

A total of 159 commercials broadcast by stations in Ecuador, Colombia, Panama, Nicaragua, and Honduras were included in the sample. A commercial was required to contain only one of the informational cues in order to be classified as informative. It should be noted that this is a relatively minimal standard which has the effect of minimizing the chance that an advertisement would be classified as uninformative when it was, in fact, informative. Further, no attempt was made to judge the veracity or usefulness of the information presented. The mere existence of an informative cue, as defined in [Table I](#), was considered sufficient to classify the advertisement as informative. For each commercial that was analyzed, the researchers determined if the advertisement was informative or noninformative and, if it was informative, which informative criteria were presented.

Advertisements to be evaluated were selected at random between the following time periods: weekdays from 9:00 to 12:00 a.m., 12:00 to 4:00 p.m., and 7:00 to 11:00 p.m.; and weekends from 8:00 to 12:00 a.m., 12:00 to 4:00 p.m., and 7:00 to 11:00 p.m. This classification scheme was selected to parallel the procedures used by Stern and Resnik and Dowling. However, the relatively small amount of programming scheduled for the morning hours in Latin America meant that this time slot was somewhat overrepresented in the resulting sample.

Results

Content analysis of the advertisements revealed that 84.3 percent of the Latin American television commercials satisfied one or more of the criteria listed in [Table I](#). In contrast, Resnik and Stern found that only 49.2 percent of their sample U.S. television commercials satisfied one or more of the informative criteria. Dowling reported that 74 percent of the Australian commercials could be classed as informative. This striking result is perhaps the most startling of this study's findings. Since this study replicated the research method used in the prior two studies, it can be assumed *a priori* that there are substantial differences between advertising in Latin America and advertising in the U.S. and Australia.

However, this overall estimate of advertising informativeness must be disaggregated to determine if this finding is uniform across various broadcast times and product categories.

Chi square analysis of the information content of the Latin American commercials by time of day (see [Table II](#)) shows that no statistically significant differences occur at the .10 level. Thus, the proportion of informative advertisements does not appear to vary according to broadcast time.

Table II

Number of Informative and Noninformative Advertisements By Time of Day

	<u>Morning</u>	<u>Afternoon</u>	<u>Evening</u>
Informative	39	46	49
Noninformative	5	7	13

Chi square equals 2.90, no relationship at .90 level

This result is in sharp contrast with the findings in the U.S. and Australia. Both these countries exhibited clear patterns in the ratio of informative to noninformative advertisements according to broadcast times.

Ratio of Informative to Noninformative Ads

	<u>Morning</u>	<u>Afternoon</u>	<u>Evening</u>
U.S.	4:5	2:3	3:2
Australia	7:1	4:1	2:1
Latin America	8:1	7:1	4:1

In the U.S. the proportion of advertisements broadcast in the evening are far more informative than those broadcast during the morning or afternoon--with the later showing a much higher proportion of noninformative advertisements. In Australia the pattern is reversed, the more informative ads appear in the earlier hours. The Latin American pattern tends to follow the Australian, although the high overall level of informativeness precluded a statistically significant association. Apparently in Latin America and Australia, as audiences become more heterogeneous in the later viewing hours, advertising shifts from a specific product related theme to a general audience related theme. Many of the advertisements broadcast at these later times portray an "image" designed to position the product in the market. Thus, by using the restrictive

definition of "informative" adopted in this study, these lifestyle advertisements, aimed primarily at the broad later-hour viewing audience, were classified as noninformative.

The time of day analysis was also stratified by Weekday and Weekend time periods. Again, no statistically significant differences in the proportion of informative advertisements existed among the Latin American advertisements. Thus, the proportion of informative ads does not appear to vary significantly by time period on weekends or weekdays. In general, the same situation exists in the U.S. and Australia:

Ratio of Informative to Noninformative Ads

	<u>Weekdays</u>	<u>Weekends</u>
U.S.	1:1	0.9:1
Australia	3.2:1	2.6:1
Australia	3.2:1	2.6:1
Latin America	5:1	5.75:5:1

Only minor differences exist in the informativeness of advertisements broadcast during the week and during weekends. Thus, information content in advertising does not appear to vary within any of the three countries on weekdays versus weekends.

The type of product advertised did not account for significant differences in the informativeness of Latin American commercials. For the purpose of analysis the sampled commercials were grouped into six relatively homogeneous product classifications, as shown in [Table III](#).

Table III

Number of Informative Advertisements by Product Classification

	<u>Informative</u>	<u>Noninformative</u>
Food	30	6
Institutional	17	5
Personal Care	32	9
Laundry and Household	16	0
Hobbies, Toys, Transportation	16	3
Other	23	2

The results indicate that the same, overall high proportion of informative commercials exists across all product types. There was a slight, but not significant tendency, for a greater proportion of noninformative ads to exist in the personal care and institutional areas, however. This is in contrast with the results reported in the other studies, which both showed significant association between the informativeness of the advertisement and the type of product advertised. The U.S. results indicated that advertisements for food, personal care, and laundry and household products were informative in fewer than 50 percent of the cases, while institutional, toys, hobbies and transportation, and "other" advertisements were informative in greater than 50 percent of the cases. The Australian results indicate that advertisements for food, personal care,

and institutional subjects were informative in 60 percent of the cases, while advertisements in the remaining product categories were informative in 83 percent of the cases. Thus, for the U.S. and Australia the relative levels of informativeness for the categories were in the same direction. In Latin America it is notable that advertisements for laundry and household products, food, and "other" seem to be comparatively more informative, relative to the area averages, than is the case in the U.S. and Latin America.

Discussion

The key question suggested by this research is, "Why are advertisements in Latin America more informative than those in the U.S. and Australia?" The products depicted in the Latin American advertisements studied were classified by stage in the product life cycle: introduction, growth, and maturity. **Table IV** depicts the relationship between a product's life cycle stage and the informativeness of its television advertising. Commercials in the introduction stage tend to be more informative, while the opposite is true for products in the maturity stage. These results imply that for newer products, informative advertising may be necessary to educate the audience about the unique characteristics of the product; while for more mature products the information is of less importance. This observation is also consistent with the pattern noted in the Stern and Resnik study.

Table IV

Number of Informative and Noninformative Advertisements by Stage in the Product Life Cycle

	Life Cycle Stages		
	<u>Introduction</u>	<u>Growth</u>	<u>Maturity</u>
Informative	42	54	38
Noninformative	0	3	22

Chi square equals 32.42, p .005

Interestingly, 99 of the 159 (62 percent) products surveyed in Latin America were in the introduction or growth stage; only 23 or 234 (10 percent) products categorized in the U.S. study were in a comparable early stage of the life cycle. This suggests that a greater proportion of products advertised on television in Latin America can be considered new and, hence, amenable to a promotion strategy emphasizing information. This greater proportion of new products is, in turn, likely to account for the greater observed frequency of informative advertising in Latin America.

This explanation is in sharp contrast with that proposed by Dowling to account for the greater percentage of informative advertising occurring in Australia compared to the United States. Dowling's explanation centered on the regulatory environment facing Australian advertising and concluded that:

The Federation of Australian Commercial Television Stations, like the federal and state government legislation and the Advertising Standards Council, represent a set of powerful environmental stimuli which monitor Australian television advertising practice. These conditions provide ample explanation for the comparatively high levels of informative advertising found in this study (4, p. 36).

The present research findings in Latin America call into question the universality of the suggested explanation that higher levels of advertising informativeness are accounted for by "stricter" levels of either government or self regulation. Advertising informativeness in Latin America is higher than that prevailing in both Australia and the United States. Yet, regulation of advertising activities, in all forms, is substantially less stringent in Latin America than both Australia and the U.S. What accounts for this paradox? One reasonable explanation appears to be the relative proportion of products in the earlier stages of the product life cycle in the various countries. Data from the studies in the U.S. and Latin America suggest that significantly more of the advertised products studied in Latin America are in the early stages of the product life cycle, and thus especially likely to utilize informative advertising. Although specific product life cycle data were not included for the advertisements studied in Australia, Cateora and Hess suggest that many more Australian products may be in the earlier stages of the product life cycle than those included in the U.S. data. Their analysis makes the point that many products which have reached maturity in highly developed economies may yet be innovations or growth products in lesser developed economies. (3) This, in turn, suggests that the proportion of mature products in an economy is likely to increase directly with the stage of economic development. Given that products in the earlier stages of the product life cycle more frequently use informative promotional programs, this explanation would provide a more universal account for the results observed in the U.S., Australia, and Latin America.

Conclusion

This research documented several important differences in the information content of Latin American television advertisements, compared with the United States and Australia. These differences are found in:

- The higher overall level of advertising informativeness in Latin America (84 percent versus 74 percent in Australia and 49 percent in the U.S.)
- No association between informativeness and daily broadcast times of advertisements (in the evening advertisements became less informative in Australia and more informative in the United States).
- No association between the informativeness of the advertisement and the product advertised.

Overall, the results are highly encouraging for the status of Latin American advertising. Television advertising appears to be playing an especially useful role in providing consumers with significant quantities of information. This is consistent with established economic and social justifications for advertising. By extension, these observations suggest that criticisms of the frivolity or uselessness of advertising in Latin America are not on strong ground. This indicates that regulations of the type reported by Boddewyn for control of advertising content may not be necessary or useful in Latin America, unlike other places in the world. More and different types of government control or industry self-regulation do not appear necessary at the present time to insure a flow of information to consumers.

The results of this study also have two important implications for international marketing theory and practice. First, these results provide some insights into the international transferability of marketing programs. Recent evidence has suggested that national identity is being re-emphasized for promotion strategy in Latin America. This study extends these discussions to one specific aspect of promotion strategy--the information content of television advertisements. Results indicate that commercials in Latin America contain substantially more information cues than those in the U.S. and Australia. International marketing managers may wish to consider this factor in designing or adopting promotional programs for their countries, as this is one of the few documented differences between Latin American and U.S. advertising practices.

Second, this research suggests an alternative explanation for differences in the observed frequency of informative advertising among countries. This explanation suggests that the number of products in the initial, early stages of the product life cycle accounts for the proportion of informative advertisements. Thus, countries which advertise greater proportions of relatively new or innovative products are also likely to exhibit greater numbers of informative commercials. This explanation is in contrast to the earlier explanation suggested by Dowling which focused on the role of external regulation in determining the frequency of informative commercials.

Several limitations must be kept in mind in interpreting the results of this study. First, the sample of Latin American advertisements, although comparable in size to the other studies, may not be necessarily representative of the wide diversity of television advertising in all Latin American countries. Clearly more research in more countries is required before adequate generalizations can be developed. Second, additional research is needed to document the relationship between product life cycle stage and advertising informativeness. Although the information presented here is highly suggestive, further investigations in other countries are required before reaching a definitive conclusion.

Finally, this study implicitly assumes that consumers require and need information and that advertising should provide this information. Yet from the viewpoint of many consumers this may not be true. In some cases the consumer may only require awareness or image messages. Further research should be undertaken which evaluates the total importance of information from the standpoint of the consumer rather than accepting the normative judgement of the total importance of information in advertising.

These limits notwithstanding, these findings are interesting for advertising practitioners and policy makers seeking to obtain a clear picture of comparative advertising practices.

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A VULNERABILITY EVALUATION OF U.S. PLATINUM CUSTOMERS

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ABSTRACT

The availability of adequate supplies of strategic minerals is becoming an increasing concern for customers. Countries such as the U.S. are perceived to be highly vulnerable in this respect. To determine to what extent such U.S. customers are vulnerable, the case of platinum was studied. Vulnerability criteria were identified, quantified and incorporated into a composite vulnerability index. U.S. platinum customers were rated as being rather highly vulnerable, according to tentative findings. Some avenues for further research are suggested.

INTRODUCTION

The industrialized economies of the West are becoming more and more sophisticated in terms of their use of minerals. A greater variety is being used and more applications are being found for minerals than ever before. This has also made the West more dependent on other countries for supplies of all the raw or processed minerals they do not possess themselves.

Although the U.S. is generally in a better condition than the EEC countries and Japan, it still relies heavily on foreign suppliers for a substantial number of minerals. By contrast, Comecon countries (including the USSR) are mainly independent of foreign mineral suppliers at this stage (1 pp. 5-7). Many of these minerals are of critical importance to the U.S. and the West because of their use in defense, petroleum and other strategically important industries. The majority of suppliers of the needed raw materials are mostly non-aligned Third World countries, the USSR and other countries with a (potentially) unstable political or economic environment.

U.S. customers of strategic minerals have become extremely concerned about the availability of future supplies. This is especially true in cases where the world market position is extremely tight or volatile as reflected by rising or fluctuating prices, projected or actual shortages, and insufficient or no substitutes. Oil, cobalt and platinum are cases in point.

The marketing environment for strategic minerals, consequently poses quite a challenge for its customers. This makes a thorough environmental evaluation extremely important. In fact, for strategic minerals it is just as important (if not more so) for the customer to assess the marketing environment than it is for the seller. Such evaluations by the latter are obviously not new, but the practice is still not widespread. It seems to be growing, however, at least as far as U.S. firms are concerned (2 p. 43).

This study aims to develop some tentative determinants, rating scales and indices in order to assess the marketing environment of strategic minerals in a structured format in general and the vulnerability of the customer in particular.

APPROACH

Risk assessment of the marketing environment is not only a relatively new one, but also a very controversial one. Most of the risk analysis seems concentrated on the political environment although other elements are now also being considered more frequently, such as economic, social and even physical factors (3

pp. 164-169, 4 pp. 195-201).

Different approaches have been suggested and used to measure such environmental risks. Some involve the use of the Delphi technique, others the use of experienced politicians, diplomats and managers. These approaches are all based on the "soft" data of subjective opinions. Other methods involve the use of "hard" data such as specific economic or social statistics or ratios (3 p. 107). Still others use mainly general country surveys. Regardless of the source of data, however, all methods inevitably require at least some subjective input, e.g. the determination of which variables to use, how to quantify them and for what time horizons they should be collected and projected.

Each method also has its own unique weaknesses (and strengths) (5 pp. 104-105). No wonder that different models sometimes give different ratings for the same countries (6 p. 60).

Weaknesses or not, some environmental assessment is essential for decisionmaking in business. The ideal method may never be found, but the use of any means that will help assess such risks in a less arbitrary manner, should be considered. Using different methods for cross-checking purposes should also be considered, just as in forecasting.

The method proposed here differs from those above in mainly three ways. Firstly, it attempts to determine the environmental risk a (specific) customer (country) (U.S.) is exposed to, rather than a potential investor or marketer. This not only involves assessing the needs of the customer, but also the overall supply position - in this case world-wide. Hence, a country evaluation is aimed at determining its (continued) reliability as a supplier to a specified customer (U.S.), not the assessment of its stability as a market or investment object. This makes the analysis more specific, less comprehensive, and thus, it is hoped, less complicated. Secondly, a specific product (i.e., platinum in this case) is used. This enhances the specificity while still allowing for sufficient data to be used as the use of these products (strategic minerals) is widely recorded in most instances. Thirdly, the method is designed to be relatively simple and flexible with both quantitative and qualitative options. Where possible objective ("hard") data is used.

The approach employed in this study involves the use of a series of key factors which are held to be the main determinants. For each of these factors a rating scale or an index is developed with weights where relevant. As an alternative, grades are used in addition to numbers. The grades are intended for users who object to numerical analyses and are aimed to serve more as a broad guideline. The factors used are:

- Foreign dependence
- Supplier reliability
- World market pressure
- Availability of alternative supplies
- Extent of critical use of the product (platinum).

Naturally any selection of this nature is ultimately subjective. The determinants chosen are tentative and illustrative at this stage. Nevertheless they seem suitable for this study and they are intended to represent, directly or indirectly, all main influences that (may) have a significant effect on the vulnerability of the (U.S. platinum) customer. Finally these

measures are all incorporated into an overall index (rating).

The data bases chosen were obtained from published official data where possible. The information used for determining the supplier (country) reliability was obtained from a wide variety of sources which helped form the author's opinion over a number of years. (Such sources include environmental risk figures determined by some of the methods referred to!) For a more comprehensive analysis a broader based panel and/or a more formal use of objective data is probably advisable. The same is true for the ultimate determination of the value, grade and weight of each of the factors considered. As this is a tentative study, the actual numbers and rankings used are not as vital, however, but are rather intended to serve as guidelines and examples.

FOREIGN DEPENDENCE INDEX

The degree of dependence a customer country has on all its foreign suppliers can be relatively easily quantified by objective data. **Table 1** represents the relevant data for the U.S.' dependence on platinum imports (all metals of the platinum group are included viz. platinum, palladium, rhodium, ruthenium, iridium and osmium.)

Table 1
Foreign Dependence Index

Item	% ¹⁾	Weight	Index ²⁾
South Africa	50	.89	44
USSR	22	.89	20
United Kingdom	12	.89	11
Total: Main supplier dependence	84	.89	75
Other	16	.89	14
TOTAL: Net import reliance ³⁾	89	1.00	89

1) % of imports, 1975-1978. Adapted from Morgan, J. Resource Planning for Mineral Supplies. Speech, PEI, Richmond. Jan. 19, 1981, p. 5.

2) Weight x %.

3) Imports-exports and adjustments for government and industry stock changes, expressed as % of apparent consumption.

The net import reliance of the U.S. is ultimately expressed as a percentage of apparent consumption (the latter equals U.S. primary and secondary production plus net imports). (1 p. 5). In determining this total the relative contributions of the main suppliers to U.S. imports were tallied and converted to contributions to apparent consumption, i.e., the 11% of local sources included.

There are other variables one might wish to consider in determining foreign dependence, but the purpose of this specific index is purely to measure the dependence in terms of volume. A factor such as the nature of the supplier countries involved is also a major consideration but is covered by the next measure, i.e. the supplier reliability ratings. In order to eliminate short-term fluctuations, it is advisable to select a series of years, if available. To some extent the time horizon for which the vulnerability assessment is intended, will also determine the length of the base period. (In this example a 20 years' projection will be used.)

According to the index figure of 89 (out of 100) arrived at in **Table 1**, the U.S. is heavily dependent on foreign suppliers for platinum-group metals. Also the number of main suppliers is relatively small, some-

thing which is true for a great number of strategic minerals. Grades could be used if a numerical analysis is not desired. In this example they were not added as the index data, including the weights, is based purely on objective data.

SUPPLIER RELIABILITY RATINGS

To rate the reliability of supplier countries is a much more challenging task than to determine the foreign dependence index. Subjective data has to be introduced, even if voluminous "objective" data are gathered at first to provide basic information. The reliability of the suppliers (countries) is being determined, however, not so much on their stability (political or economic), business potential or the nature of their cultures. In this specific example the USSR, South Africa and the UK were individually evaluated for their reliability as suppliers to the U.S. A four point scale was used as indicated in **Table 2**. This scale is used in Haner's Political Risk Index which forms part of his overall BERI (Business Environment Risk Index) (4 p. 135).

Table 2
Supplier Reliability Ratings

Supplier Country	Grade ¹⁾	Rating ¹⁾	Weight
South Africa	B/C	2.5	.59
USSR	D	4	.27
United Kingdom	A	1	.14
Overall (weighted)	(C)	2.7	

1) A or 1 means minimal risk; B or 2 means acceptable risk; C or 3 means high risk; D or 4 means prohibitive risk

The only risk assessed here was the danger of the supplier cutting off (vital) supplies such as platinum for "strategic" reasons (which mainly implies political and to a lesser extent economic considerations). The countries in question each present vastly different conditions.

In some instances the present government or government system may be expected to act or react adversely to the U.S. in a crisis situation, e.g., the USSR. Political stability may be a critical factor in the case of South Africa over the next twenty years. A radical change in government there might possibly bring to power Black majority rule with a different political system and a different political outlook (non-aligned or communist). This in turn, might lead to a cut-off or limitations in the supply of platinum to the U.S. and/or higher prices. The degree of economic dependence of South Africa on the U.S. at that time may also be critical, and so might the role of the USSR in this context. Even if the present political structure remains intact over the time horizon (20 years), political and social unrest and limitations of reserves may cause supply curbs (5, p. 49).

On the other hand, South Africa has shown remarkable resilience over the past decades. A number of doomsday forecasts made in years past have not materialized. Although the political and social tensions have not changed significantly, economic progress has been made especially in the area of self-sufficiency in strategic areas. A high priority has also been placed by government on the exploration and development of strategic minerals for both political and economic reasons.

All this represents a very uncertain scenario - South Africa is the least predictable of the three suppliers.

Although the U.K. has shown some evidence of neutralist tendencies in certain opposition circles, this is by no means a general trend and does not need to result in an adverse supplier - customer relationship with the U.S. over the next twenty years. Britain has been one of the U.S.' staunchest allies and trading partners over the years. Political stability is not seriously threatened. Ironically the U.K.'s ability to supply the U.S. with (reprocessed) platinum (from other sources) may be impaired by the policies of their suppliers of the raw material. In this context even the U.K. could become a less reliable supplier. However, the U.K. is politically less vulnerable than the U.S. because of its laws and more "diplomatic" profile in world politics.

The ratings in **Table 2** are based on the lines of reasoning presented above. South Africa's D/C rating reflects the uncertainty mentioned, i.e., the risk is estimated as higher than "acceptable" but not as great as "high". Perhaps "somewhat risky" would be an apt description of its reliability.

The USSR may have been rated rather severely in the view of some but reliability really counts in times of crisis. At such times the USSR may not deliver - the opposite also holds true, as the recent grain embargo has proved.

The weights assigned in **Table 2** are based purely on the relative contributions made by each supplier to the imports of the U.S. - see **Table 1**. Incidentally, the rates are scored to indicated unreliability i.e., the least reliable rating scores highest. This is done to achieve consistency throughout - the ultimate aim is to measure the vulnerability of the U.S., not its autarky.

The overall (weighted) rating (grade) reflects a fairly high-risk reliability for the main suppliers as a group.

WORLD MARKET PRESSURE RATING

The (world) market conditions determining whether an (economic) shortage exists, is another key factor. If market conditions are tight or under pressure, "natural" supply limitations may occur. What constitutes a "shortage" depends of course on the interpretation given to the term. Strictly speaking no shortages occur in truly "open" or "perfect" markets as (temporary) shortages will lead to adjustments of supply and demand at higher prices. In practice this ideal is almost never completely attained.

In the case of platinum the limited number of suppliers and the presence of external factors play a significant role in the market. For instance, the platinum price is very sensitive to inflation scares and to world tensions. The USSR's output has been falling recently although South Africa has (so far) offset this. (7, pp. 72-75). The problem is that production cannot be readily expanded once a supplier has reached full capacity. In addition, the South African mines produce substantial amounts of nickel as byproducts. The latter is an important source of revenue and costly to store. When the nickel market is unfavorable they are reluctant to sell and to store, hence nickel (and platinum) production is cut back or at least not expanded (8. p. 57).

Overall, the market demand for platinum is currently being satisfied and prices have come down from previous highs, due to recessionary conditions. Consequently, an A grade is awarded for the current (one year) period (out of twenty). For the intervening 18 years demand is expected to outstrip supply somewhat or at least from time to time at "normal" prices. This will be due to some new technological advances which are expected to

stimulate world demand. Fortunately some recycling is being and will continue to be undertaken, especially in the auto industry. However, both the U.S. and Japan, who together account for approximately 80% of total free world consumption, are expected to increase their demand for the metal until the year 2000. After that (only one year included in forecasting horizon) the demand is expected to start declining. New developments in the auto, petroleum and electrical industries are likely to result in a reduced demand for platinum by then. Supplies are likely to keep pace - given expected production capacity and available reserves - barring a crisis.

Table 3 reflects the ratings. The weights were determined by the number of years in the period. On the whole, the pressure the world market is likely to exert on the availability of U.S. supplies is expected to be moderate.

Table 3
World Market Pressure Rating

Period (1981-2000)	Grade/Rating ¹⁾	Weight
Current	A 1	.05
1982-2000	B 2	.90
After 2000	A 1	.05
Overall (weighted)	(B) 1.9	

1) A or 1: Slight (pressure; B or 2: moderate; C or 3: Severe; D or 4: Extremely severe

ALTERNATIVE SUPPLY RATINGS

Substitutes and stockpiles can also be important sources of (alternative) supplies when the world market is under pressure or when a crisis appears. New technology would enable more efficient consumption or production, in effect creating extra or alternative supplies. The availability of viable substitutes is only moderately likely within the 20 year horizon. Metals such as tungsten, nickel, gold and silver can already serve as technical substitutes in some instances. At present such substitution is usually not economical. Should the price of platinum rise significantly, substitution may become more economical. Barring any lengthy economic or political crisis, this is regarded as unlikely, hence the C grade. - See **Table 4**. U.S. (and other) stockpiles are deemed inadequate at present (9, pp. 68-71) with little likelihood of being expanded fast enough. As a result very little will be available for use and then only in a crisis situation, thus a rating of 3 is awarded. New technology is not rated as any improvements that may be made are expected to have minimal impact on the volume available in the next twenty years (weight = 0).

Table 4
Alternative Supply Ratings¹⁾

Item	Grade/Rating	Weight
Substitutes - technical & economic availability	C 3	0.9
Stockpiles - availability (govt., industry)	C 3	0.1
New technology e.g., increased durability ²⁾	- -	0.0
Overall (weighted) ³⁾	C 3	

1) Rate, availability of new supplies,

2) Regarded as negligible for rating period.

3) Grading: Availability - Highly likely, 1; Very likely, 2; Moderately likely, 3; Unlikely, 4

The weights in **Table 4** are based on the estimated physical contribution these supplies would make. It is

felt that by far the main portion of any alternative supplies would come from substitutes. The stockpile levels are so low that their contribution is almost negligible if spread over a twenty-year period. However, their importance lies in immediately releasing a notable volume (say 6 months' supply) in a crisis situation. As a result the weight was increased to 0.1, which assumes that such a crisis is possible although not very likely and that such supplies would only last for a limited period of time. The overall rating is consequently dominated by the availability of substitutes.

CRITICAL USE INDEX

The most critical uses of the platinum-group metals are to be found in the automotive, electrical and petroleum industries - see [Table 5](#).

Table 5
Critical Use Index

U.S. Industry	% ¹⁾	Weight
Automotive	30	1
Petroleum refining	5	1
Electrical	17	1
Total critical use	52	1
Overall (weighted)	52	1

1) Percentage of U.S. demand in 1978 based on U.S. Bureau of Mines data (11).

The percentages are strictly based on demand data. The weights were regarded as equal, i.e. percentage contribution to overall demand is the only criterion here. However, the weights were introduced in order to allow for placing different emphasis on the significance of use by each industry.

The overall critical use is currently just over half of total use - see [Table 5](#).

COMPOSITE VULNERABILITY INDEX

The ratings and indices above can now be combined into an overall index indicating the vulnerability of the customer country (the U.S.) to the strategic mineral in question (platinum).

[Table 6](#) reflects the results. The original scores were all converted to a 100-point index to be comparable. The weights to be used posed a major problem. Any decision made in this respect is bound to be mainly subjective. The alternative is to just stick with the original scores or grades and assess each factor independently and in isolation.

Table 6
Composite Vulnerability Index

Index/Rating	Score	Index	Weights	
			Crisis	No Crisis
Foreign dependence index	89	89	.20	.05
Supplier reliability rating	2.7	68	.35	.25
World market pressure rating	1.9	48	.05	.50
Alternative supply ratings	3.0	75	.10	.10
Critical use index	52	52	.30	.10
Overall (weighted)			67	58

This is possible but will not prevent an eventual decision on overall vulnerability to be made on similarly subjective grounds.

In order to make the use of the weights more flexible, a distinction is made between crisis and no-crisis situations. This means, for instance, that the world market pressure can be given a much more important role in a "normal" situation than in a crisis situation such as a war when market conditions are expected to be of little significance. In a crisis, supplier reliability and the degree of critical use of platinum are deemed to become significantly more important.

As [Table 6](#) indicates, the U.S. is expected to be more vulnerable in a time of crisis. The difference between the two index numbers is not that large, however. Still, both figures are well over the 50-mark. A slight problem surfaces for those who insist on one overall vulnerability rating. (For instance, one may argue that it is difficult if not impossible to forecast a crisis.) To overcome such objections a separate set of weights may be developed, incorporating in some way a probability estimate of a crisis occurring. Or, the present two indices scores could be combined according to some ratio. In this case it was decided to present the indices separately.

This still leaves the interpretation of the actual scores up in the air. Comparisons with other strategic materials is one possibility. Another is presented in [Table 7](#).

Table 7

Tentative Interpretation of Vulnerability Index

Degrees of vulnerability	Grade	Rating	Index (pt)	Index (range)
Extremely vulnerable	D	4	100	88 - 100
Highly vulnerable	C	3	75	63 - 87
Moderately vulnerable	B	2	50	38 - 62
Slightly vulnerable	A	1	25	13 - 37
Not vulnerable	X	0	0	0 - 12

The degrees of vulnerability again represent a four-point scale to make it consistent with the others used to arrive at the overall index data presented in [Table 6](#). On the basis of this interpretation, the U.S. is regarded as being (rather) highly vulnerable as a platinum customer in times of crisis and (at least) moderately vulnerable during other times.

CONCLUSIONS

In order to evaluate the vulnerability of customers (countries or industries or individual firms), ratings, grades and indices can be used as demonstrated. All require at least some quantification (even grades imply this) and a greater or lesser degree of subjectivity. Still, the need for such an assessment is becoming increasingly important. For instance, Horst Metz, a materials specialist with Booz, Allen, Hamilton, Inc., recommends that risk analysis be used to determine the internal importance and external vulnerability of the metals and materials we use (11, p. 98). This will better enable both government and industry to take appropriate measures to reduce this risk.

The bias of subjectivity may be reduced by using flexibility in the ratings (e.g. grades) by alternative ratings (e.g. a distinction between a crisis and non-crisis situation) and by allowing for weighting (where the bias as to importance is made a formal

input and may be varied). By the same token it also lessens the uniformity and hence the accuracy of any assessment. The analyst has to attempt to reach a happy medium between misleading preciseness and overly flexible but ambiguous measures.

These tentative methodological findings may serve as a point of departure for more investigations of this nature. For instance, panels or groups of "qualified" people may be used in conjunction with as much objective data as possible. New or modified factors may be considered - every strategic material may not require an identical set of factors. Other customer (and supplier) countries should be used for comparative and methodological purposes. Actual "results" should be compared with the "forecasted" ratings to determine the latter's accuracy. This would pose a new challenge - how to objectively determine historical vulnerability.

The problems experienced with other types of (political) risk assessment in business should not deter us from attempting to determine customer vulnerability to suppliers. The need and the dangers are real. Let's not wait until a crisis is upon us before we act.

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AN EXPERIENTIAL APPROACH TO MARKETING EDUCATION

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ABSTRACT

The paper examines two paradoxes in the art of teaching. The first, vocational vs. humanistic education is illuminated by "selling sprints" created to teach basic selling skills. The second, the process or rationalizing vs. sensitizing human behavior draws from psycholinguistics to support a proposed motto for marketing education.

HEAR and forget
SEE and remember
DO and understand

This paper attempts to organize a process of dealing with paradox. Because teaching is so intimately involved with growth and change, this is inevitable. Nevertheless, the contradictions that we deal with daily require us to examine and clarify our pursuit of this art. For every art requires clarity and precision to pursue what attracts us to it--its beauty, truth, or perfection.

I came to teaching after pursuing marketing in Los Angeles, San Francisco, and NEW YORK. I have seen radical changes occur in my forty years of active combat in the marketplace. And I have noted that old soldiers not only do not fade away, they seem to have unfortunate tendencies to become increasingly dogmatic. Therefore, I ask your indulgence. I am trapped (as we all are) by my experience. And that experience has led me to question many of the assumptions that we have come to in marketing education. That questioning has taken on an increasingly market-oriented approach. Naturally, having made my living in marketing, those patterns, skills and attitudes would carry over.

I would like to examine my explorations into two paradoxes and the rationale from which they came. They apply to all education; but I will confine my discussion to marketing education. We all are daily concerned with a fundamental decision: IS EDUCATION ESSENTIALLY VOCATIONAL OR HUMANISTIC? In the perspective of marketing education, this could take the form of specific opposing questions: ARE WE ATTEMPTING TO PRODUCE OUTSIDE SALES REPS OR BRAND MANAGERS (for example) who can also dash off a competent press release? Or, ARE WE ATTEMPTING TO PRODUCE IMPECCABLY ETHICAL, INFORMED THEORETICIANS? After fifteen years of junior college and university teaching, I have developed a tentative, working solution. I would propose that the paradox be resolved by ignoring neither. In my early years in teaching, I found this difficult. All the textbooks in wide use in the late sixties were conventional multisyllabic collections of theory. Most of my colleagues were firmly in control of three-a-week or daily lectures. And the students were regularly subjected to "objective" test banks.

There was an elaborate pretence which still persists that the ability to sensemark the appropriate test item was somehow positively correlated to learning marketing. As my age and dogmatism have increased, so has my dissatisfaction with this charade. The attitudes, sensitivities, and skills I trained for and promoted to management in New York are nowhere evident. Minute-longing and memorization were perhaps being tested. Professional marketing, however, was conspicuously absent everywhere I looked in the colleges and universities.

After valiant attempts to translate the code of McCarthy, et al, to my students, I confess I waffled. I surreptitiously began writing and distributing slangy, simple handouts to my students to explain the game. One on selling triads, for example, suggested some techniques to develop their basic salesmanship skills--listening, leading conversations, and questions.

I called it SELLING SPRINTS and KILLING THE DRAGON. The basic idea came from a group-process seminar I attended at San Jose State University. All selling involves listening and talking, basically. This can normally not be done easily in a large group. But dividing the group into groups of three, or what I call selling triads, facilitates a great deal of practice in as little as fifteen minutes. It is a good idea to give a set of short explicit instructions followed by a timed, 30-second period in which to carry them out. This accustoms your students to the sprint timed format. After they have had thirty seconds to select two other partners and get briefly acquainted, give them thirty seconds to decide who will be the first seller, buyer and TV camera. Then give them perhaps a minute to decide on the good or service they are going to work with. Explain that the buyer and seller will face each other and the TV camera will face them both.

At this point, it is a good idea to use yourself as an example (smile, introduce self, etc.). Once you have set the tone you will be surprised how enthusiastically and joyously your students PARTICIPATE. In fact, you should be prepared for a pretty high noise level.

I usually use a 2-minute sprint initially. Most students don't finish a presentation, but explain that you're as interested in the three roles being played as the particular dialogue employed. I have excerpted two pages from that particular scene in my book, An Experiential Approach to Marketing.

HERE IS WHAT EACH PERSON WILL DO DURING THE TWO-MINUTE SPRINT:

- SELLER: Introduce yourself to the buyer, open with a joke or whatever opening you want to try out. Then move as far into the sale as you can.
- BUYER: Let the seller control the sales interview. Be normally polite and attentive. Try to respond as normally as you usually would.
- TV CAMERA: Your job is to perform EXACTLY like a TV camera. You should record objectively what is said and otherwise communicated between the buyer and seller. Whatever you see and hear should be described at the end of the encounter to both parties. You should detail what you experience WITHOUT (or holding to a minimum) your emotional reactions. (TV CAMERAS DON'T EMOTE).

AFTER TWO MINUTES OF INTERACTION, THE TV CAMERA (who is also the time keeper) will CALL TIME. Both the buyer and the seller will remain silent while the TV CAMERA finishes describing the transaction. It is possible to have a free exchange of reactions before switching roles if you wish.

SECOND SPRINT:
Here the PLOT THICKENS. EACH PERSON SWITCHES ROLES. THE NEW BUYER, HOWEVER, IS GOING TO ROLE-PLAY THE MOST

RECALCITRANT, UN-COOPERATIVE, ABUSIVE BUYER HE/SHE CAN IMAGINE. Both seller and TV camera will work as best they can around this MONSTER. After two minutes, the NEW TV CAMERA and buyer will report as objectively as possible what they experienced. The sellers may make notes, if they wish, on the comments applied to them. It can be confusing to try to keep track of what was said about each in three different roles in that brief period.

Again, if the participants wish, they may take a short, post-mortem period to exchange reactions before moving into the final TWO-MINUTE SPRINT.

FINAL SPRINT:

Each person will NOW ASSUME THE ROLE THEY HAVE NOT PREVIOUSLY TAKEN AND WE WILL CHANGE THE BASIC DYNAMICS AGAIN AS FOLLOWS:

THE NEW BUYER WILL NOW COMPLETELY SUPPORT AND FULFILL THE SELLER'S NEEDS BY BEING AS AGREEABLE AND SUPPORTIVE AS POSSIBLE. ONE CAUTION: avoid buying until as close to the end of the two-minutes as you can judge. Essentially, this little group encounter contains ALL the BASIC POSSIBILITIES OF ANY SALES PRESENTATION. After a neutral, two-minute sprint to get the feet wet, we bring on the MONSTER, that deep, unconscious feeling that haunts us all. We all share unconscious fears about being embarrassed or unable to cope with the situation in which we are trying to convince someone. That is why most people avoid SELLING. EVERY PROFESSIONAL FINALLY HAS TO FACE AND DEAL WITH THAT COMPLETE FABRICATION OF FEAR AND UNCERTAINTIES. The game only objectifies and enables you to EXPERIENCE OUT those things we all share --such fears and the unwillingness to admit them to our consciousness. Once you have played them out, they lose their force. Experiencing these MYTHS in the safe and controllable environment of a TRIAD SPRINT dissipates the emotional charge.

We finish with a positive reassuring encounter because it squares with the real world. Most of your fellow human beings are willing, if not eager, to deal with you as nicely as you will allow them. The sprints contain the THREE ELEMENTS THAT ALL PROFESSIONALS CONSTANTLY WORK TO PERFECT:

1. THE ABILITY TO LISTEN ACCURATELY AND OBJECTIVELY (TV CAMERA).
2. THE ABILITY TO CONTROL AND MOVE A SELLING CONVERSATION IN A GIVEN DIRECTION (THE SELLER).
3. THE ABILITY TO LISTEN AND RESPOND STRATEGICALLY TO WHAT IS HAPPENING IN ANY CONVERSATION.(THE BUYER).

The second sprint described, I now call "KILLING THE DRAGON." I feel it is important to go through all three types of sprints in a single session or two periods. All three sprints will require a little over 30 minutes. If they are done with the appropriate light touch, everyone will enjoy learning how they listen, control and move a conversation, and respond strategically to conversational gambits. There are endless variations that can be played. I always pick up something new every time I put a class through this experimental exercise.

I have found the KILLING THE DRAGON sprint particularly effective in blowing up with laughter the unconscious fears that we all share. The exercise is particularly useful in getting the more theory-prone student to actually go out and make effective calls in the marketing campaign which is a part of all of my marketing and salesmanship classes.

Another way of stating the paradox we are presently dealing with is the relative value of theory as opposed to actual practical experience. I am really not sug-

gesting that we abolish teaching theory in marketing education. I am merely pointing out that all my experience and logical abilities convince me that theory is, at best, only HALF of our agenda. Unless we are willing to subject our theories to actual testing, we are mis-educating our students. For surely everyone can agree that the BUSINESS OF MARKETING is essentially to achieve results.

Any good theoretician is aware of the crucial role theory will always play in organizing and utilizing experience. But until a theory is tested, it is only empty words or numbers. The content of any viable program of marketing education must suggest and demonstrate the vital interplay between theory and experience. I was heartened to discover the word, "experiential" to be the underlying theme of a recent marketing conference I attended. Without the pragmatic test of reality, we are really not teaching marketing at all.

The very valuable contribution theory will always make to marketing has tended to obscure a fundamental reality. A very basic dynamic of marketing is emotional. The skills, attitudes, and theories that guide the professional are based upon practical experience and interaction with a great many real people. Much of that process can really not be caught very precisely on the written page or the test bank.

This serves to introduce a paradox that disturbs all educators, but particularly those in marketing. Historically, education has seen itself as a rationalizing process. And this will always be true. But to put it in the form of a paradox: IS EDUCATION A PROCESS OF RATIONALIZING OR SENSITIZING HUMAN BEHAVIOR? By now you should be able to anticipate my answer: BOTH.

I would urge a complete reappraisal of our new abilities to sensitize. I and many of my colleagues have kept a color-equipped TV studio busy videotaping student TV commercials, sales presentations, and guest experts from professional marketing. Our guests are successful and generous professionals who enjoy sharing their expertise. These new capacities for careful analysis and discussion of the WAY it is done open new vistas. We all know that the most rationally elegant communication can fail to be noticed unless an appropriate emotional tone is projected. And now it has become possible to replay and isolate the gesture and nuance that the master marketer employs.

To return to our theatrical metaphor, even the most un-inspired words can be transformed by a professionally sensitive, imaginative interpretation. A favorite idea of a marketing V.P. of my acquaintance catches it very well: "DON'T LULL ME WITH FACTS OR FANTASIES, GALVANIZE ME WITH AN AUTHENTIC EXPERIENCE."

I wrote a thesis in the late sixties proposing the development of a taxonomy of communication. Unfortunately, little financial interest has been forthcoming. In fact, post-Proposition-13 funding has closed the studio. That close and detailed study and analysis of gesture, voice, intonation, etc. is no longer available. Dr. Ray Birdwhistell, whose book, *Kinesics*, pioneered non-verbal communication analysis, once guesstimated that words carry only 26% of the total message being communicated. It is obvious that this crucial marketing dynamic is almost completely untouched.

This serves to introduce the final educational paradox we are concerned with in this paper. At the center of every educational specialty is the human symbolic process. In fact, someone once defined a university education as a four-year reading and writing vocabulary drill in specialized symbol systems. It is certainly obvious that our human capacity to represent reality symbolically and manipulate time and space and our conscious-

ness is unique as far as we know.

When I returned from the marketing wars to graduate school, I made a lucky choice. I chose to pursue psycholinguistics as my thesis subject. I suppose that my marketing background dictated my choice. At least, today, I am certain that the discipline that combines psychology and linguistics is an appropriate background for understanding the nonrational half of marketing. After all, psychology, the study of human behavior combined with the study of the unique behavior patterns that make us human, or symbol systems or languages, is certainly appropriate.

I would like to suggest that human education, and particularly marketing education, are essentially symbolic processes. There is no paradox here. From the pioneer work of the Russian psychologist, Vygotsky, there has been increasing recognition of the powers of symbolization. In fact, the publishing of his book, Language and Thought, in the early sixties was the impetus for the development and growth of psycholinguistics.

Vygotsky was one of the first to recognize the unique and powerful effects of the word on human consciousness and mental activity:

. . . Consciousness reflects itself in words, like the sun in a drop of water. A word is related to consciousness like a small world to a big one, like a living cell to the organism. It is a small world of consciousness. (Vygotsky, L. S., Thought and Speech, PSYCHIATRY, 2:29-54, 1939, 0.52)

Essentially, Vygotsky's book, Language and Thought, summarized his carefully detailed thesis that language was the focus of the development of conscious human conduct. He developed his thesis from his career studies of language development and changes in thinking in Russian school children. His work is in the tradition of Piaget and the psychologists-linguists who began to recognize the intimate relationships between the use of language and being human. From my study of his ideas and the field of psycholinguistics, I began to substitute in-class memos and more extended, out-of-class memos for "objective" testing. I was gratified to discover that after initial objections many students demonstrated surprisingly rapid progress in their abilities to write clearly and precisely. In fact, I presently have abandoned formal testing completely in favor of weekly memos and a final marketing campaign. This, coupled with frequent opportunities to verbalize in group settings, has demonstrated to me the truth of something I first encountered in Thought and Language:

Inner speech is condensed, abbreviated speech. Written speech is, deployed to its fullest extent, more complete than oral speech. Inner speech is almost entirely predicative because the situation, the subject of thought, is always known to the thinker. Written speech, on the contrary, must explain the situation fully in order to be intelligible. The change from maximum compact inner speech to maximally detailed written speech required what might be called deliberative semantics . . . deliberate structuring of the web of meaning. (Vygotsky, L. S., Thought and Language, M.I.T. Press, Cambridge: 1962, p. 100)

This "structuring of the web of meaning" has become the basic function of the individual and, sometimes, group memos. I am no longer surprised at how much more readily ideas and suggestions in my handouts are translated into memos which, in turn, are converted into successful marketing campaigns. I would not like to leave the impression that this whole thing took place as an orderly, rational exercise of an organized intellect. I stumbled, funbled, and guessed my way to this present tenta-

tive state. For that is really what attracts and keeps most teachers in teaching. The fascination of watching an ongoing experience with its changing paradoxes that growth and change will always bring never palls.

I would urge you to think long and carefully about the details of the art that you daily perfect. It was difficult to abandon the persuasive cliches of McCarthy. As one of the most widely read textbooks in marketing education at that time (the late sixties), I was too new to question the gospel. But as I grew in experience and became increasingly frustrated trying to explain his complex symbolism to my students, my attitude changed. I became more insistent upon a more balanced view (particularly after my survey of jobs being held by my former marketing students). Even today, I would seriously question most of the widely used marketing texts. In my opinion, they just do not give a true account of marketing.

I will now admit that I have been leading you down a primrose path. The paradoxes that we have been examining here are real and challenging in a pragmatic sense. But in another important sense, they are constructions of our symbolic behavior patterns. They are figments of our traditional acceptance of the conventional wisdom. We only assume that all this rhetoric is marketing. That is a symbolic habit that our conditioning imposes upon us.

Contrary to a popular conception, my years in the field have led me to value integrity particularly. I have learned to completely reject the popular cliché of the chameleon marketer pilaging the populace. This is certainly going on, but not very successfully in the same place for very long. In my experience, sound marketing results from fair and honest principles applied in the marketplace. Anything else soon finds the oblivion it deserves.

I am told that there is an excellent motto carved over the entrance of the Children's Library in Washington, D.C. I would like to propose AN EXPERIENTIAL YEAR OF MARKETING EDUCATION. And I would further propose this as our motto:

HEAR and forget
SEE and remember
DO and understand

TOWARDS BETTER THEORY AND PRACTICE IN MARKETING EDUCATION:
A CHOICE-BASED, APPLICATION-ORIENTED APPROACH

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ABSTRACT

The relevance of the traditional marketing curriculum as it relates to real world practice has often been challenged. This paper discusses the nature of the problem and then offers a perspective and some corresponding alternative approaches to curricula which appear useful for bridging the theory versus practice gap.

INTRODUCTION

Much has been written in the various marketing journals and conference proceedings as concerns the general area of marketing education; many different topics, of course, have been mentioned under this rubric, with varying degrees of coverage.

One of the topics which has received a great deal of attention in this literature, however, is the possible gap that may exist between marketing theory and actual marketing practice. In particular, the relevance of the traditional marketing curriculum to the "real world" has often been challenged (Brannen and Renforth, 1981).

Many authors have suggested ways of bridging the gap in marketing education. For example, Day (1979) has suggested that marketing practitioners and academicians find a mutual interest, namely research that concentrates in the area of problem solving, and Ramond (1978) has suggested that the following integrating guidelines be used in the teaching of marketing:

1. Do not hesitate to teach theory, but do be sure it applies.
2. Teach failure-avoidance before success-imitation.
3. Teach values as well as subjects.

Academics such as Goedeke (1973), Gelb (1971), Enis and Smith (1976), Marshak and De Groot (1978), Mills (1981), and Murphy and Lacznik (1979), as well as practitioners such as Keane (1977), and Hise (1975) have called for more pragmatic programs with a stronger emphasis on actual business practices. Enis (1977) has described marketing as a product and has suggested that marketing educators need to reconsider the nature of the product to meet changing student needs in this decade. Joyce and Krentler (1980) have gone further on this theme and have advocated a marketing orientation to educate marketers to marketing education. Additionally, an empirical study of students', practitioners', and academicians' perceptions of what should be taught to students showed that students and practitioners (but not academicians) were closely aligned in their belief that marketing courses should stress practice rather than theory (Cagley and Boone, 1981).

Thus, it appears that marketing educators may often not be providing the kind of education that marketing

majors desire, or the type of finished product that is desirous to marketing practitioners. Accordingly, the purpose of this paper is to discuss a perspective and a corresponding alternative teaching method or application (style/curriculum) that may be conducive for bridging the gap that currently exists between marketing theory and practice.

The Element of Choice: A Student-Oriented Perspective

The major element underlying the approach and/or methodology to be discussed is the element of choice. Choice is practiced in the marketplace and is a strategy that seems to work very well. Likewise, it is our premise as marketers and marketing educators that students should also enjoy this same choice mechanism as it relates to the taking of marketing courses. Those of us who teach principles of marketing are well aware that many students with varied interest levels in the subject (usually predicated on their major) are grouped together and expected to perform in some manner that is acceptable to the instructor. In order to accomplish this goal, choice has to be made a part of the learning mechanism--a mechanism that stresses practical application, and the ability to reason in a context of problem solving. A major way in which choice is implemented in the teaching of marketing, of course, is through the methodologies that are used/offered in the classroom. Different market segments of students certainly respond in different ways to different methodological orientations with differing degrees of structure, involvement, and the like. Consistent with our premise that choice should be a part of the marketing educational environment, and in the spirit of improving our classroom treatment of both theory and practice, a choice-based approach to marketing education will now be described. This methodology has been used with success in over 45 sections of the Principles of Marketing course.

A CHOICE-BASED APPROACH TO MARKETING PRINCIPLES

The approach to be described makes use of four different syllabi representing alternative approaches to marketing education. These four syllabi employ varying degrees of structure, test taking, experiential learning, research requirements, vocal contributions to class discussion, and experimental settings of real world problems. All aspects of these syllabi are chosen to stress how marketing theories are used in the "real world." Moreover, a student is able to choose the syllabus that best fits their particular needs, interest, and program of study. The syllabi are constructed so that students with different strengths, interests, and studying habits will benefit from the same class. Examples of the major elements of each of these syllabi are shown below:

TABLE 1
STRUCTURED VERSUS UNSTRUCTURED COURSE SYLLABI

- Syllabus I
- a. Consumer behavior experiments (discussed below)

- b. Group project (discussed below)
- c. Contributions to discussions
- d. One research paper

Syllabus II

- a. Consumer behavior experiments
- b. Two small group projects (a marketing problem is given to a group of students, in which they have one week to prepare a presentation. The problem encompasses lectures, reading materials, and discussions).
- c. Two major research papers
- d. Contributions to discussions

Syllabus III

- a. Consumer behavior experiments
- b. Three major research papers
- c. Contributions to class

Syllabus IV

- a. Consumer behavior experiments
- b. One major research paper
- c. Three problem-oriented exams
- d. Contributions to class

It is hoped that these four syllabi encompass most of the particular needs of students in the principles of marketing class. The above syllabi form a sort of continuum which ranges from most unstructured to most structured in orientation. It is hypothesized that each student will pick the course outline that best fits their learning mode, since each course outline is constructed with the thought of allowing the student as much freedom as possible to make marketing management decisions in a classroom atmosphere. Descriptions of two of the major elements of the above syllabi--the Group Project and the Consumer Behavior Experiment--will now be given.

The Group Project

A major component of this method of teaching is the group project, which stresses that the student has the ability to develop a marketing campaign for a new or innovative product/service. A brief outline of this model is shown below:

1. Students are segmented into groups of their own choosing after many communication exercises are given in class, so as to help the student choose the individuals with whom they would prefer to work.
2. The student group works together to determine leaders, and to assign duties according to the group project outline.
3. Students must first generate a workable product never before on the market.
4. As lectures and discussions are conducted on the various topics of Consumer Behavior, Salesmanship, Pricing, Distribution, Market Research, Managing the Marketing Company, the Promotional Mix, and so on, students make presentations on each theoretical aspect and make it work for their product/service. Students must, for example, delineate the following in detail: (1) appropriate market segmentation strategies, (2) which pricing mechanism is most appropriate for their market offering, (3) a market feasibility study, (4) a promotional plan, (5) the creation of a sales force and territories, (6) methods of distribution, an appropriate approach to channel leadership, and/or a functional or institutional approach, and so on, (7) effects of the external environment, (8) the overall benefit of the product to society, and (9) given that competition has entered the market, how their

strategies will change over time and through the product life cycle.

The final presentation for each group takes about 45 minutes and serves as the final examination for the class. Over the many sections that this teaching technique has been utilized, it has been extremely successful from the following standpoints: (1) students seem to enjoy the class and look forward to the competitiveness that is generated by the projects, (2) retention of the basic principles of marketing appears to be greater than when traditional methods are utilized (witnessed by the greater understanding of marketing from junior to graduating senior), (3) the best of both worlds is achieved, i.e. theory is taught, while practical application is the outcome, and (4) marketing practitioners have applauded this method and are convinced that it does have merit, in that it helps to make the student marketer ready for the business environment. Additionally, this method seems to give better results than do simulations because the group project allows the students to not only make decisions, but to be creative, and to thoroughly apply marketing theory to marketing practice. It also enables them to think about critical issues that they must deal with when they enter the business community. All in all, the project serves as a device that seems to tie together the entire principles of marketing course and which most effectively bridges the gap between marketing theory and practice.

Experimental Learning Methods (Consumer Behavior Experiments)

These techniques are often used in conjunction with the group project discussed above. The purpose of these experiential exercises is to illustrate a specific marketing theory, concept, or principle from the perspective of marketing practice. Two of these learning experiences will now be discussed. The first is the "Pepsi/Coke Challenge," and the second is the generic versus national brand perceptual taste test.

Pepsi/Coke Challenge. Students partake in an experiment in which they are first blindfolded and then given three cups of liquid to taste. The cups may hold any combination of Pepsi, Coke, or 7-UP, yet all students are given the same combinations. After tasting all three they are to indicate which drink was the Pepsi, the Coke, and the 7-UP. The statistical probability of choosing any one, two, or three drinks correctly is also determined. The purpose of the experiment is to instruct students about concepts of packaging, advertising, practical and psychological ramifications of taste tests, and to determine what marketing strategies bottlers of the three drinks are using. Invariably the students cannot distinguish differences in taste, and therefore, realize that something else is indeed selling the product. The students then write a paper discussing these factors and how they are used in a very practical setting, namely obtaining market share for essentially homogeneous products.

Generics vs. National Brands. This taste test is used to illustrate concepts of selective perception in the market place, along with principles of pricing, packaging, and image building through advertising. The procedure is as follows: the students are given three to four generic products and similar products merchandised under national brands. Students taste each (not blindfolded) and indicate which is the generic, which is the national brand, and indicate which one they prefer, and the dimensions on which their preferences are based. This experiment usually has the outcome of mixed preferences for both generics

and national brands as concerns product attributes (i.e. texture of generic fruit is usually preferred, while color of national brands is judged better). When price enters the decision process, however, generics usually become the most preferred, as critical attribute differences are often not readily seen. Thus, students experience firsthand the dynamics of both selective perceptual processes and of product positioning.

Both of the above experiential exercises encompass not only theories of consumer behavior, but also encompass concepts and methods of pricing, advertising, and packaging. The experiments allow the student to witness firsthand how marketing principles operate from a strategic point of view, while enabling the student to get a feel for how marketing managers manage product lines.

CONCLUSION

This paper has discussed a choice-based, application-oriented approach to marketing education. The basic considerations and their applications that have been discussed in this paper have been very successful in bringing decision-making and marketing practice into the classroom. Obviously, nothing substitutes for real life experience in the business environment. Nevertheless, it is the feeling of the authors that these and similar classroom activities can do much to close the theory versus practice gap that currently exists in much of marketing education.

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BUSINESS AND NONBUSINESS STUDENT
PERCEPTIONS OF QUESTIONABLE
ADVERTISING PRACTICES

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Abstract

This paper reports the findings of a study which identify student ethical evaluation of questionable yet common advertising practices. The results suggest generally that students' perceptions may not be as negative as reported in earlier studies. There are, however, differences in student perceptions between business and nonbusiness students and between non-business majors who have taken an Introduction to Business course and nonbusiness majors who have not taken such a course.

Introduction

James J. Kilpatrick (1975) reported the findings of a Gallup study which clearly suggested that students are generally dissatisfied with business and hostile to free enterprise. The findings, however, also suggest that student attitudes may be a result of misinformation and misunderstandings of business and business practice. One series of questions asked the student respondents to rate the honesty and ethical standards of people in various fields. On a list of eleven categories, advertising ranked last! The study also revealed that students politically move sharply to the left during their four years in college and that students believed that their political views had been influenced by the subjects they had studied and by their teachers.

Perhaps the Gallup findings can be linked to the general feeling of the population toward business and its practices such as advertising. Bardsdale and Darden (1972) explored general attitudes people hold toward business and found that 74 percent of their sample believed that manufacturers are more interested in making profits than in serving consumers and 58 percent believed that manufacturers shirk their responsibilities to the consumer. Bardsdale and Darden also found that 55 percent believed that product advertising was not believable and 71 percent believed that manufacturers are not reliable sources of information. In both of the studies cited above advertising appears to fare poorly.

In evaluating business and advertising practice, individuals observe the practice over time and subject the practice to a set of ethical beliefs and standards. According to Bartels (1968) ethical standards are based on religious, personal, or societal influences. Hawkins and Cocanougher (1972) reported a significant relationship exists between individual's educational pursuits and the standard of ethics used to evaluate the social acceptability of various marketing practices.

Frazer (1979) explored the advertising area by arguing that educators have done a fine job of teaching technical excellence but poorly in teaching social responsibility, ethical considerations and economic aspects of advertising. Lazer (1970) emphasized this belief earlier when he suggested that attempts to teach business students how to deal with social issues

have not been as successful as efforts directed at the development of marketing technicians and that hostility toward marketing in general exists centering on the undesirability of advertising, middlemen, and profits. As a result, Shipchandler (1975) said marketing and advertising educators may be faced with increasing antagonism.

This study looks at the ethical perceptions of students toward various advertising practices. Some of the advertising practices may be very innocent and harmless while others are more serious. The objectives of the study were to identify the level of student opinion concerning the practices and also to explore a variety of factors which may be related to ethical perceptions.

Methodology

A questionnaire containing 30 hypothetical situations which could occur in marketing practice was used. Nine of these hypothetical situations pertain to advertising practices and are the situations evaluated in this paper. The nine situations were replications from the Hawkins-Cocanougher study (1972). All situations involve advertising practices that represent primary areas of interaction between the business community and the consuming public.

The respondents were asked to evaluate each of the nine situations as to their perception of the degree of ethical conduct involved. A semantic differential type scale was used for each situation with the set of polar adjectives as illustrated below:

(1) (2) (3) (4) (5) (6) (7)

Ethical __ : __ : __ : __ : __ : __ : __ : Unethical

Respondents were categorized into groups according to their major and class standing. A profile of each group was developed and compared to that of another group. The group profiles were developed by assigning number values to each of the seven degrees of intensity and then finding the group's median score. The median scores were then used to test for significant differences between the different groups of students. The data produced by this ordinal scaling technique were considered to be nonparametric and were analyzed by the Mann-Whitney U technique, with a correction for ties to test the hypotheses. This non-parametric technique was selected as being most appropriate given the nature of the sample and the instrument. While the Mann-Whitney technique was the primary means of analysis, a Z test was used in Hypothesis One to compare observed scores from hypothetical values.

A purposive sample intended to have business student respondents from each class, freshmen to senior, was drawn from university course offerings. A total of 179 completed questionnaires comprised the business student segment of the sample. In like manner a sample of 315 nonbusiness student respondents was obtained.

Findings

Hypothesis 1: Students will view the situations as being unethical. Based on Kilpatrick's (1975) report highlighted above, this hypothesis appears reasonable. One might suspect that students have a low tolerance for advertising practices, particularly when the practices may be considered questionable. Before testing this hypothesis, definitions of ethical and unethical need to be developed. As stated in the methodology section, a seven-point scale ranging ethical (1) to unethical (7) was used to obtain data. It appears reasonable, although arbitrary, to suggest that mean scores at or below the scale mid-point of 4 should be

considered as more ethical than mean scores above the scale mid-point. Therefore, a Z test comparing the observed mean from the hypothetical level of 4 was conducted for each of the nine scales. The results are in **Table 1**. Surprisingly only two scales produced a mean score significantly higher than 4.0 or in the unethical category. Perhaps students are not as hostile to business as originally predicted.

Hypothesis 2: Business majors will view the situations as being more ethical than will nonbusiness majors. This hypothesis flows from the findings of Hawkins and Cocanougher (1972) who found business majors more tolerant of questionable business practice. In

Table 1

Ethical Perceptions of Students
Hypothesis One

<u>Statements</u>	<u>Mean</u>	<u>Z</u>	<u>P</u>	<u>Conclusion</u>
1. A local bank advertises that their 4% rate on savings accounts is the "highest legal limit." While 4% is the highest rate legally allowed, by compounding the interest monthly rather than annually, the bank could legally pay a higher effective rate.	4.429	5.64	.000	Unethical
2. A national insurance company has just begun its first "scare" campaign which emphasizes the uncertainty of survival and the terrible financial affects (which cloud the good memory of the deceased) caused by the death of the "underinsured" breadwinner. The president of the firm evaluated the approach by stating that it is "good for people to have adequate insurance and if the American Cancer Society can use scare advertising to promote the public good, so can the insurance industry."	4.198	2.83	.017	Unethical
3. A large grocery chain maintains several stores in low-income areas. These stores are run in a manner that is apparently similar to the other stores except that the quality of the meats and fresh vegetables is lower (the firm makes no effort to inform the consumer of this lower quality). However, the average price level, is also lower in these stores, indicating that at least some of the cost savings are passed on to the consumer.	4.002	.03	.968	Ethical
4. A local land development company advertises that its newest housing project is only a 20-minute drive from downtown. While it is true that with no traffic problems and driving at the maximum legal speed at all times one can reach downtown in 20 minutes, the average driving time under normal conditions is at least 25 minutes.	3.956	-.63	.525	Ethical
5. A well-known manufacturer of detergents has just allocated the largest TV advertising budget of its history. The advertising campaign is frankly aimed at a low cultural level and has been openly criticized as low quality and offensive. However, it appears to sell the detergent and the firm has decided to double the number of ads used in previous years.	3.907	-1.41	.160	Ethical
6. A manufacturer of a dandruff shampoo has launched an intensive advertising campaign designed to sell its product by arousing the social anxiety of potential customers.	3.604	-5.66	.000	Ethical
7. A national magazine, highly popular with young adults, derives a large proportion of its income from cigarette advertising.	3.345	-8.19	.000	Ethical
8. A manufacturer of small appliances strongly advertises its six-month guarantee. However, the guarantee is not automatic but requires the consumer to fill out and mail a prestamped card requesting purchase information. It takes 10 to 15 minutes to fill out the card.	3.339	-7.96	.000	Ethical
9. A national organization has recently hired a team of psychologists to use motivation research in order to determine the "real" reasons people purchase its product. The firm expects to use these findings to prepare more effective advertising and promotional appeals.	2.616	-20.29	.000	Ethical

comparing business majors with nonbusiness majors on the nine scales, a significantly lower score (more ethical) was found for business majors in 8 of 9 cases at .10 level or lower. In addition, when scores across the nine scales were added together to form a total score, a significantly lower value was also found for business majors. The results of these tests are in **Table 2**. The results do indicate support for the hypothesis that generally business majors view the situations as being more ethical than nonbusiness majors.

Hypothesis 3: Freshman business majors will view the situations as being more ethical than will freshman nonbusiness majors. This hypothesis was tested in order to determine if the difference between business majors and nonbusiness majors exist at the time of entry into a higher educational environment. While total sample differences exist between business and nonbusiness students as demonstrated in hypothesis 2, no difference was found between freshmen students. The total mean score for freshmen business majors is 34.0 and for freshmen nonbusiness majors the total mean is 34.3. A Mann-Whitney test produced a Z score with a probability of less than .859. Therefore this hypothesis is rejected and freshmen business and non-business students should be viewed as possessing similar ethical perceptions of the advertising situations presented.

Hypothesis 4: Senior business majors will view the situations as being more ethical than senior nonbusiness majors. This hypothesis not only tests for differences among senior business and senior nonbusiness students but it yields clues as to the movement of student attitudes over time when the means are compared to the entry level means of approximately 34.0 presented above. The total mean score for senior business majors is 32.75 (lower than entry level) and the score for senior nonbusiness majors is 35.78 (higher than entry level). The Mann-Whitney U test of difference between the group of senior business students and the group of senior nonbusiness students was significant at the .011 level ($Z = -2.5599$). Senior business students are, therefore, more tolerant of the advertising practices than their nonbusiness senior colleagues. Hypothesis 4 is accepted.

Hypothesis 5: Nonbusiness majors who have taken an Introduction to Business course will view the situation as being more ethical than will nonbusiness majors who have not taken an Introduction to Business course. This hypothesis was supported indicating that an Introduction to Business course has significant influence on nonbusiness majors resulting in relatively more acceptable attitudes toward advertising. The total mean score for nonbusiness majors with an Introduction to Business course is 33.3 and the total mean score for nonbusiness majors without an Introduction to

Table 2

Ethical Perceptions of Business and Nonbusiness Majors				
<u>Statement</u>	<u>Group</u>	<u>Means^a</u>	<u>Z</u>	<u>p^b</u>
Total Score	Majors	31.39	-4.51	.000
	Nonmajors	34.61		
1	Majors	4.18	-2.21	.027
	Nonmajors	4.57		
2	Majors	3.96	-2.46	.014
	Nonmajors	4.31		
3	Majors	3.83	-1.86	.064
	Nonmajors	4.10		
4	Majors	3.65	-3.20	.001
	Nonmajors	4.13		
5	Majors	3.65	-2.85	.004
	Nonmajors	4.05		
6	Majors	3.21	-4.36	.000
	Nonmajors	3.83		
7	Majors	3.10	-2.37	.018
	Nonmajors	3.48		
8	Majors	3.41	.62	.537
	Nonmajors	3.30		
9	Majors	2.28	-3.96	.000
	Nonmajors	2.82		

^aSince the data were considered to be nonparametric, the group means are presented only as descriptive statistics. A higher mean rating indicates that the advertising practices employed in the situations described are viewed as less ethical.

^bTaken from the Mann-Whitney U test, Sidney Siegel, Nonparametric Statistics for the Behavioral Sciences (New York: McGraw-Hill Book Company, 1956).

Business Course is 35.1. The means are significantly different at the .082 level. A Mann-Whitney U test produced a Z of -1.74. It could, therefore, be suggested that nonbusiness majors who have taken Introduction to Business have a more tolerant view of advertising practices because they understand the complexities of business.

Discussion and Conclusions

A major surprise in this study is that the students interviewed generally did not feel that the situations were unethical as indicated by scale means larger than the scale midpoint as presented under hypothesis 1. In the two cases that produced a higher than scale midpoint mean, the questionable practices concerned a bank advertising the "highest legal limit" when the bank could actually pay a higher effective rate by changing the compounding policy and the use of fear messages by insurance companies which emphasize the uncertainty of survival. The other scales produced lower than scale-mid-point scores and include such practices as: dissemination of cigarette advertising, aiming advertising at a low cultural level, advertising guarantees requiring consumer registration, not informing consumers that your products may be of lower quality than competitors, advertising travel time from a new building project to downtown under ideal conditions rather than under normal conditions, and the use of motivational research findings in order to develop more effective advertising. It is interesting to note that some of these practices such as using motivational research and aiming advertisements at a low cultural level are high on the list of often criticized advertising practices. While using the scale midpoint as the ethical/unethical cut-off point is arbitrary, it could be concluded, however, that those means below the midpoint suggest a more ethical appraisal by the sample than those means above the scale midpoint.

As found in the Hawkins and Cocanougher (1972) study, business majors perceive the situations as more ethical than nonbusiness majors. It is interesting to note that students appear to enter college at about the same level in terms of ethical perceptions as described above in hypothesis 3 but move in different directions with senior business majors perceiving the situations as more ethical than senior nonbusiness majors. Apparently exposure to professors and curriculum may have an effect on students' ethical frames of reference in regard to advertising over a four-year period of college life.

This study also suggests that nonbusiness students who have some curriculum exposure to an Introduction to Business course also appear to possess more tolerance of the advertising practices presented in the questionnaire. Perhaps a better understanding of marketing, advertising, and business practice helps develop an ethical frame of reference which is more consistent with business and advertising management. One could make a case that nonbusiness students should enroll in marketing or business classes. It may very well be that a truly well rounded, liberal education is not complete without exposure to business classes. This view is not presently popular but with the recent national growth of business class enrollments and the growing awareness of the role of business in society this view may become standard.

This paper provides a brief description of how students view some common yet often criticized advertising practices. While the results show some feeling of student rejection of some advertising practices, they by no means reflect the negative student attitude

reported by Kilpatrick (1975). The difference between business and nonbusiness students is an important difference. However, the finding which indicates equal entry level attitude between business and nonbusiness students suggests that educational efforts directed at presenting a managerial orientation could help develop greater tolerance among students toward advertising and business practice. With growing interest in business education which is a national trend, one might suspect a more tolerant attitude to develop over time. On the other hand it is possible that some educators and others might well view these findings with alarm. The American Assembly of Collegiate Schools of Business (AACSB) has recently identified the teaching of social, ethical, and political concern as a major need in colleges of business presumably resulting from an observation of questionable business practices. If one concludes that the intent of the AACSB is to elevate the ethical plane of future business practitioners, the finding of greater student tolerance for questionable business practices has serious implication for the long run image of business, e.g. the image of business won't improve until the practice improves and the practice won't improve until the ethical plane of future business people improves.

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STABILITY OF GRADE PREDICTION EQUATIONS FOR PRINCIPLES OF MARKETING

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Abstract

Discriminant functions were derived and used as grade prediction equations for three groups of students who had completed Principles of Marketing. The equations were compared as to the variables, the signs of the variable coefficients, and the percentage of correct classifications in a holdout sample. It was concluded that while discriminant analysis appears to be a useful technique for grade prediction in Principles of Marketing, the optimum discriminant function varies considerably among groups of students.

Introduction

A paper was presented at the 1981 Conference of The Academy of Marketing Science (Brown, 1981) that discussed the possibility and value of predicting students' grades in Principles of Marketing as a strategy for advising students on course selection and improving course performance as measured by grades earned.

Data consisting of the grade received in Principles of Marketing and eight other academic and demographic variables for 173 students at a liberal arts college was analyzed by means of discriminant analysis. A discriminant function containing three independent variables was derived and used to predict the grades earned in a holdout sample of students. The overall proportion of correct classifications, or "hit rate", was 70%, with rates for individual grade categories ranging from 0% in the "D-F" category to 89% in the "B" category. This level of correct predictions, when compared to the level that would have been attained by assigning all students to the largest group, was judged adequate to consider the attempt to predict grades in Principles of Marketing a success. However, it was recognized that the variables found to be useful predictors and their relative importance as indicated by their discriminant function coefficients might be peculiar to the specific situation. It was suggested that similar studies be performed by other instructors, at other schools, etc., so as to yield evidence as to the applicability of this type of analysis in other situations and the stability of prediction equations across situations. This paper reports the results of an investigation of these questions.

Review of the Literature

No other studies of grade prediction for Principles of Marketing have been found in the literature, but there are studies providing evidence on the stability of equations derived for predicting grades in other courses and for predicting overall academic performance as indicated by grade point average (GPA).

Instability of predictors between male and female students has been found great enough by some researchers to warrant the derivation of separate prediction equations, while others have obtained satisfactory results by including sex as an independent variable in one equation applicable to both sexes. Hills, Klock, and Bush (1965) and Sawyer and Maxey (1979) studied the stability over time of equations to predict performance of college freshman from high school grades and ACT

scores. In both of these studies, separate equations were derived for males and females, though the magnitude of the resulting improvement was not reported in either case. Watley and Martin (1962) in a study of freshman business students also used separate equations. Clauretie and Johnson (1975) in a study of principles of economics students, McDonald and McPherson (1975) in predicting overall grade point average, and Mills (1978) in a study of working undergraduate business students all apparently found enough stability between the sexes to use one equation with sex as an independent variable.

Two studies involving the prediction of grade point averages of college students using high school grades and college entrance test scores as independent variables suggest that the relative importance of specific variables as predictors may be situation specific. Price and Kim (1976) found ACT scores superior to high school grades as predictors of grades of business students, while Chissom and Lanier (1975) found high school grades "far better" predictors of freshman grades than SAT scores.

Three studies of the predictive validity of equations over time have yielded conflicting results. Hills, Klock, and Bush (1965) found their equations for predicting grades of new students stable in predicting relative grades, though not necessarily the actual grades received, over a two year period. In a similar study, Sawyer and Maxey (1979) found a high level of stability in predicting actual grades received over a four year period. On the other hand, Bowers and Loeb (1972) found the weights of ACT composite scores in a regression equation used to predict freshman grades unstable over a five year period.

Two authors, after extensive literature reviews, have concluded that prediction equations must be derived separately for each college in which they will be used. One of these studies used psychological variables as predictors of college performance (Gallessich, 1970) while the other utilized the more common high school grades and ACT scores (Munday, 1967).

In summary, the evidence as to the stability of academic prediction equations is mixed, but there is some evidence that the usefulness of specific predictor variables and prediction equations is unstable across different situations such as schools, groups of students, or academic subjects and, furthermore, may change for the same situation over time.

Methodology

The stability of grade prediction equations for Principles of Marketing was analyzed in this study by using discriminant analysis to derive equations for three groups of students who had taken the course at a small liberal arts college. The results were compared with respect to the variables found to be useful predictors, the relative weights of the variables, the signs of the coefficients of the variables, and the percentage of correct classifications in a holdout sample both overall and in each grade category.

Table I describes the three groups of students included in the study. All the students took the course within a two and one-half year time period.

TABLE I
ANALYSIS GROUPS

Group	Instructor	Number of Students
1	A	101
2	A	173*
3	B	102

*Includes the students of Group 1 plus an additional 72 from the following semester.

Grades of students were obtained from class rosters and values for eight predictor variables were obtained from the records office. **Table II** describes these variables and how they were coded.

TABLE II
PREDICTOR VARIABLES

Variable	Symbol	Coding
Cumulative grade point average	GPA	4 point scale
High school percentile rank	HSRANK	No = 0, Yes = 1
Business-economics major	MAJ	No = 0, Yes = 1
Prescribed junior class rank when taking course	CRANK	No = 0, Yes = 1
Greek affiliation	GREEK	No = 0, Yes = 1
Sex	SEX	Female = 0, Male = 1
Verbal Scholastic Aptitude score	SAT-V	
Mathematical Scholastic Aptitude score	SAT-M	

The data were analyzed by the Discriminant Analysis routine of the Statistical Package for the Social Sciences (SPSS) using the stepwise option (Nie et al, 1975). The categories of the dependent variable were the grades earned in Principles of Marketing. The "D" and "F" categories were combined, as a liberal drop policy had resulted in few course failures. The entry criterion was changes in Rao's V significant up to the default level of 50%. A random sample of 25% of the cases, stratified by the proportion of the total group in each grade category, was drawn from each analysis group and used as a validation sample.

Results

The results of the analysis are presented in **Tables III** and **IV**. **Table III** shows for each of the three groups of students the variables that were found to be useful predictors, their signs and standardized weights in the discriminant function, and the percentage each weight is of the sum of the weights in that function.

The only variable that entered all three functions was GPA. In each case it contributed more to the discriminant score than the other variables combined, with the relative contributions of the variable ranging from 51% to 70%. As would be expected, in all cases a higher GPA was associated with a higher grade in marketing.

Two variables entered two of the discriminant functions. SEX was the second variable to enter the equation for group 1 and the last of three to enter the equation for group 2. In both cases, males performed slightly better than females. SEX contributed less than half of GPA's contribution to the discriminant score in group 1 and less than one-third of GPA's contribution in group 2.

HSRANK entered as the second variable in two of the equations. For group 2, it made just over one-third the contribution of GPA to the discriminant score and for group 3 just under one-fourth. Though the change in Rao's V was significant at the high 20% level when this variable entered equation 3, its inclusion increased the holdout sample hit rate by about 10 percentage points. The most interesting characteristic of this variable is that its sign is different in the two equations. The implication of this is that, since a lower value on this variable is associated with a higher high school graduating class rank, group 3 students who graduated higher in their high school classes tended to perform less well in Principles of Marketing. This result is especially unexpected since both GPA and HSRANK are indicators of previous academic performance.

Three other variables, SAT-V, MAJ, and GREEK entered only one discriminant function.

Table IV contains data on the hit rates obtained by applying the discriminant functions derived to the holdout samples for each group. One method of evaluating the hit rate is to compare it to the proportion of correct classifications that would be obtained if no information on predictor variables was available and all cases were assigned to the largest category in the analysis sample (Morrison, 1969). The third line of **Table IV** shows this improvement resulting from the use of the discriminant function.

TABLE III
USEFUL PREDICTOR VARIABLES

Group 1		Group 2 ¹		Group 3 ¹	
Variable and Weight	Weight as % of Total	Variable and Weight	Weight as % of Total	Variable and Weight	Weight as % of Total
0.941 GPA*	51%	0.871 GPA*	60%	1.062 GPA*	70%
0.400 SEX**	22	-0.330 HSRANK**	23	0.246 HSRANK****	16
-0.334 SAT-V**	18	0.243 SEX***	17	0.217 GREEK***	14
-0.173 MAJ***	<u>9</u> <u>100%</u>		<u>100%</u>		<u>100%</u>

Change in Rao's V significant at: *the 1% level, **the 5% level, ***the 10% level, ****the 20% level.

¹For Group 1, grade category centroids were larger for higher grade categories; while for groups 2 and 3, grade category centroids were smaller for higher grade categories. To facilitate interpretation, signs of variables for groups 2 and 3 have been reversed.

TABLE IV
HOLDOUT SAMPLE HIT RATES

Group 1	Group 2	Group 3	
<u>Overall</u>			
65%	70%	67%	
<u>By assigning all to largest group</u>			
46%	45%	45%	
<u>Improvement</u>			
19%	25%	22%	
<u>By Grade Category</u>			
A	67%	50%	50%
B	56	90	75
C	83	65	88
D-F	0	0	0

Conclusions

The results of this study suggest that discriminant analysis is a useful technique for predicting performance in Principles of Marketing. Though both the overall hit rate and the improvement above the rate obtained by assigning all cases to the largest group are at a maximum in the original study, these figures for the other two groups are not substantially lower. Unfortunately, the major weakness of the method in its application to the original group remains in its application to the two additional groups included here. In all three groups, grades of students in the validation sample who could benefit most from prior knowledge of the grade they were likely to receive in the course - those who received D's and F's - were not predicted correctly. This outcome may be a result

of a small number of people in all three analysis samples that received D's and F's or from failure to include predictor variables that do in fact differentiate these students from those receiving other grades.

The variation among the groups of the variables found to be useful predictors and their signs and relative weights indicate that even though discriminant analysis does appear to be a generally useful technique for grade prediction in Principles of Marketing, specific prediction equations do not exhibit a high degree of stability from one group of marketing students to another. This is especially evident in comparing the results of groups 1 and 2.

Group 1 consists of all the students one instructor had had in Principles of Marketing when the research for the original paper was started. Group 2 includes the group 1 students plus 72 additional students of the same instructor from the next semester. Fifty eight percent of the students in group 2 are the students of group 1. There were no substantial changes in course content, materials, or teaching methods between the semesters during which group 1 students took the course and the semester the additional students included in group 2 were enrolled. Under these circumstances, stability of prediction equations derived for the two groups, using an identical methodology, could be reasonably expected. The equations derived, however, showed considerable variation in the variables that were useful predictors and the relative contributions made to the discriminant score by the two variables common to both equations. This indicates that in using grade prediction equations even in what appears to be a stable situation, regular checks should be made over time to insure that the optimum combination of predictor variables is being utilized.

The stability of predictor variables was highest between groups 2 and 3. Three variables entered the discriminant function of each group, with two variables in common to both functions. They occupied the same position in both functions as the variables contributing the most and second most to the values of the discriminant scores. However, the sign difference of the second variable to enter both equations, HSRANK, represents a significant element of instability be-

tween the two equations. Even greater instability exists between groups 3 and 1, with only GPA common to both equations.

In conclusion, the results of this study suggest that multiple discriminant analysis can be used with some degree of success to predict grades students will earn in Principles of Marketing, but that the optimum discriminant functions show substantial variation across situations. Not only was substantial variation in functions found between the students of two different instructors, but the optimum function for predicting the grades of students of one instructor was found to exhibit considerable variation over a short period of time. Consequently, any school or instructor attempting to use the approach described in this paper as an aid in student advisement should implement a program for frequent re-analysis so as to ensure that the optimum combination of available predictor variables is being utilized.

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STUDENTS ATTRIBUTION OF SUCCESS IN THE MARKETING PRINCIPLES COURSE

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Abstract

Perceived reasons for success in four evaluation methods were investigated in the case of the basic marketing course. The study involved 137 students who had completed their first marketing course. Relative importance of reasons for over-all success in the course, for success in four evaluation methods and for success in securing a job were collected. Results indicated that the series of reasons for success exhibited a stable underlying pattern of controllable and uncontrollable factors.

The student work and intelligence were perceived to be relatively more important reasons of success than the instructor or luck factors. Of the four evaluation methods, success in objective tests was perceived by students to be more the results of chance. Overall success in the course, in each evaluation method and in securing a job, was attributed significantly more to controllable than to uncontrollable factors. This result was stable irrespective of age, sex, student status (full or part-time) and student grades obtained in the course.

Introduction

Marketing education has developed as much as marketing research over the last decades. The number and quality of students have changed, and so have the instructors, the objectives, and the pedagogical methods. More and more questions arise about what marketing education is or should be, however too little is known about the students feelings although they are the primary party concerned.

The body of publications about marketing education is increasing and most of the literature deals in a normative fashion with education methods (Crawford 1974; Fox 1971; Frazer 1979; Gaedeke 1973; Harper 1973; Marshak and Degroot 1978; Odiorne 1979; Scott 1972; Shoaf and Czepiel 1973). Attention has also been given to the structure of curricula (Bloom and Silver 1976; Coe 1978; Gilmour 1979; Hollander 1978; Loudenback 1973; Marks and Nelson 1978; Swerdlow 1978). Much fewer publications deal with training evaluation in relation to the worklife (Brethoover and Rummler 1979; Kirkpatrick 1979; Zelby 1974).

This later point is of particular importance since education should be a preparation to real life. From this viewpoint, the student's performance evaluation methods are critical, since evaluations are feedback and reward; people adapt to such feedbacks and rewards, interpret them and behave according to these interpretations.

Marketing education should thus use, evaluations which trigger the same kind of interpretation and attribution than evaluations in the job market. If students have to learn how to be successful in their career, they should be educated to live with the same standards in the education system.

Thus if the present literature on marketing is interesting it does not specifically consider students attri-

bution of success in the three areas of: 1) overall result in the course, 2) different evaluation methods in the course, 3) getting a job and be successful on the job.

The present research focuses on attribution processes by which the students perceive and explain success in these three important areas of concern in a college environment.

Attribution Theory

Attribution theory deals essentially with the processes by which individuals perceive and explain causal relationships and give meaning to events in their environment. As noted by Kelly (1971) these processes assume "a need to have a veridical understanding of these relations (a reality orientation to the world) and a need to predict and apply them (a control orientation)".

When explaining their own behavior or that of others, individuals tend to interpret the situation in terms of intrinsic or extrinsic factors. This process has a direct effect on inferences made by the individual about behaviors. When a behavior is perceived as being caused mostly by external factors such as forced compliance there is less confidence in the attitude being congruent with the behavior. However if the behavior is perceived much more under the influence of internal factors under control of the actor or the observer, attitude appears more congruent with the behavior. Previous research by Settle (1973) has shown that some individuals tend to perceive events more under the influence of external causes while others tend to interpret what happens to them as due to internal causes, such as their own effort or capability. Although this latter research has shown significant differences between blacks and whites, no significant ones were found between sexes and between social classes.

Research by Mizerski (1974) and Smith and Hunt (1978) measured the extent to which individuals assigned characteristics to objects on an internal or external basis. Knowledge of the internal vs external nature of attribution is connected with the principle of correspondance developed by Jones and Davis (1965). Accordingly, individuals making inferences on an internal basis (ie: assigning behavior of others to factors under their control or making inferences about the characteristics of an object on an intrinsic basis) gain more information as to the real motivation of an actor or as to the characteristics of an object such as presented in advertising, than those individuals making inferences on an external basis. The underlying assumption of this principle is that predetermined behavior according to role expectation does not reveal much to the observer (Jones and Nisbett, 1971).

In addition to giving the individual a veridical view of his world, attribution processes can be seen as a means of maintaining control of one's environment. Hence, such knowledge is sought by the individual in order to gain better management of the environment. This tendency for better control is connected with the internal aspect of attribution. Since internal infe-

rences reveal more information on events, they therefore allow the individual to improve his control over the environment.

The objective of the present research is to assess whether students interpret their success in various university activities on the basis of intrinsic and extrinsic factors as suggested in attribution theory.

Research Questions

This study deals with widespread evaluation methods in the marketing principles course. Specifically, instructors would assign group work on cases and group projects and would balance this group evaluation by individual objective tests and individual traditional exams. Percentage-wise, group evaluations would not account for more than fifty percent of the over-all evaluation in the course.

The purpose of the research was:

- 1) First, examine similarities and differences of the reasons for success in the four evaluation methods.
- 2) Second, assess whether various reasons of success could be structured according to a stable underlying pattern of intrinsic and extrinsic factors as suggested in attribution theory.
- 3) Third, test for the significance of the importance of controllable (intrinsic) factors vs uncontrollable (extrinsic) factors in the over-all success in the course, in the four evaluation methods, in getting a job, and being successful on the job.
- 4) Fourth, consider if the success in the above various activities, in paired comparisons, exhibit significance differences on controllable and uncontrollable factors.

The usefulness of this research lies in the answers to the following questions: how do students perceive the various reasons of success in various evaluation methods? How are these reasons structured? To what extent are the various methods showing differences in these reasons? Are these reasons of success stable across various evaluation methods as well as for the over-all result in the course and in being able to get a job? Answers to these questions allow the improvement in combining evaluation methods in the basic marketing course, and in examining how they compare with getting a job and being successful on the job.

Method

Data for the research were collected from second and third year students enrolled in undergraduate business programs at two major universities. All students had taken a compulsory first year course in basic marketing. The total data set represented 139 respondents, 137 of which provided complete sets of responses.

The questionnaire consisted of four parts:

- 1) Information on the student's result in the basic marketing course and its degree of certainty. A series of fourteen reasons for getting this over-all result in the course evaluated on 7 point-scales ranging from "not important" to "very important". These reasons were generated on an priori basis through group discussions.
- 2) Importance of the same series of reasons for success in four evaluation methods in the course:

group work on cases, group projects, objective tests and traditional exams.

- 3) Importance of the same series of reasons for being able to get a job and be successful on the job.
- 4) Classification data on: university registration, age, sex, student status, number of years of university study, father's occupation and nature of job wanted.

The questionnaire was pre-tested in order to check for understanding and ease of answering.

Results

Answers to the first part of the questionnaire indicated that 89.1% of students were very certain of their result in the basic marketing course.

Classification data in the fourth part of the questionnaire revealed that student's average age was 22.9, 67.2% were males and 89.7% were full time students.

Table 1 indicates the mean importance of 14 reasons of success in four evaluation methods. Examination of the table shows that working effort and previous knowledge are important factors irrespective of the evaluation method.

However, the instructor and family concerns appear to be less important reasons of success. Comparisons within specific evaluation methods reveal that for objective tests luck is perceived to be as important as motivation or previous experience.

TABLE 1

MEAN IMPORTANCE OF 14 REASONS OF SUCCESS FOR 4 EVALUATION METHODS (N = 137)

Reason of success	Group work on cases	Group Projects	Objective Tests	Traditional Exams
Student's motivation	5.657*	6.036	4.681	5.620
Student's working effort	5.632	6.073	5.193	6.204
Student's previous knowledge	5.301	5.547	5.830	6.219
Student's previous experience	4.847	4.883	4.444	4.569
Student's intelligence	5.066	5.234	5.306	5.679
Student's creativity	5.285	5.445	3.296	4.577
Student's abilities on analysis	5.679	5.560	4.891	5.723
Student's abilities on synthesis	5.640	5.737	4.785	5.854
Student's written expression	4.526	-	-	5.949
Student's oral expression	4.260	4.336	-	-
Luck or bad luck	2.482	2.453	4.711	2.920
The instructor	4.304	3.370	2.874	4.412
Student's state of health	2.394	2.581	2.615	2.765
Student's family concerns	2.221	2.299	2.185	2.292

* mean score on a seven-point scale where 7 = very important.

Principal components analysis of the 14 reasons of success for each of the four methods of evaluation, produced two factors with eigenvalues greater than 1.0, accounting for about 50% of the variance in the importance ratings. Varimax rotation of these two components suggested the following interpretation. First, an intrinsic factor including reasons such as: the student's intelligence, motivation or abilities on analysis. Second, an extrinsic associated with reasons of success such as: the instructor, luck or the student's state of health. Despite the fact that the explained variance

is relatively low, the controllable (intrinsic) and uncontrollable (extrinsic) factors present a consistent pattern for all four evaluation methods and were retained for further analysis.

Table 2 lists the factor loadings of each reason of success for the four methods of evaluation. The two resulting components served as a basis to compute the controllable and the uncontrollable indices. Each was represented by a single unweighted average comprising all the reasons of success, which in all cases, obtained their highest loading on the relevant factor.

The third research question concerned the test on differences of importance between the controllable (intrinsic) and the uncontrollable (extrinsic) factors, for the four evaluation methods as well as for the over-all performance on the marketing principles course, and for obtaining and being successful in a marketing career.

TABLE 2

FACTOR LOADINGS OF TWO VARIMAX-ROTATED FACTORS FOR THE FOUR METHODS OF EVALUATION

Index	Reasons of success	Group work on cases	Group projects	Objective tests	Traditional exams
Controllable factor	Student's motivation	.518	.526	.309	.418
	Student's working effort	.518	.545	.508	.660
	Student's previous knowledge	.566	.630	.530	.750
	Student's previous experience	.356	.520	.610	.265
	Student's intelligence	.546	.570	.647	.511
	Student's creativity	.609	.642	.520	.346
	Student's abilities on analysis	.817	.792	.649	.746
	Student's abilities on synthesis	.708	.706	.702	.744
	Student's written expression	.429	.473	-	.675
Student's oral expression	.503	-	-	-	
Uncontrollable factor	Luck or bad luck	.489	.650	.212	.454
	The instructor	.386	.290	.238	.324
	Student's state of health	.861	.823	.699	.770
	Student's family concerns	.376	.339	.895	.894

Table 3 presents the results of T-tests computed on matched samples. For all seven situations the student's perception is that the controllable factor is significantly more important than the uncontrollable factor ($p < .001$). These findings suggest that in general, marketing students consider the possibility of success as highly controllable and depending more on individual than environmental factors. This is consistent with previous research in which business students were found to possess inner-directed values in a greater extent than non-business students (Petrof et al., 1981).

The analysis of the controllable factor presented on **Table 4**, revealed significant differences between the perception of the importance of this factor in regard to the four evaluation methods and to the success in obtaining a job. All T-tests on matched samples for every combination of these situations were statistically significant. The relative importance of the controllable factor was higher for individual activities, for instance: obtaining a job or being successful in a traditional exam, rather than for group activities. The success on objective tests was the exception of this rule.

TABLE 3

T-TEST OF MATCHED SAMPLES FOR DIFFERENCES OF IMPORTANCE BETWEEN THE CONTROLLABLE AND UNCONTROLLABLE INDICES OF SUCCESS (N = 137)

Situations	Mean		T Value	Significance
	Controllable factor	Uncontrollable factor		
Overall Performance in the Marketing Principles course	4.45	3.24	10.37	0.000*
Group work on cases	5.26	2.98	20.47	0.000*
Group projects	5.44	2.78	22.98	0.000*
Objective tests	4.87	3.43	12.63	0.000*
Traditional Exams	5.60	3.12	22.47	0.000*
Obtaining a job	5.80	3.98	18.35	0.000*
To be successful in his job	5.88	3.37	21.61	0.000*

Significant at level $p < .001$

TABLE 4

T-VALUES OF MATCHED SAMPLES FOR DIFFERENCES OF IMPORTANCE OF THE CONTROLLABLE FACTOR BETWEEN THE FOUR METHODS OF EVALUATION AND THE SUCCESS IN OBTAINING A JOB (N = 137)

	Group projects mean = 5.44	Objective tests mean = 4.87	Traditional exams mean = 5.60	Obtaining a job mean = 5.80
Group work on cases mean = 5.26	3.47*	3.58*	5.73*	7.87*
Group projects mean = 5.44	-	5.33*	2.84**	6.10*
Objective tests mean = 4.87		-	7.25*	9.83*
Traditional exams mean = 5.60			-	3.47*

* Significant at level $p < 0.001$
 ** Significant at level $p < 0.01$

As for the uncontrollable factor the analysis presented on **Table 5** revealed significant differences between the four evaluation methods and the success for obtaining a job. In the same manner as for the controllable factor, the relative importance of the uncontrollable factor was higher for individual activities and lower for group activities while the T-tests on every combination of these five activities were statistically significant.

Examination of statistical results across variables such as sex, age and student status revealed no significant differences in the importance of uncontrollable and controllable factors of success in the four evaluation methods.

Discussion and Conclusion

Before concluding, some limitations of this research should be mentioned. Results might be different if more than one underlying dimension is retained in relation to the controllable factor. The controllable

TABLE 5

T-VALUES OF MATCHED SAMPLES FOR DIFFERENCES OF IMPORTANCE OF THE UNCONTROLLABLE FACTOR BETWEEN THE FOUR METHODS OF EVALUATION AND THE SUCCESS IN OBTAINING A JOB (N = 137)

	Group projects mean = 2.78	Objective tests mean = 3.43	Traditional exams mean = 3.12	Obtaining a job mean = 3.98
Group work on cases mean = 2.88	1.99***	5.13*	3.19**	11.08*
Group projects mean = 2.78	-	6.33*	4.51*	12.85*
Objective tests mean = 3.43		-	3.14**	4.80*
Traditional exams mean = 3.12			-	10.09*

* Significant at level p. < 0.001
 ** Significant at level p. < 0.01
 *** Significant at level p. < 0.05

index construction would then be questionable. Also, responding students were associated with two different kinds of institutions: a traditional older university and a relatively new progressive network of colleges. This may have influenced the results. Further, respondents were taking additional optional courses in marketing. Thus, they were different from students taking only the marketing principles course and no other marketing course.

With these limitations in mind, the following conclusions can be drawn:

Two underlying factors associated with intrinsic and extrinsic reasons are apparent in confirmation with attribution theory.

In a pedagogical perspective, success in objective tests is attributed more to random elements than for other evaluation methods, therefore they should be used with caution.

Irrespective of the evaluation method, student consistently perceive their individual role and not the instructor's role as the main reason of success.

Taking both controllable and uncontrollable factors into account, tables 4 and 5 reveal that students perceive group projects and traditional exams as showing the largest discrepancies between controllable and uncontrollable factors. Individual activities, however (obtaining a job and objective test) tend to show the least possibility of control. A tentative explanation of this finding could be the safety effect associated with group activities.

Further Research

The results and limitations of the present study indicate some new directions for research on the subject further investigation on the controllable (intrinsic) component should search for a more detailed description and comprehension of this important factor.

The data for this research were collected from students enrolled in optional courses in marketing after completing with success the marketing principles course. It can be easily hypothesized that this kind of students have already developed a positive attitude about marketing. Further studies should consider the viewpoint of students not taking any optional courses in marketing after the marketing principles course.

The comparison of the results of this study with the attributions made by respondents already in the job market could give another interesting insight on the subject.

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THE EFFECTS OF JOB EXPERIENCE ON PERCEPTIONS OF MARKETING EDUCATION

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Abstract

In this paper, an analysis of the effects of job experience upon the satisfaction of individuals with their marketing education is presented. Perceptions related to satisfaction with a particular degree, preparation for a first job and preparation for supervisory positions were included in the analysis.

Introduction

Increased competitiveness among marketing programs has made it clear to many administrators in marketing education that marketing techniques should be employed to better position and promote their service (Traynor, 1981). In an attempt to maintain present enrollments, colleges and universities are becoming more aware of the influence of perceptions and preferences of students toward their respective institutions of higher education (Gorman, 1974).

Marketing efforts directed at improving the number of admissions have been discussed widely (e.g., Hoopes, 1972; Gorman, 1974). The prospective student market has been viewed as most important to long-run institutional survival (Houston, 1981). However, recent researchers have defined more than one market or public to whom the institution of higher education must be accountable (Berry and Allen, 1977; Houston, 1981). Houston (1981) has identified several markets or "publics" which are of concern to the institution of higher education: prospective students, existing students, former students, parents, community, employers, industry/government, prospective faculty, and other educators. The purpose of this paper is to investigate the attitudes of "former students" toward the value of their formal educational experience and to determine the criteria which they deem to be important in obtaining employment. In addition, attitudes of former students are analyzed to ascertain the effect of occupational category, employment/supervisory experience and sex differences.

Methodology

775 graduates of a northwestern Pennsylvania state college were contacted through a direct mail survey. This represented all of the graduates in marketing from the college since the beginning of its business program. A cover letter signed by a student officer was included in the mailing. The tone of the letter was one of seeking information about the school's graduates and requesting information that would be helpful to current students in the job search effort. A self-addressed, stamped envelope that was part of the mailing enabled a response rate of 34.3% to be achieved.

It is important to note some peculiarities of the sample that are related to the relatively young age of the business program at the college. Few respondents who graduated prior to 1972 sent back their questionnaire. Consequently, analysis related to chronological age is limited to a span of nine years. This means that the study focuses upon the early years of a marketing career, the period in which job-change activity is at its highest. (See Table 1).

Table 1
 Respondent Characteristics

	Male	Female
Average number of jobs held	2.25	1.85
Average years of experience	4.39	2.62
Average time in current job	1.95	1.42

Alumni were asked their attitudes toward the value of their formal education received at the college. Several types of questions were asked:

1. Did the college prepare you well for your first job?
2. Did the college prepare you well for your current position?
3. Do you feel your degree from the college is competitive with degrees from other schools?
4. Do you feel that your grades were important in acquiring your first job?
5. Was it easy for you to obtain your first job?
6. Were extracurricular activities important in getting a job?

The questionnaire also requested information regarding the students occupational category, whether they held a supervisory position, whether they had to relocate in order to obtain their current position, whether they obtained their job before or after graduation, how many times they relocated since graduation, and how many years it had been since graduation.

Cross-tabulations were employed between the attitudinal questions and the employment data to determine if there were any relationships which would suggest that the particular variable might play a role in determining the former students' satisfaction with their formal education.

Findings of the Study

In Table 2, the responses to the six attitudinal questions are displayed. Over 63% felt that the college prepared them well for their first job. Similarly, 62% felt that they were prepared for their current position. Over 74% felt that their degree was competitive with degrees from other schools. Grades were not considered to be of major importance in acquiring the first job with only 30% agreeing or strongly agreeing. 52% felt it was easy to obtain their first job. 49% disagreed or strongly disagreed with the statement that it was easy to obtain their first job. Extracurricular activities were considered to be important in obtaining one's first job by 51%.

Table 2
Attitudinal Responses
(Likert Response PCT)

	SA	A	NO	D	SD
College prepared me well for my first job.	11.8	51.9	17.6	14.1	4.6
College prepared me well for my current position.	10.3	52.5	17.5	16.0	3.8
College's degree is competitive with degrees from other schools.	21.2	53.4	14.4	9.8	1.1
Grades were important in acquiring my first job.	5.3	25.0	14.4	40.2	15.2
It was easy to obtain my first job.	18.6	33.5	8.0	31.2	8.7
Extracurricular activities were important in obtaining my first job.	21.0	30.5	15.6	23.7	9.2

After cross-tabulation of the six attitudinal questions with eleven independent variables, a more in-depth analysis was obtained. Several variables emerged as significant in influencing former students' attitudes toward the value of their formal education.

Students holding supervisory positions felt that the college prepared them well for their first job more strongly than did non-supervisory graduates. The supervisory group strongly agreed in 46% of the respondents. The chi-square of 9.85 was significant at the $\alpha = 0.05$ level. Of students who received their job before graduation, 24% strongly agreed that the college prepared them for their first job. Of students who received their job after graduation, only 9% strongly agreed that the college prepared them for their first job. The resulting chi-square of 17.3 was significant at the $\alpha = 0.001$ level.

Another finding of the study was that the students who relocated to obtain employment and students who obtained their jobs before graduation felt that extracurricular activities were important in obtaining their first job. Students who had to relocate in order to obtain employment agreed or strongly agreed in 60% of the cases whereas the non-relocated students agreed or strongly agreed only 43% of the time. The related chi-square of 12.3 was significant at the $\alpha = 0.01$ level. Students who obtained their first job before graduation agreed or strongly agreed in 65% of the cases observed while only 49% of the students who obtained their job after graduation agreed that extracurricular activities were important in obtaining their first job.

Finally, students who graduated most recently from the college felt that their formal education prepared them well for their first job. Students having graduated several years previously are not as positive about their preparation. Table 3 lists the responses to the question, "Did college prepare you well for your first job?" The responses are cross-tabulated by years since graduation. The difference in attitude toward the preparation for the first job was significant with a chi-square of 47.5 ($\alpha = 0.01$).

Table 3
Preparation for First Job
(Likert Response PCT)

Year since graduation	SA	A	NO	D	SD
1	22.8	49.1	17.5	5.3	5.3
2	13.0	52.2	23.9	8.3	4.3
3	11.1	55.6	14.8	18.5	0.0
4	15.8	57.9	0.0	21.1	5.3
5	0.0	63.9	13.9	19.4	2.8
6	0.0	50.0	30.8	19.2	0.0
7	19.0	57.1	4.8	14.3	4.8
8	0.0	40.9	22.7	22.7	13.6
9	25.0	25.0	25.0	12.5	12.5

Conclusion

Approximately two-thirds of the college's marketing graduates appear to be reasonably satisfied that their formal educational experience prepared them for their first job as well as their current position. Further support for this is indicated when the former students were asked how the college's degree compared with other schools, over 74% stated that they felt their degree was competitive. These two concepts might suggest that the respondents feel that, although their degree is as strong as other schools', all schools could prepare students better. There was however 19% of the former students who felt that their formal education did not prepare them for their first job or their current job.

Grades were not considered to be an important factor in acquiring one's first job, 49% disagreed. 51% responded that extracurricular activities were important in obtaining one's first job where 33% disagreed.

Students holding supervisory jobs felt much more positive about the preparation received. Likewise, students receiving their jobs before graduation felt more positive about their formal educational experience. Perhaps, what we have found here is a measure of satisfaction with preparation as a function of job success. Similarly, students who relocated and obtained their jobs before graduation felt that extracurricular activities were important in obtaining their first job.

The findings that recent graduates feel more satisfied with their educational experience than graduates from earlier years might indicate either growth and development in a given marketing program or it might indicate that as a person matures in the world of work, they become more aware of the deficiencies in their formal education. However, our findings on supervisory versus non-supervisory satisfaction with their education would suggest the former conclusion.

This paper represents the findings at one college, in one part of the country. Obviously, the findings are not generalizable on the basis of this writing alone.

Studies that analyze the satisfaction of graduates with other marketing programs would be required in order that the relationships concerning the length of experience and occupational category on satisfaction with the educational experience could be described with confidence. The outcome of this type of research will be to prepare the area of marketing education to make the changes that will keep programs in the field viable and dynamic.

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EVALUATION IN MARKETING EDUCATION:
THE CASE OF THE FINAL EXAM

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Abstract

In this age of increased interest in accountability, marketing educators would benefit from a judicious assessment of their instruction techniques. This paper focuses on the evaluation stage in the teaching-learning processes. More specifically, it evaluates the instructional role of final examinations in the teaching-learning processes, explores some of the difficulties inherent in final exams, and proposes some means to restore their instructional value to marketing educators.

The authors propose a next-to-final final. This examination would be conducted at least one or two class periods before the conclusion of the course in order to provide an opportunity to discuss the content and the results of the exams with the students.

Introduction

The decade of the 1970s might be considered by some educators as the time when the theory of accountability in education took root and began to grow (Aukerman, 1978). While a universally accepted theory of accountability in education does not yet exist, the pressure is mounting against educational institutions at all levels to improve the quality of their instruction.

Amid the increased interest in accountability, marketing educators ought to embark on a judicious assessment of their instruction. After all, marketers preach the virtues of measurement and control in conducting marketing activities, and have accepted our task of teaching Marketing as a bonafide marketing activity (Enis, 1976, 1977, 1978; Jackson and Razzouk, 1981).

One of the most uniform artifacts in our institutions of higher learning is the final examination. Traditionally, most institutions have required final exams and schedule these events at the end of every academic period. Much in the nature and scope of education has changed over the past few decades, but the concept of final exams has remained relatively unchanged ever since Horace Mann replaced oral exams with written finals back in 1845 A.D. (Lieu, 1976). While final examinations are traditional, it has long been recognized that they are not without their problems (McClusky, 1934). The purpose of the paper is to evaluate the role of final exams in the teaching-learning processes, explore some of the difficulties inherent in final exams, and propose some means to enhance their instructional value to marketing educators.

The Nature and Purpose of Testing

Tests are given as part of the measurement and evaluation step in the teaching-learning processes. A distinction should be made between measurement and evaluation. According to Green (1975, p.4) "Measurement is concerned with the application of instruments

to collect data for some specific purpose." In teaching, the purpose of measurement is to generate the input for the evaluation process. Evaluation then, is the process of subjective appraisal with specific purposes or aims in mind.

Some of these purposes are:

To measure individual and group learning for determining what progress has been made.

To check end-of-course status.

To measure the effectiveness of instruction and the educational program.

To seek opportunities for improving methods, procedures and content.

To discover student weaknesses.

To instruct, by giving the students some understanding of their strengths and weaknesses while at the same time emphasizing and reinforcing important points.

A review of the existing literature on testing and evaluation reveals lengthy bibliographies of material devoted to the treatment of examinations. Most of this literature treats examinations as instruments for measuring scholastic achievement. It is replete with studies on topics such as the construction of various types of examinations, the factors involved in guessing, and the reliability and validity of instruments. On the other hand, very little attention is given in the literature to investigating the instructional values of final examinations (Buethe, 1969; Curtis and Darling, 1932; Curtis and Woods, 1929; Donnelly and Logothets, 1957; Matz, 1961; McClusky, 1934; and Pannwitt, 1958). Furthermore, with the exception of McClusky (1934) the scope of this limited literature is confined to elementary and secondary education. As limited as this literature may be, it generally is critical of the finality of finals, and bemoans the under-utilization of their instructional value. The following sections identify some of the inherent weaknesses of finals and propose changes to overcome these weaknesses.

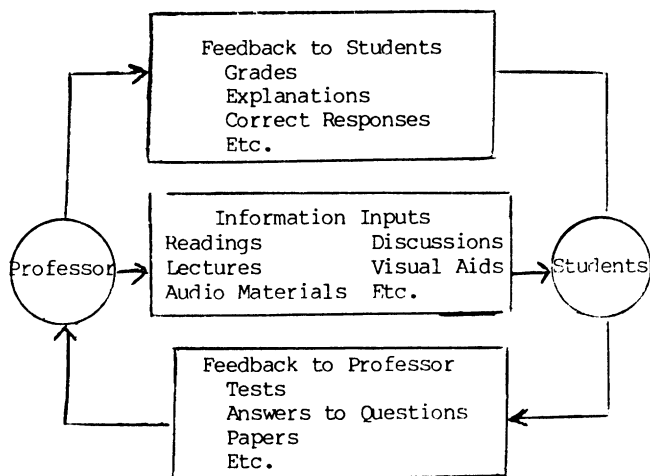
Pitfalls of Final Examinations

Academic learning may be viewed as a system, (Figure 1). Students receive various inputs to help them learn, such as lectures, readings, discussions, etc. These inputs are colored by their perceptions, feelings, beliefs, etc. At some time in the educational process, students are asked to output this knowledge which they have stored. One method to measure learning is to test students to see how close their outputs are to the inputs or stimuli to which they have been exposed or how well they can integrate these stimuli. Thus, given that tests are reliable and valid, students indicate their knowledge to their professors. The professor then evaluates the

outcomes and passes evaluations back to the students in terms of grades and comments. In the event of an incorrect response by the student, this feedback may serve as a navigator to get the student back on course. Feedback depicting a correct response would indicate to the student some competency in a particular area, and would reinforce the learned material. The problem with final examinations is that this second feedback loop to the student is missing. Students receive a final grade but may be unclear about specific strong or weak areas. Thus, the navigator aspect of feedback is lost. Further, the instructors may be less inclined to evaluate rigorously and to prepare an adequate review in the absence of the need to formally present their evaluations.

Figure 1

The Academic Learning System



Current educational theory (Hull, 1952; Skinner, 1966; Ray, 1973) indicates that learning occurs most rapidly when responses are reinforced. There is also evidence which indicates that feedback or knowledge of results can improve learning. More specifically, in human learning, feedback is considered as a source of new information as opposed to merely a reinforcer (Ray, 1973). Most educators spend a significant period of time reviewing the midterm examinations and discussing the questions. Nevertheless, despite the normally proportionately high weight given to the final, the same feedback does not accompany finals.

Several centuries ago when oral final examinations prevailed, students left the final examination with direct and immediate feedback (Green, 1975, p.17). However, the basic weakness inherent in any written or objective examination which is final is that students do not receive immediate or specific feedback concerning their performance. To be sure, the instructor may learn how effective he or she has been in teaching, but students often remain ignorant of the kind and degree of their own knowledge. Indeed, they may even be unaware of how they were evaluated. The value of this feedback is to help students evaluate their progress or lack of it while there is still time in the academic term for them to remedy these differences.

Another major weakness of finals is that in the absence of reinforcement and feedback, it is difficult for students to know exactly which aspects

of their stored information are correct and which are not. A student may receive a high grade on an examination and still be deficient in one or more specific areas. It is unfortunate for students to be ignorant of their strengths and weaknesses. However, if the final is the last scheduled meeting during the academic learning period, the feedback loop so necessary to reinforcement is not completed.

The third weakness of final examinations is their inadequacy in training students to evaluate their own work. Driska (1978) suggests that one major purpose of evaluation is to help students do an adequate job of self-evaluation. In order to develop responsibility in the learning process, there must be a balanced exchange between professor and student. This joint venture should not end during the evaluation process. If students are to become responsible for themselves and for their own self improvement...measurement outcomes and evaluation results should be shared (Davis, 1978, p. 152).

Finally, in the absence of feedback, students may become apprehensive about grades and grading systems. Testing, grading and reporting may appear to students as something done to them, not something in which they actively participate. Evaluation should bring satisfaction to students since knowledge of progress or lack of progress, if seen in the light of the total evaluation process, is helpful--not threatening (Driska, 1978, p.8). Thus, evaluation procedures utilized properly can and should raise the level of aspiration of students.

An Alternative to the Final Final

Overcoming these weaknesses requires that a different perspective be taken. Nearly fifty years ago McClusky wrote that, "--by correcting false impressions, by filling in sporadic gaps of ignorance and by confirmation of content already known, the discussion of the specific outcomes of an examination provides a propitious occasion for the achievement of significant objectives of instruction" (McClusky, 1934, p.586). One way in which these benefits could be attained is through a next-to-final final. This procedure which has been used over a period of time by the authors, involves the scheduling of the last examination prior to the final class period. At the beginning of the term, students are told that their final examination will be given on the last regular day of classes instead of the assigned date during finals week. This information is given to provide sufficient lead time for students to prepare effectively for this deviation from the normal procedure. It is also explained that the final class period--the one normally used for an examination--would be used to discuss the final examination, and that attendance at this final meeting is mandatory. During that period, all graded papers are returned to students with appropriate comments. The professor then spends the first part of the session explaining test questions and answers, and relating them to the instructional framework developed during the term. Students are then given a chance to raise questions concerning the test items, the responses, or the method of grading.

Advantages and Disadvantages of a Next-to-Final Final

Students' reactions to the method indicate that they overwhelmingly prefer this format to traditional final examinations. Further investigation of students' comments provide several reoccurring perceived advantages to such a format. First, it

Conclusion

enables two-way communication instead of the normal one-way communication inherent in a traditional final examination. This procedure provides students with alternative frameworks and ideas concerning the subject matter covered, and helps them recognize the viewpoints and approaches utilized by the professor in evaluating them. It also allows them to ask questions and voice objections.

In addition, this method allows students to receive immediate reinforcement or corrective criticism concerning the approach which they had chosen to answer the exam questions. This immediate feedback has the effect of reducing student uncertainty. It allows them to quickly see how they have performed rather than making them wait for grades to be processed and distributed through appropriate institutional channels.

More important than just receiving grades quickly is the fact that students know why they received a certain grade. That is, they understand the basis for their evaluation. This practice eliminates the problem of having students ask why they received a certain grade in a course or on a particular examination. Too often students are not sure exactly why they received a grade or which part or parts of an examination they "aced" or "bombed". This method of pointing out specific aspects of student performance allows them to be more certain of their areas of proficiency and deficiency with respect to the course material.

From the professors' point of view, this method forces better preparation. They must formulate and articulate to the students the purpose of the exam questions, the various alternative correct answers, and the criteria for evaluation of specific responses. The professors are also forced to justify their evaluation of particular questions. If properly used by the instructor and responded to by the student, this feedback session can serve to point out the merits of correct responses and the drawbacks and limitations involved in less correct responses. This can be a very useful educational device.

On the negative side, however, students may become very defensive about their answers. If this session becomes a bargaining exercise or if students use this time solely to espouse their own unjustified viewpoints, much of the value of the exercise is lost, therefore, the instructor must be very careful to point out and emphasize the positive aspects of this session and not let it stagnate into a platform for student grade enhancement. In the situations discussed previously, students were told that grades would not be changed as a result of the interaction but that it was to be used as an educational device. The responses were still almost uniformly positive. Thus, students seem to be interested in getting feedback even though they were aware that it would not change their grade.

Another potential difficulty with the proposed procedure is that examinations must be completely graded between the testing and the feedback sessions, in some cases this may prove difficult or impossible. Also, finals are usually scheduled for larger blocks of time which may not be available for instructors during the last week of regular instruction. One possible solution to this problem is to schedule the last examination for several class periods.

As subjective as the measurement has been, results from our experience indicate that the advantages of this alternative, the next-to-final final, outweigh the disadvantages; and that overall, it stands superior to the predominant practice of traditional finals.

In conclusion, marketing educators should consider more seriously the instructional value of final examinations. These examinations should be conducted at least one or two class periods before the conclusion of the course in order to provide an opportunity to discuss the content and the results of the examination with the students. Final examinations are not to be final but rather next-to-final. In this context, the sequence of instructional activities becomes "Teach Test-Teach" instead of the seemingly prevalent practice of "Teach Teach Test".

As marketing educators interested in the progress of our profession and our discipline, we should continue to investigate our instructional activities and seek answers to some unresolved questions on the instructional value of final examinations.

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MARKETING ETHICS: THEORY AND PEDAGOGY

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Abstract

Theory and pedagogy for education in marketing ethics is examined. Theoretical underpinnings are developed, a case incident is presented, and a pedagogy is developed and operationalized for analyzing the case with ethical theory. Implications of the pedagogy are discussed.

Introduction

Are we as marketing educators effective in integrating the concept of ethics in the curriculum? Do we offer separate courses in marketing ethics? Should we offer separate courses or build ethics' modules into present courses? How do we teach ethics? What are the effective and less than effective pedagogies?

For many marketing educators, the answers to the above questions are "No, and "I don't know." While we in our courses mention ethics, we do not expend extended amounts of time on ethics nor do we use ethical theory to underpin the discussions of ethics.

Situation

A recent monograph (Murphy and Lacznik, 1980) reports the current status of ethics in marketing in a survey of 225 U.S. and Canadian marketing department chairpersons. At the undergraduate level, 3 of 225 schools offered a course in marketing ethics. The course was not required, but offered at least once a year by one school and less than once a year by two schools. At the master's level, 14 of 165 schools offered a social issues in marketing course and only one school had it as a required course.

Other studies have reported similar results. McMahon (1975) found a course socio-ethical issues was not offered by sixty percent of the undergraduate and forty percent of graduate programs in 557 schools of business and public administration. Saul (1981) concluded that, "in all too many cases one can find absolutely no attention focused on ethical development: superficial, contrived, or otherwise," in business schools.

The Need

The need for ethics in marketing education is both required and felt. Accreditation (AACSB, 1979) requires that every business program include course work dealing with ethics. Beyond this, the literature articulates the felt need for ethics in marketing education. A recent study, (Saul, 1981) suggests that ethical considerations be incorporated in existing courses or in separate courses. Another study (Trawick and Darden, 1980) found that formal education was indicated as the main factor to improve ethics in marketing in a survey of academics and practitioners. An earlier article (Gelb and Brien, 1971) noted that the marketing manager most often must answer questions regarding ethical issues for the firm, and, by implication, requires education in marketing ethics. Baumhart (1968) and Schutte (1963) concluded that education in ethics yields a person sensitive and articulate about ethical issues. The recent study of marketing depart-

ment chairs (Murphy and Lacznik, 1980) found that business ethics and social responsibility will be areas of intense public debate in the 1980's.

The need for ethics education in marketing is apparent. It is required given the AACSB requirement for course work dealing with ethics, and the Murphy and Lacznik prediction of public debate on business ethics in the 1980's. It is felt an appropriate need given the findings that education in marketing ethics makes one more ethically aware and sensitive. Here, though, the caveat must be made that ethics instruction cannot guarantee a person will behave morally. We can, however, hope that education in marketing ethics will cause marketers to be more ethically aware in their professional and private lives.

The importance of marketers becoming more ethically aware, and perhaps the most persuasive argument for ethical instruction in marketing, is the fact that young marketing managers have difficulty resisting the pressure of upper management in aethical situations. Carroll (1975) reports that younger managers tend to demonstrate loyalty to superiors by going along in questions of morality; he found that "almost 60% of the respondents (n=236) agreed that young managers in business would have done just what junior members of Nixon's re-election committee had done." These results were supported by another study (Bowman, 1976). When coupled with Ferrell and Weaver's (1978) finding that marketing managers "believe that they make decisions in an organizational environment where peers and top management have lower ethical standards than their own," the need for ethics education in marketing is demonstrated and apparent.

Current Pedagogy

Having demonstrated the situation and established the need for ethical education in marketing, questions of pedagogy arise. How do we teach ethics in marketing? What are the more effective pedagogies?

The often used pedagogical approach to consider ethical issues in a marketing class is through case study, incident analysis, or discussion of a report in the business press. These approaches may be complemented with guest speakers, films and outside readings. The pedagogy is to review the issues posed in the case situation, discuss the ethical aspects of the case, and recommend what the actor in the case should have done in the situation. From the exercise, the student receives limited understanding of the ethical issue and what should be done in the presence of such an issue given the same environment as posed in the case.

The weakness of current pedagogy is that it is too situation specific and oriented towards opinions of what should have been done in the situation. What is needed is an asituational pedagogy that provides a theoretical base upon which to more fully conceptualize the ethical issue, to build compelling ethical arguments, as well as providing the theoretical underpinning to analyze and understand, from an ethical perspective, both the action taken as well as the action that should have been taken.

treated" is following the golden rule.

Theoretical Underpinning

FIGURE 1
ETHICAL THEORIES

Ethical theory provides a framework within which to analyze an ethical incident and arrive at a judgment concerning the propriety of the incident and the action that should have been taken. Two theories and a concept provide the underpinnings for ethics. The theories (Beauchamp and Bowie, 1979) are "teleological" and "deontological" theories. The concept is "ethical relativism," (Brandt, 1979).

Teleological Theory

Teleological theory is concerned with the "consequence" which results from an action or marketing practice. This theory is operationalized by examining consequences to the organization versus consequences to the individual.

- . If the action taken has consequences beneficial to the organization, the action is ethical by teleological theory of utilitarianism (Mill, 1957). That is, the individual is motivated to take an action to maximize the greatest good for the greatest number of people. In practice, a marketing manager applying utilitarianism in his/her decision making process would determine the effects of each alternative and would select the alternative that optimizes the satisfactions of the organization. For example, making a decision that yields the greatest profit is supported under utilitarianism.
- . If the action taken as consequences beneficial to the individual, the action is ethical according to the teleological theory of egoism (Beauchamp and Bowie, 1979). That is, the individual takes an action to maximize self interest (psychological egoism), or ought to take the action (ethical egoism). For example, a sales representative deliberately underestimating sales potential when recommending the level of sales quota to management is psychological egoism. The sales representative wants a lower quota because it is in his/her self interest.

Deontological Theory

Deontological theory is concerned with the rule used to arrive at an action or decision rather than the consequence of the action. The theory is operationalized by single rule versus multiple rule classifications.

- . Single rule theory includes the "golden rule" and the "categorical imperative," (Kant, 1965). In brief, these require that we not make an exception of ourselves. That is, we should treat others the way we want to be treated (golden rule), and we should never engage in practices or follow rules which we could not recommend to everyone (categorical imperative). The marketing manager who never takes an action that could not be explained in a televised press conference is adhering to the categorical imperative, while a sales manager who treats sales representatives "the way I want to be

. Teleological Theory

- . Utilitarianism
- . Egoism
 - Psychological Egoism
 - Ethical Egoism

. Deontological Theory

- . Single Rule Theories
 - Golden Rule
 - Kant's Categorical Imperative
- . Multiple Rule Theories
 - Ross's Prima Facie Duties
 - Rawl's Maximin Principle
 - Garrett's Principle Of Proportionality

. Ethical Relativism

- . Multiple rule theories expand the calculus of single rule theories. The "prima facie duties" (Ross, 1930) requires that the manager choose the action that is the more obligatory duty. For example, a manager has the duty to maximize profit, but also to refrain from injuring people. The latter is the more obligatory duty. The theory of "maximin principle" (Rawls, 1971) ask for equal justice for all parties in a relationship, that there be an inherent respect for individuals, and that business be socially responsible. The "principle of proportionality" (Garrett, 1966) asks that the manager considers his/her motives for an action, the means used to achieve the action, and the results of the action. Hence, Garrett combines elements of teleological and deontological theories and synthesizes motive, means and ends.

Ethical Relativism

The concept that what is ethical depends upon what is felt to be ethical by a particular group at a particular time is ethical relativism (Brandt, 1979). When a product manager declares, "what is right is what I say is right," he or she is practicing ethical relativism. Similarly, the notion that marketing ethics are different from societal ethics is a form of ethical relativism, as is the situation of a company using different ethical standards in different countries. For example, paying a bride in a foreign country to secure a purchase order, and considering it not to be a bride but an advance payment in advance of an order, is ethical relativism. It is not considered a bride because the managerial group decides it is not a bride.

Application

The theoretical underpinnings of ethics discussed above must be presented in any marketing class charged with considering ethical issues in marketing. However, it is not sufficient that theory is only presented. The

theory must also be placed in application. As an example, consider the following case incident.

Case Incident

During a sales call on your largest customer (\$800,000 volume per year), you were informed the previous sales representative, since retired, regularly returned 1/2 percent of his 5% commission to the customer. You do not want to lose the customer. You did not report the situation to management, and decided that you will continue the practice.

Analysis Without Theory

In analyzing the incident without the underpinning of ethical theory, the students will generally discuss the case. They will consider volume (\$800,000), commission (\$40,000), and the kickback (\$200). Some will conclude that the kickback is acceptable because it is not significant given the amounts of volume (\$200/\$800,000) and commission (\$200/\$40,000). Other students will argue that a kickback is always wrong. But, without a strong basis upon which to advance the argument, the students taking the numerical approach will have the more compelling argument. As a student once stated, "\$200 is the investment to have a guaranteed \$800,000 sale. Without this, the salesperson may have to spend \$500 to \$1000 more in travel and entertaining to generate the sale." To respond, "Yes, but it is not ethical," is not a compelling argument given the logic-in-use of the numeric analysis. What is missing is the ethical theory required upon which to build a compelling ethical argument.

Analysis With Theory

Utilizing theory, the numeric analysis is the same as above. But, theory provides a framework around which to build the analysis and upon which to make compelling arguments on all aspects of the case. The recommended pedagogy is to first determine the facts of the case, next to isolate the ethical issues, then complete any numeric analysis, specify the relevant ethical theory, recommend the appropriate behavior, and finally assess what was learned from the case.

- . Facts. The facts given include: new sales representative; largest customer; informed of kickback; amounts of volume, commission and kickback; rep does not want to lose customer; practice not reported; decision to continue practice. Facts not given include: demographics on customer and sales representative; experience; number and volume of other customers; and etc.
- . Ethical Issues. There are two ethical issues: giving kickback to customer at the customer's request; failure to report the practice to management. These issues are apparent from the case and are the major ethical issues. These should be analyzed before any ancillary ethical issues are considered. For example, should the previous sales rep have informed the new rep of the kickback practice?
- . Numerical Analysis. Consider volume (\$800,000), commission (\$40,000), and kickback (\$200) and their inter-relationships as was presented above.
- . Ethical Theory. The sales representative and the customer are egoistic in taking action that yields self benefit. As

the sale is assumed due to the kickback, utilitarianism argues there are beneficial consequences to the organization. The question is, can the practice be explained and recommended as required by the categorical imperative? And, is the more obligatory duty to give the kickback or to report the practice to management? The principle of proportionality requires that the motives, means and ends of the kickback practice be examined. In sum, the kickback practice can be argued for with teleological theory but argued against with deontological theory.

- . Appropriate Behavior. The obligatory duty is to report the practice to management. Together with management a strategy for dealing with the customer should be developed. The firm must be prepared to lose the customer. Numeric analysis is used to analyze the impact of the loss on the firm and the sales representative. While the kickback practice can be justified by egoism and utilitarianism, the prima facie duty of the sales representative is to report the practice to management. The maximin principle would require that all parties in the relationship be considered and treated equally, including other customers. The ethical arguments against the kickback are compelling and ably offset the numeric arguments for the kickback.
- . What Is Learned. The student learns to assess the facts of the situation, to identify the ethical issues, and to use ethical theory in the analysis. But, beyond this, and more important, the student gains an understanding of moral responsibility, the human consequences of actions, and develops an ethical viewpoint that will be useful in professional decisions.

Discussion

The pedagogy presented above enables the marketing educator to fully discuss ethical issues presented in cases, incidents or reports from the press. The theory provides a framework for the qualitative discussion of ethics. Lacking the framework, too often students seize upon the quantitative aspects of the case and thereby inhibit full discussion of the ethical issues.

The need to fully discuss ethical issues was demonstrated earlier in the paper. As educators, we are remiss if we do not include discussion of ethics in our syllabi. That discussion is enhanced by utilization of the theory and pedagogy presented in this paper.

Students enjoy and are receptive to the discussion of ethical theory. It enables the student to experience concreteness in the previously abstract concept of ethics. Theory makes "sense of a disturbing situation;" of what "would otherwise be inscrutable and unmeaning . . .," (Kaplan, 1964). Beyond this, the author has found that discussion of ethical theory develops a readiness in the student for the acceptance of marketing theory.

Conclusion

The various reports of the importance of ethical issues in marketing during the coming decade are compounded given the new era of deregulation. As external controls on business are relaxed, the need for an understanding by every manager of ethical theory and practice is increased. As educators, now more than ever before, we have the responsibility to ensure that students leave our programs with a sense of ethics. As we do this, as we enhance our programs with ethics, marketing education, and through education, marketing itself is enhanced. And, as marketing is enhanced, we too, as marketing educators are enhanced.

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EXPOSING STUDENTS TO MULTINATIONAL MARKETING DIMENSIONS:
A DILEMMA FOR MARKETING EDUCATORS

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Abstract

This paper, based on an exploratory research and experiences of Stephen F. Austin State University, examines the educators' dilemma of exposing students to multinational marketing dimensions. Several approaches for providing international marketing education are analyzed critically. Key factors which affect the internationalization process are identified to provide certain guidelines.

Introduction

The growth of multinational business over the past few years has been phenomenal. Although international business has been in existence for a very long period of time, only in recent years have such terms as "multinational corporation," "foreign subsidiary," "foreign investments," "multinational cartels," "Petro-dollar," "world car," and "international marketing" become widely used. It is not uncommon to find products bearing labels such as "made-in-Japan," "made-in-People's Republic of China," "parts made-in-the U. S. and assembled in Mexico," "parts made-in-Taiwan and assembled in the U. S.," and "parts made-in-Japan, assembled in the U. S. and Canada." Recently, it has become difficult to define what the "American" car is, because the American car manufacturers use so many automotive parts manufactured abroad.

The international business situation is such that social, political and economic events in one country can directly or indirectly affect the environment in another country. Economic and social policy makers across the world now recognize how the world economies are inter-related and interdependent one way or another.

Consequently, it has become imperative that business students acquire an understanding of certain multinational marketing dimensions. The importance of exposing students to international business has been established in several research studies (Goodman, 1973; Hines, 1971; Tarleton, 1977). A survey of chief executive officers by the American Council on Education (1977) showed that business graduates with foreign language capabilities were relatively more successful, in comparison with those with just business or liberal arts degrees. In a study by Ryans, Stuhldrer and Woudenberg (1979), 94 percent of all business faculty respondents expressed their support for international study. According to the U. S. Department of Commerce (1981), business schools must emphasize the worldwide perspective by creating and expanding international business curricula because the need for educated and skilled executives continues to grow.

Recognizing the changing world business environment, the American Assembly of Collegiate Schools of Business (AACSB) set a standard for accreditation that requires schools to include a worldwide perspective in their curricula. This standard is specified in the following AACSB philosophical statement (1979-80, p. 36): "The purpose of the curriculum shall be to provide for a broad education, preparing the student for imaginative and responsible citizenship and leadership roles in business and society - domestic and worldwide." This

"worldwide perspective" standard has posed a serious dilemma for educators: How can students be exposed to international business aspects with limited resources and growing enrollment in business schools?

Based on our school experiences and exploratory research, this paper examines various aspects of this dilemma.

School Approaches

In order to meet the standard, suggest the AACSB guidelines (AACSB, 1979), business schools can require a separate course in international business as part of the "Common body of knowledge" (CBK) or integrate multinational marketing dimensions into the basic core courses.

A study by the Academy of International Business (Grosse & Perritt, 1980) found a variety of approaches which were being used to expose students to international business. The AIB study concludes from its examination of numerous courses, programs, and curricula that international business education has become a "matured product" after being a "new product" over the past two decades. The product may have matured. However, most schools seem to include international dimensions in their basic courses, and do not seem to require a separate course (Hise, 1975; Ryans, et.al., 1979). As the Ryans, Stuldreher and Woudenberg study shows, there is no consensus on the best methods to provide adequate exposure.

Perlick (1977) examines four options to the educator's dilemma: (a) the single course approach; (b) the selected list approach that lists all international courses being offered by all schools at the university and allows students to choose from the list; (c) internationalizing the business policy course, and (d) internationalizing the entire basic core. According to Perlick, incorporating the international perspective into each core course is perhaps the most reasonable solution in terms of limited resources.

Palubinskas (1981) advocates complementing the business degree program with an international business certificate. After receiving the degree and while obtaining appropriate successful experience with a company, individuals take several courses in international business and earn a certificate upon completion. Palubinskas believes that education must not be restricted to training international specialists since all people are either active or passive participants in international developments; consequently, knowledge about the international dimension qualifies people better for dealing even with domestic problems.

The National Commission for UNESCO (1971, 1973) has studied the issues in depth, and makes several recommendations to provide international business education. Among its key suggestions are: (a) Experiment with new curricula teaching approaches unique to the international business aspects. (b) Stimulate research relevant to the international business problems. (c) Give faculty members the opportunity to spend a year in a multinational firm, providing consultation and gaining new perspectives. (d) Schools and businesses must provide more consulta-

tive opportunities for faculty members, especially in those areas where international and intercultural factors are especially significant in the determination of corporate policy and strategy or in operations. (e) Develop plans for internationalization of school of business curricula in terms of goals, resources, and recommended budgets.

Undoubtedly, there are several suggestions and approaches which many schools have incorporated in their efforts to educate students about international business. Table 1 summarizes several major options or approaches, underlining advantages, limitations and certain other features of each option.

SFA Approaches

At Stephen F. Austin State University, several different approaches have been tried to provide an adequate coverage of multinational marketing dimensions over the past few years. Overall, the School of Business has been fairly successful in integrating international dimensions into both graduate and undergraduate curricula. At present, students are provided with ample opportunities to learn about international business. There are several courses with an international flavor in the curricula. An "International" emphasis program is provided for graduate students. The amount of faculty research in the international area has increased considerably. The growing faculty and student interest in the subject is evident in a variety of educational activities.

All of this has been accomplished, despite serious resource constraints. The progress has been made without expanding the degree requirements, without diluting the other course offerings, and without spending any additional resources.

The primary approach of SFA is simple. Instead of requiring a separate course in international business or depending on the existing core for the coverage, the school utilizes its existing electives in the curricula. Such courses as "Current Topics in Marketing," "Internship," "Independent" or "Special Problems" studies - in addition to the functional core courses - are used to provide the international perspective. These elective courses require no extra resources, no legislative approval; and they do provide flexibility. Student choices toward these electives, however, have been carefully monitored through careful guidance and planning.

Faculty Guidance

The faculty guidance or advice has been an integral part of the internationalization process. SFA faculty works closely with students each term to plan their courses and careers. Students are strongly advised to take electives which provide international understandings.

The Executive-in-Residence Programs

Also, to increase students interest in the international area, the School of Business has instituted an "executive-in-residence" program in which a business executive from a multinational firm is used as a lecturer on certain international topics. The faculty in charge of the course and the executive-in-residence plan topics of discussion together. Under this program, the executive is provided to the University at the expense of the firm, and the school incurs no cost. The executive is simply provided release time to lecture and interact with students and faculty.

SFA's current executive-in-residence is a result of the cooperation of CONOCO, Inc., which has supported the program since its inception. SFA is the only university to receive a long term commitment from CONOCO in the form of executive-in-residence.

Mr. Franz Ehrhardt, a citizen of Germany and currently president of KAYO, a subsidiary of CONOCO, has been our "executive-in-residence" from the beginning. He was formerly the Division Manager of North American Marketing for CONOCO. He first visited the campus in the Fall of 1978 as a guest speaker in a graduate international marketing class. Later, he was asked to address the SFASU chapter of the American Marketing Association. His popularity with the students was instantaneous and overwhelming. Because of his popularity and area of expertise, he was asked by the department chairperson to become an executive-in-residence. Thus, Mr. Ehrhardt became the first executive-in-residence for the "Current Developments in Marketing" course. His first lecture series was in the multinational business area. About 50 students, who registered in this elective course for credit hours, were exposed to the global business dimensions and had an opportunity to interact with a professional manager with considerable experience in multinational business operations.

The executive-in-residence program since then has become very popular with students and acceptable to both faculty and administrators. At present, the participating firms in the program include CONOCO, Xerox, Cabot Corporation, and Texas Instruments.

Programs such as the executive-in-residence traditionally have existed at schools - for example, Yale, Dartmouth, Columbia - which are located in/near major cities or have significant financial support (Sloan, 1980). SFA has been successful despite the absence of these factors.

Travel/Study Programs

Travel/study programs at SFA are additional efforts to expose students to multinational dimensions. There are several different programs in which students can participate and study the interaction of language, history, and business in different countries. Most programs are interdisciplinary in nature, and are organized in collaboration with other departments and schools in the university.

Internships

Internships in multinational corporations provide students with practical, on-site experience in companies engaged in international business activities. Some students are placed in businesses as interns as a result of the internship program developed through ASPA (American Society of Personnel Administrators) in cooperation with the Houston Personnel Association. Other internships result from companies individually soliciting student interns or from students seeking intern slots with various companies.

Interns may petition faculty and department chairmen of the various departments in the School of Business for up to three hours credit in Accounting, Administrative Services, Computer Science, Economics, Management and Marketing. While interns may not deal directly and/or specifically with international operations, they often learn business operations from the perspective of an international (or multi-national) company. Therefore, many students seek internship slots.

Eventually we hope to expand the program to the extent that interns will actually work abroad. This may result from a cooperative effort with U. S. based multi-national

TABLE 1 *

MAJOR OPTIONS TO THE MULTINATIONAL MARKETING DIMENSIONS DILEMMA

Options	Option I Separate Core Course in Multi-National Business	Option II List Approach	Option III Integration Into The Entire Existing Core	Option IV Integration Into The Business Policy Course
Major Characteristics	<ul style="list-style-type: none"> *All students are required as part of common body of knowledge 	<ul style="list-style-type: none"> *Students are required to take one course from the list of approved international courses available on campus 	<ul style="list-style-type: none"> *Functional, basic core courses cover the appropriate international dimensions 	<ul style="list-style-type: none"> *Multinational business policy issues, in addition to domestic issues, are covered in "Business Policy"
Advantages	<ul style="list-style-type: none"> *Meets AACSB requirements *Students are provided a wider perspective *Creates better student interest 	<ul style="list-style-type: none"> *Could meet AACSB requirements *Provides flexibility for students *Utilizes available expertise on campus *Requires relatively less resources 	<ul style="list-style-type: none"> *No additional faculty or resources required *No changes in basic curriculum necessary *Could meet AACSB requirements 	<ul style="list-style-type: none"> *No additional faculty or resources required *Could meet AACSB requirements *Better control relative to Option III
Limitations	<ul style="list-style-type: none"> *Requires qualified faculty *Requires additional resources *May have to eliminate an essential course or lengthen the requirements *Less flexible 	<ul style="list-style-type: none"> *Lack of adequate school of business control *May not provide adequate business perspective *Problems may exist in coordinating programs and schedules 	<ul style="list-style-type: none"> *Faculty may lack adequate training and interest *Tendency to ignore the dimensions that may exist *No assurance that the subject is adequately covered *Inadequate time for adequate coverage 	<ul style="list-style-type: none"> *Students and faculty may lack adequate interest and background to resolve international issues *Lack of adequate time to do a thorough job
Possible Solutions to Limitations	<ul style="list-style-type: none"> *Seek resources from administration, business firms, etc. *Develop faculty or recruit *Seek cooperation of other schools & departments on campus 	<ul style="list-style-type: none"> *Better cooperation between departments and schools 	<ul style="list-style-type: none"> *Develop & encourage faculty *Implement measures to insure the adequate coverage *Use team teaching 	<ul style="list-style-type: none"> *Develop & encourage faculty *Use team teaching *Invite guest speakers from businesses

TABLE 1 (continued)

MAJOR OPTIONS TO THE MULTINATIONAL MARKETING DIMENSIONS DILEMMA

Options	Option V	Option VI	Option VII
	Certification Program	Use of Electives	Proficiency Exam
Major Characteristics	*A study program which students can pursue before or after graduation	*Students choose electives, such as "Current Topics in Marketing," or others which provide an international flavor	*No specific courses required but students must pass a "proficiency test" before graduation
Advantages	*Provides better incentives for students *Could meet AACSB requirements *Assures better understanding *Provides flexibility	*Flexibility *No need for additional resources *Overcomes the "new course" legislative constraint *Could meet AACSB requirements	*Could meet AACSB requirements *Provides faculty indirect incentives to cover the subject adequately in functional courses *Sets uniform knowledge standards
Limitations	*Requires many qualified faculty and other resources *Calls for integrated efforts between schools on campus *May have to lengthen study time	*Students may not choose *Lack of qualified faculty *Lack of adequate administrative control	*Possibility of faculty and student resentment *Slightly increases faculty load without benefits in return
Possible Solutions to Limitations	*Same as Option I	*Better planning and control *Develop faculty *Solicit business support	*Undertake efforts to minimize "Negative" feelings *Could waive the requirements under certain circumstances

*This table was developed on the basis of exploratory research and our own experience at Stephen F. Austin State University.

firms or through an exchange program whereby cooperating U. S. companies hire international students and non-U. S. based reciprocating companies hire Stephen F. Austin State University students. This aspect of the program is still in a developmental stage.

Curriculum Change

Also, to advance the worldwide perspective, SFA recently modified its marketing program slightly. The total credit hours requirement to major in marketing remains the same (24 hrs.); but instead of requiring eight specific marketing courses, the curriculum was changed to require only four. This change increased the number of available electives in marketing, and has provided more flexibility and course choices for both students and administration. As an elective, the International Marketing course is in a more favorable position at present than ever before.

The school has, in addition, increased student interest in the world business by encouraging and enabling teachers to take their students on field trips to world trade centers, international trade shows, and multinational corporations.

Future Plans

In spite of a **considerable** degree of success at SFA, there are many students who will graduate without being exposed to certain international business dimensions. To alleviate this problem, there are other plans under consideration.

One possible plan to insure that students are exposed to multinational business is to have students pass a "proficiency" examination on the subject before they are awarded a business degree. The proficiency examination is easier to implement, requires no additional

resources, and assures that the faculty would try to cover the multi-national dimensions adequately in the core courses. Students who have taken certain approved courses could be waived this requirement.

Another possibility under consideration is to use a "team-teaching" approach. Faculty members with knowledge and expertise in the field may be used on a rotation basis to teach certain aspects of international business in specific functional courses, like finance and marketing. Rotating faculty spends a few hours during the term in a specific class, and then moves on to another class. The faculty with expertise can enlighten the student, reduce the responsibility of the regular core teacher, and fulfill the AACSB requirements.

Factors Affecting Dilemma

Like many other universities, SFA obviously has experimented with different approaches to resolve the dilemma concerning multinational business. There are plans to experiment with new approaches.

At SFA, it has become clear from its experiences that the ability to deal with the dilemma depends on numerous factors. Some factors are internal or organizational, while others are external and beyond the administrative or faculty control. **Figure 1** outlines several important factors which determine how effectively can the educators expose students to multinational marketing dimensions. There are different groups such as faculty, school administration, university administration, government, business, and students, each affecting the internationalization process in one way or another.

In order to provide better multinational business

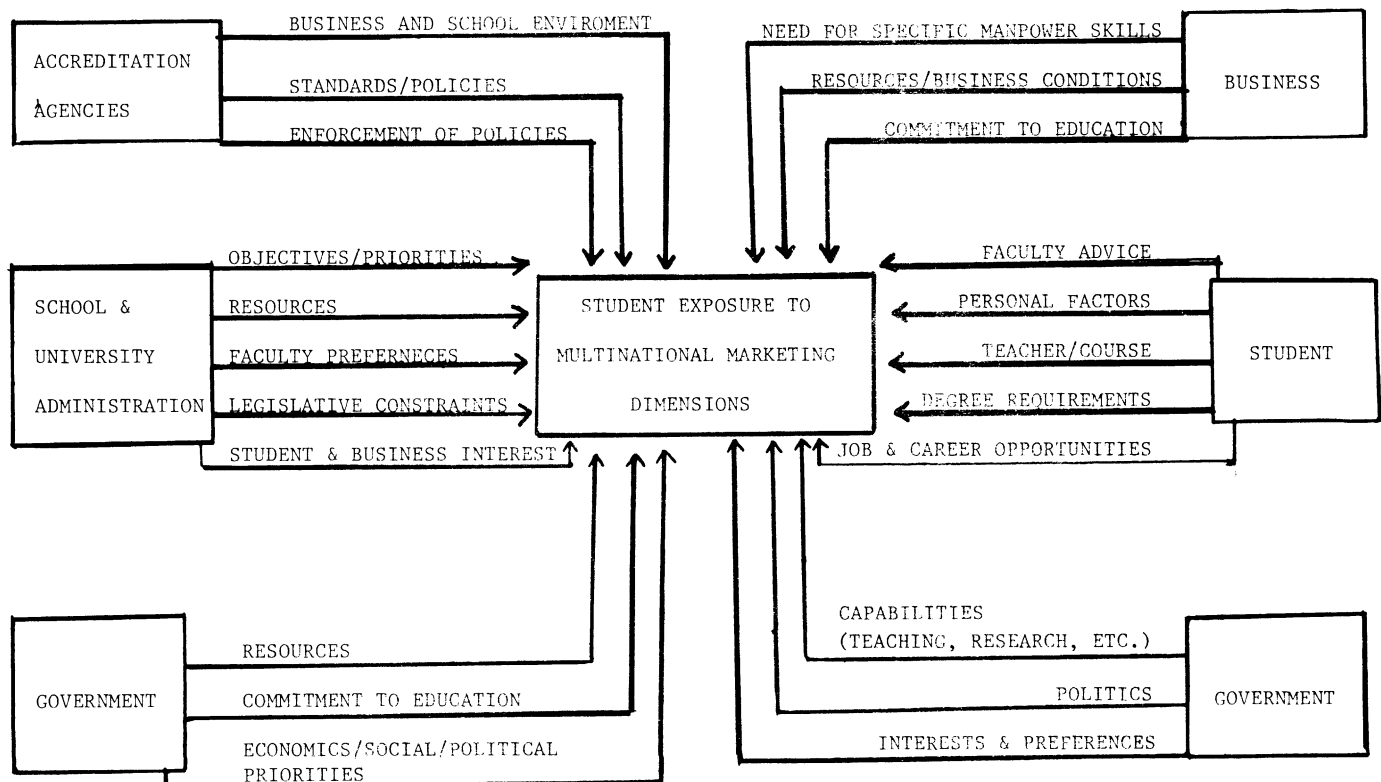


FIGURE 1 - FACTORS AFFECTING EDUCATOR'S DILEMMA

understanding, however, administrative support, faculty support, business support, and student interest are among the key essential factors.

Administrators can provide adequate resources whenever possible. They can provide faculty and department chairpersons flexibility and freedom to develop new programs and to experiment with different approaches.

Faculty support is essential to cultivate student interest in international business. Individual faculty members can encourage students, solicit business support, play down politics, and provide a large commitment of time and energy.

Business firms can support and provide assistance in unique ways. They can advise in the curriculum planning and be ready to serve as executive-in-residence. Business can provide financial assistance in the form of grants and scholarships to encourage studies in international business.

Finally, students must have interest and desire to learn about international business. They must be sensitive to the global developments and should recognize the scope and magnitude of international business. They should seek assistance of faculty and other qualified persons in planning their careers and courses.

Conclusion

In conclusion, exposing students to multinational marketing dimensions is a difficult and complex dilemma. The dilemma is not likely to be resolved by lip service paid to internationalizing marketing curricula, but by creative tasks and experimentations. The problem of providing sound international education requires a joint-effort in which all interested parties act together toward its success.

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PROFILE DETERMINANTS AND FACTORS PREDICTING PERFORMANCE
OF UPPER-DIVISION STUDENTS IN A TWO-CAMPUS SETTING*

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Abstract

This paper reports the findings of an exploratory investigation of students attending classes at dichotomous locations of a university. It compares grade performance, demographic characteristics and other variables of two groups and develops equations to predict academic performance. Differences in all three variable categories were found, and a profile of the off-campus student compared with the main-campus student was developed. Academic performance was predicted by grade point average, hours worked and student status for the main-campus group and hours worked, age, sex and race for the off-campus group. Implications for decision planning for multi-site campuses are discussed.

Introduction

Declining enrollments and high transportation costs coupled with the dispersion of student populations have caused many universities to expand their educational programs to new locations beyond the confines of their main campus. The individuals comprising the student bodies at these remote locations certainly have the potential of being different from the main campus students. If such differences do exist, they could affect decision criteria concerning class size, curriculum planning, faculty assignments, and funds allocations as well as efforts to promote off-campus programs. Additionally, this information should provide valuable insights to instructors for improving the educational process within their discipline.

Recently a number of studies have provided evidence that such factors as grades, GPA, major, student status as defined by numbers of courses taken in a particular term, and employment history tend to characterize present day students. For example, results of one study (Holahan and Kelley, 1978) indicate that students with higher grade point averages perceived themselves as more academically competent, and subsequently earned higher grades. Propensity to be employed had no effect on academic performance. However, several researchers (Gillespie, 1972; Mills, 1978) found that those who do better tended to have longer hours of outside employment.

Additionally, college students can be profiled by demographic variables such as age, sex, and race. No support for the contention that grade point average varied with age was found (Gayle and Jones, 1973). According to one study (Sedlacek, et. al., 1976) whites tended to receive higher grades than non whites. The non whites in their sample were predominantly black. Their conclusions were supported by the results of another study (Pedrini and Pedrini, 1978) which related ACT (American College Test) scores to race and sex. Race was associated closely with general achievement and aptitude, with whites receiving higher ACT scores than non whites. Grades also were associated with general achievement and aptitude. Those receiving higher

ACT scores also tended to receive higher grades. Sex, however, produced no significant correlations with ACT scores and males and females were considered to earn approximately the same grades.

Factors affecting the performance and satisfaction of adult students--those aged 25 and over--were analyzed (Malin, et. al, 1980). It was found that women, in this age group, achieved higher grade point averages, were more satisfied with college, and reported more positive intellectual and personal achievement than their male counterparts. These factors are important to note at a time when increasing numbers of adults are enrolling in institutions of higher education.

Since this study was conducted at an upper-division and graduate university, it seemed appropriate to address the issue of the junior-college transfer into an upper-division institution. While junior-college transfers held unrealistic expectations of university life (Donato, 1973; Fenstermaker and Roberts, 1972), the "culture shock" of the new environment did not affect their grade point average. However, contradictory results in performance, as indicated by transcript evaluation of junior-college transfers, were found by others (Knoell and Medsker, 1969).

Purpose

The research presented in this paper gains importance from the fact that it appears no analysis pertaining to specific comparisons of groups, by physical location, has been conducted previously. The first purpose of this paper is to profile students at both the main-campus and off-center locations of a university to ascertain possible differences between the two groups. Main campus is defined as the location for instruction within the physical confines of the university's central operating unit. Off campus, by contrast, are those facilities away from the university's central operating unit. Given this background, the second purpose of the study is to investigate which of the profiling factors previously extrapolated tend to predict academic performance.

Methodology

Data were collected through a self-administered questionnaire from students enrolled in two sections of a basic marketing course taught during daytime hours on the same days by the same instructor at an upper-division and graduate university. The basic marketing course is a core requirement for the baccalaureate degree in business. Course number, days, and instructor were standardized in order to hold constant variables which could impinge on data accuracy. Further, to hold time taught as constant as possible, the two sections chosen were scheduled in a mid-day, back-to-back sequence at the two locations.

The procedure for this study was conceptualized in two phases. The sampling unit for both phases was the same and consisted of fifty-six students. Forty-one (73%) of the participating students were located on the main campus while fifteen (27%) were located off campus.

*This paper is an extension of a paper presented at the Allied Southern Business Association Meeting, November, 1980.

The survey instrument contained questions about the student's major, number of hours employed, institutions in which freshman and sophomore years were completed, number of courses taken in the present quarter and quarters completed at the upper-division institution. Also, questions about age, sex and race were asked. Each student placed his or her name on the questionnaire. Numeric grades for each student were calculated at the end of the term. These grades along with grade point averages were posted on each questionnaire.

Phase One

The dichotomized groups were analyzed statistically to answer the following: Did the two groups differ in terms of (1) grade performance; (2) demographics, as represented by age, sex and race; and (3) other academically-related characteristics as a function of the location of the course of instruction? The data were analyzed by utilizing Mann-Whitney U and Chi Square Tests, where appropriate (Siegel, 1956).

Phase Two

Based upon the results in phase one, stepwise regression analysis was utilized to assess which factors most strongly contributed to academic performance. Academic performance was defined as the participating student's numeric grade in the basic marketing course. The results of phase one indicated whether a regression for each group or the summated groups would be performed. The following regression equation was used in which academic performance was the dependent variable.

$$\text{APER} = f(\text{AGE}, \text{SEX}, \text{RAC}, \text{GPA}, \text{HRS}, \text{LDV}, \text{SS})$$

Where: APER = Academic Performance (Numeric Grade in Basic Marketing Course)

AGE = Age

SEX = Sex

RAC = Race

GPA = Grade Point Average

HRS = Hours Employed

LDV = Lower-Division Institution

SS = Student Status (Full time or Part time)

Since the basic marketing course is a core requirement for all students, regardless of major, this variable was removed from the equation in the present study.

Results

Results of statistical analyses for the two phases are presented below.

Phase One

Data from the dichotomized groups were analyzed to determine whether significant differences existed between the groups in the three general areas mentioned above. Results of findings are shown in Tables 1 and 2. The discussion below, however, will address only those variables found to be significant at $p < .05$ with the exception of age at $p < .06$.

Grade Performance. Grade performance was measured by the final grade each student received in the course. Table 1 (APER) indicates that main-campus students

TABLE 1
DICHOTOMIZED GROUP ANALYSES
(MANN-WHITNEY U)

Factors	Subgroupings	Dichotomization Percentages*		Z Value	Significance Level
		On-Campus	Off-Campus		
APER	A	12.2	-0-	2.174	.01
	B	43.9	26.7		
	C	31.7	40.0		
	D	12.2	26.7		
	F	-0-	6.7		
AGE	Under 25	65.8	40.0	1.554	.06
	25 and over	34.1	60.0		
GPA	Less than 3.0	36.6	66.7	1.878	.03
	3.0 and over	63.4	33.3		
HRS	Not employed	46.3	46.7	.777	NS
	Less than 36 hours	41.5	26.7		
	36 hours or more	12.2	26.7		

*Percentages may not total 100.0 due to rounding.

earned significantly higher grades than off-campus students. Over 56 percent of main-campus students received a grade of "A" or "B." No off-campus students received A's, and only 27 percent earned B's. While only 12 percent of main-campus students earned D's, over one-third of off-campus students received D's or F's. The average grade of "C," however, was rather evenly distributed between the two groups.

Demographic Variables. To ascertain if other differences existed between the two groups, data pertaining to age, sex and race were analyzed. As the data in Table 1 suggest, a marginally significant difference in the ages (AGE) of the two groups existed. It might be hypothesized that younger students, without employment responsibilities, would attend courses on the main campus. Older students, who might be employed, however, would more likely attend courses at off-campus locations particularly locations within convenient proximity to work or home. The lack of strong support for this hypothesis may be more a function of the location of the main- and off-campus sites rather than a potential rejection of the hypothesis. Both facilities are located within a large metropolitan area, hence the propensity for the older student to seek the urban proximity of the more typical off-campus location does not exist.

TABLE 2
DICHOTOMIZED GROUP ANALYSES
(CHI-SQUARE)

Factors	Subgroupings	Dichotomization Percentages*		χ^2	Degrees Freedom	Significance Level
		On-Campus	Off-Campus			
SEX	Male	61.0	46.7	.918	1	NS
	Female	39.0	53.3			
RAC	White	92.7	33.3	21.700	1	.0001
	Non white	7.3	66.7			
MAJOR**	M ₁	39.0	53.3	1.035	2	NS
	M ₂	39.0	33.3			
	M ₃	22.0	13.3			
LDV	Junior College	56.1	73.3	1.490	2	NS
	4-Year College/University	26.8	13.3			
	Both	17.1	13.3			
SS	Full Time - > 15 Hr./Qt.	51.2	26.7	2.679	1	.05
	Part Time - < 15 Hr./Qt.	48.8	73.3			

*Percentages may not total 100.0 due to rounding.

**M₁ = Management and Marketing
M₂ = Finance and Accounting
M₃ = Other Business Majors

Table 2 indicates that a significantly different racial (RAC) composition existed. It appears that choice of course location may be influenced by race. Although both campuses are within one metropolitan area, the off-campus site is within closer proximity to the non-white community of the city.

Other Variables. Given the nature and different locations of the two campuses, it was thought that the dichotomized groups might differ with respect to other variables such as types of lower-division institutions attended (LDV), major (M_1, M_2, M_3), student status (SS), number of hours employed (HRS), as well as incoming grade point average (GPA).

An urban university often has a relatively large percentage of part-time students, and the university at which these data were collected is no exception. The question of interest was whether there was a higher concentration of part-time students in either location. As indicated in **Table 2**, a significant difference between the two groups in terms of student status existed. While students on the main campus were about evenly divided between full-time and part-time status, approximately 73 percent of the students at the off-campus location attended on a part-time basis only. It seems important, therefore, to investigate the numbers of hours employed by members of these groups. Intuitively, it might be assumed that student status would be inversely related to hours employed. Despite the significant difference in student status between the two locations, a similar difference was not found in terms of hours employed.

Finally, despite the lack of difference in type of lower-division institutions attended, an analysis of incoming GPA's in **Table 1** indicates a significant difference between the two groups. Approximately 63 percent of main-campus students had incoming GPA's of 3.0 or above on a 4.0 scale, while only slightly over 33 percent of members of the off-campus group had incoming GPA's of 3.0 or above.

Phase Two

Results of the analysis in Phase One indicate that the two groups differed significantly with respect to the dependent variable, APER. Therefore, regressions were estimated for each group separately according to the previously-stated regression equation.

TABLE 3
DICHOTOMIZED GROUP ANALYSES
(REGRESSION)

Factors	ON-CAMPUS			OFF-CAMPUS		
	B Value	F Value	Significance Level	B Value	F Value	Significance Level
AGE	-.117	.06	NS	-1.884	5.51	.05
GPA	41.845	37.72	.0001	22.145	2.43	NS
HRS	-.690	11.74	.0017	-.879	10.60	.01
SEX	3.941	.40	NS	24.310	5.14	.05
RAC	-11.756	.99	NS	-51.305	8.82	.02
LDV	8.313	1.48	NS	-21.322	2.49	NS
SS	12.397	3.94	.05	2.407	.02	NS
Multi R	.884			.954		
R ²	.712			.910		
F	11.290			11.560		
P	<.0001			<.0013		

Analysis of results in **Table 3** indicates that slightly more than 71 percent ($R^2 = .712$) of the variance in grade performance for the on-campus group can be explained by the independent variables in the equation. Ninety one percent ($R^2 = .910$) of the variance is

explained for the off-campus group.

Grade point average, number of hours employed, and student status were the only variables that were significant predictors of academic performance at the $p < .05$ level for the main-campus group. When only these three factors entered the equation, they accounted for slightly more than 68 percent of the variation and suggest that students with higher GPA's may be motivated to attain higher levels of academic performance, especially if their time is not consumed with employment obligations, and they have the option to attend school as fully matriculated students.

The off-campus group, however, presented an entirely different picture. Of the three variables that were significant predictors for the on-campus group, only hours employed was significant for their off-campus counterparts. Additionally, in contrast to the on-campus group, each of the three demographic variables proved to be significant predictors of performance for off-campus students. While it appears that there should be a relationship between hours employed and student status, as indicated for the on-campus group, such was not the case for the off-campus group. Only hours employed had high predictive ability for this group. Student status, by contrast, was low in predictive ability. For example, approximately the same percentage of students in each group were not employed, yet twice as many on-campus students attended on a full-time basis. This supports the suggestion that reasons other than full-time employment, perhaps family commitments to name one, justify the part-time status of off-campus students.

Finally, since a large majority of students in the study transferred from similar type institutions (in this case, junior colleges), the data did not provide evidence that type of lower-division institution was a significant predictor of academic performance. However, further analysis of the data indicated that students who completed their freshman and sophomore years at four-year universities were better able to make the transition into the upper-division university being studied. Junior-college transfers, it seems, experienced greater difficulty in orienting themselves to an upper-division atmosphere.

Summary and Conclusions

The initial purpose of this study was to profile potential differences between two groups of students enrolled at a university's main-campus and off-campus locations. Several differences were found. Off-campus students were profiled as being slightly older, predominantly non white, and attending school on a part-time basis. Also, they tended to have lower incoming GPA's and less satisfactory current grade performance records than their main-campus counterparts. The two groups were similar with respect to sex, major, type of lower-division institution attended, and hours employed. A subsequent purpose of this study was to investigate what factors tended to predict academic performance. Grade point average, number of hours worked, and student status predicted academic performance of on-campus students. Performance of off-campus students, however, was predicted by hours worked and the demographic variables age, sex and race.

If the data reflect profiles of similar groups elsewhere and are generalizable to other institutions, several marketing implications for decision making and off-campus promotional efforts emerge. First, since both groups were similar with respect to major and hours employed, off-campus course offerings should be

planned and implemented in a pattern consistent with the main campus. Next, if the off-campus student is typically older and non white, university administrators must recognize a greater need for student counseling services at off-campus locations, to assist in socializing these students into the academic environment. This notion is supported by the fact that for the off-campus group, age and race were significant predictors of academic performance. Analysis of the results of Phase One indicated that off-campus students tended to be less adequately prepared, academically. Incoming GPA was not a significant predictor of their performances in the regression equation because it was highly intercorrelated (Green et al., 1978) with race. It seems intuitive, therefore, that university administrators and instructors must recognize the need for services, such as remedial skills assistance and academic advisement, to successfully matriculate these students through the university. Finally, as off-campus facilities gain stature, they are likely to receive greater attention from state and federal governments. Thus, it is not only desirable but necessary for university personnel to understand detectable patterns and peculiarities of members of off-campus groups to take advantage of prevailing opportunities. Detectable need patterns seemed to emerge over both phases of this study. Need patterns must be translated into approaches which engender the interest of potential students to both off-campus and on-campus locations. To cite one example--communications must be directed to specific target groups to make them aware of the availability of orientation programs and counseling facilities.

Clearly generalizations from this study are limited, not only because of its local nature and small sample size, but also because other variables relating to academic performance were not tested. Although the regression equation for the off-campus group was able to explain 91 percent of the variance (over 71% for the on-campus group) in academic performance, it appears that other factors exist. For example, while student expectancy may be implied as a predictor of academic performance, this variable was beyond the scope of the study and therefore not included.

This study, although exploratory in nature, has moved considerably beyond a simple, descriptive profile of two groups of students. However, other related areas of research exist. As implied, research on the relationship of student expectancy and satisfaction, to name one area, is necessary. To the extent that such information is made available, university administrators will be in a viable position to develop more effective policies to meet the needs of diversified student groups.

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Female Student Attitudes Toward Careers in Professional Selling

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Abstract

This study examines the attitudes and opinions of 56 female business majors concerning a career in non-retail professional selling. A large proportion of subjects were cognizant of the rewards and opportunities associated with success in selling. There was, however, concern over coping with pressure to sell, long hours, women earning less than men, lack of job security, and unstable salary. The findings also suggested that many female students want to learn more about or experience first-hand the practical applications of professional selling.

Introduction

Through academic research and student interest have centered on advertising, personal selling is the most important element in marketing communications to most business concerns. Kotler estimated that, in 1977, American firms spent over \$100 billion on personal selling and only \$38 billion on advertising (3). In most companies the personal selling effort involves substantial individual differences in performance. A survey of 80 industrial companies indicated that one third of the salespeople typically account for 62 percent of orders received (5). Because of this high variance in sales performance, it is important for sales management to determine ways to recruit the most highly qualified male and female salespeople.

There appears to be general executive agreement that women sales representatives begin their careers with two distinct advantages: they are unique and therefore have the novelty appeal, and they are socially nurtured in such a way that they seem to be naturally good with people (1). Also, in a survey of 3,000 members of the Sales Executives Club of New York, responding sales managers found that women tend to follow through on projects better than men, exhibit a better attitude, and are superior to men in reliability and reativity (4).

In contrast, another study found that women, relative to their male counterparts, are less satisfied with their supervisors and co-workers, and possess less self-confidence (2).

Objectives

While research on the effectiveness of women in sales demonstrates mixed findings, little has been done to measure their initial perceptions concerning a career commitment. The objective of this study was to examine the attitudes and opinions of female business majors concerning a career in non-retail professional selling. Emphasis was placed on attributes possessed, perceived benefits and disadvantages, and, most importantly, methods for creating interest and providing information on careers in sales.

Research Methodology

A total of 56 female business students enrolled at Western Carolina University in Cullowhee, North Carolina, participated in this study. Classes were randomly selected and the subjects completed the questionnaire at the beginning of their class period.

Findings

The subjects indicated diverse career objectives with very little interest in sales. The most frequently mentioned career choice was management of internal operations (25 percent), with financial management second (17.8 percent); retailing and personnel management tied for third (12.5 percent); and advertising fourth (10.7 percent).

Twenty-seven percent of the subjects had less than one year of actual business experience; 45 percent had between one and three years experience; and 28 percent had more than three years experience. These findings show diversity among the subjects concerning their exposure to actual business experience situations.

Table 1 records the results of ranking the five most important attributes the subjects felt they possessed which would help them in their chosen career field. Ability to get along with others received twenty replies as the most important attribute, while being a hard worker received eleven first choice replies. Following were business preparation with four, and higher than average self-confidence and being a self-starter with three each.

To evaluate the overall significance of the ranked choices, a weighted average score was calculated and converted to a percentage scale. Table 2 lists weighted averages for the career attributes and ranks their relative importance for helping the subjects in their chosen career fields. Ability to get along with others was selected as the most important attribute. The .62 weighted average score was determined in the following manner:

- 1. A tabulation of the 44 responses showed 20 respondents ranking ability to get along with others as the most important attribute; 9 ranked it second most important; 9, third; 4, fourth; and 2, fifth.
2. Weights were assigned each ranking as follows: Most important 5, Second most important. 4, Third most important 3, Fourth most important. 2, Fifth most important 1
3. The tabulated responses (Step 1 above) were multiplied by their ranks (Step 2 above) and the figures shown in Table 3 were obtained.
4. The figure 173 was converted to a percentage scale by dividing it by the maximum number of points possible (56 x 5 = 280). This gave the weighted average score of .62 which indicated the estimated relative importance of the attributes in relation to each other (see Table 2). Being a hard worker was the second most important attribute (.48), followed by effective communication skill third (.38), business preparation fourth (.24), and able to discipline self and willingness to follow instructions tied for fifth (.17).

It appears that the subjects possess certain attributes necessary to be successful in sales, i.e., hard worker, effective communication skills, and self-discipline.

The low rankings assigned to highly motivated to make money (.08), knack for influencing others (.075), and ability to cope with rejection (.072) would account for the low appeal of professional selling. Since these three attributes are important to success in selling, the perceived lack of them among women helped to explain the reported widespread lack of interest.

Concerning degree of interest in a sales career, over 40 percent rated their interest either four or five out of a possible seven. These findings suggest that a large proportion are only moderately optimistic about selling.

The same cautious optimism continued relating to the perceived number of jobs in sales as opposed to other areas in business. Almost 50 percent rated job availability either four or five out of a possible seven. It appears that the perceived limited availability of jobs in sales may indicate that a higher-status image of the profession may exist than was earlier thought to be the case.

The subjects then gave their views concerning the most important benefits relating to a career in sales. First, second, and third choices were computed as a percentage of the total responses in each rank classification. The three percentages were then added together to determine an overall expression of importance for each benefit. The greatest expression of importance was attached to challenging work (64.3), with money second (57.1), advancement opportunity third (48.2), and meeting people fourth (39.3). It appears that a large proportion are cognizant of the rewards and opportunities associated with success in selling.

Responses were also given concerning disadvantages relating to a career in sales. Once again, expression of importance criteria were used in tabulating the responses. The greatest expression of importance was attached to coping with pressure to sell (60.7), with long hours and women earning less than men tied for second (53.5), lack of job security third (46.4), and unstable salary fourth (42.8). The greatest disadvantage of coping with pressure to sell can be related to the earlier reported inherent inability to deal with such pressure. There was also concern over the long hours, being paid less than their male counterparts, and the lack of financial security aspects of the salesperson's job.

Expression of importance criteria was again used to gain insight into creating interest and providing information on careers in sales. The greatest expression of importance was attached to experience during summer vacations (76.8), with talks from professional salespersons second (58.8), more courses in sales third (51.7), and role playing type practice sessions fourth (39.3).

Implications of the Findings

One of the implications of the research is that the sales profession has acquired an image as a low-status career pathway. The trade needs to do a better selling job on what they have to offer female college graduates. The insurance industry faced a similar problem of a poor professional image a few years back but has compensated for this by doing a better promotional job on what they have to offer.

The findings also suggest that many female students want to learn more about or experience first-hand the practical applications of professional selling. Classroom visits from sales practitioners, on-the-job exposure during summer vacation, and innovative learning experiences such as role playing will enhance interest

and furnish the appropriate information needed.

The major problem appears to be that the subjects have lower expectations about their sales capabilities than should be the case. A large proportion indicated having many of the attributes needed to be successful in sales. The perceived inability to be able to influence others and to be able to cope with rejection are obstacles which can be overcome. Both marketing faculty and business executives may be able to help remedy this situation by locating and evaluating perceived attribute weaknesses and taking the necessary measures that will improve capacity to perform.

Companies should establish college relations departments, participate in "Career Days," work more closely with marketing faculties and placement officials, and do whatever it takes to attract more female graduates. As the future need for college trained personnel with new skills is likely to increase, sales oriented firms should anticipate the competitive situation by making efforts to attract such graduates. This will enable the companies to provide the years of in-hours training needed to develop the next generation of both male and female top sales executives.

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Table 1

Ranked Choices of Attributes That Will
Help in Chosen Career Field

Attribute	Ranked Choices				
	First	Second	Third	Fourth	Fifth
Ability to get along with others	20	9	9	4	2
Ability to cope with rejection	1	2	-	3	1
Business preparation	4	2	6	7	6
Outgoing personality	2	3	5	1	5
Hard worker	11	9	7	8	6
Able to discipline self	-	5	6	3	4
Ability to do routine work	-	1	3	3	-
Effective communication skill	9	8	2	9	4
Higher than average self-confidence	3	3	2	2	1
Being a self-starter	3	3	4	1	2
Like to be independent	2	4	3	4	3
Willingness to follow instructions	-	4	6	6	2
Highly motivated to make money	1	2	-	-	8
Have a knack for influencing others	-	1	2	3	5
Other	-	-	-	-	1
Do not know	-	-	-	-	-

Source: Survey of female students, Cullowhee, North Carolina,
June 1981

Table 2
Relative Importance of
Career Attributes

Rank of Importance	Attribute	Weighted Average Score
1	Ability to get along with others	.62
2	Hard worker	.48
3	Effective communication skill	.38
4	Business preparation	.24
5	Able to discipline self	.17
5	Willingness to follow instructions	.17
7	Like to be independent	.164
8	Outgoing personality	.160
9	Being a self-starter	.15
10	Higher than average self-confidence	.14
11	Highly motivated to make money	.08
12	Have a knack for influencing others	.075
13	Ability to cope with rejection	.072
14	Ability to do routine work	.07
15	Other	.004
16	Do not know	.00

Source: Table 1

Table 3
Method of Computing the Importance
of Ability to Get Along with
Others as a Career Attribute

Rank	Responses	Weight
1	20	x 5 = 100
2	9	x 4 = 36
3	9	x 4 = 27
4	4	x 2 = 8
5	2	x 1 = <u>2</u>
		173

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Abstract

This exposition is a practical guide to finding suitable marketing case situations, collecting pertinent information concerning them and then constructing interesting and usable case materials for classroom and seminar instruction.

Introduction

Many a marketing educator, whether he or she functions in an institution of higher learning or offers opportunity for expansion of marketing decision skills to practitioners, wrestles with how to most effectively teach problem solving methods. Generally, an attempt is made to bring problems found in the marketplace into the classroom. These problem situations are then analyzed and a range of solutions found. The approach just described is often referred to as "The Case Method." Those who use this technique may regularly find themselves faced with a dearth of current case materials that neatly fit the major topic areas of the course or seminar for which they are responsible. Also, student or participant complaints concerning relevance of examples or choice of firm/institution/entity (FIE) examined or the apparent untimeliness of the material are heard. Looking at the situation from the standpoint of the instructor or seminar leader, the basic question is, "Where do I obtain 'relevant' examples from 'appropriate' FIE's that are 'timely'?" Let us examine ways to answer this question.

Obtaining Relevant Case Material

Relevant case materials are those that suit the course or seminar objectives and provide the instructor with the opportunity to make certain "teaching points" throughout the period of study. Exposure to these "teaching points" should enable the student to become more informed in his or her approach to the making of marketing decisions.

What about the currency of case situations, that is, does case material have to be current to be relevant? Many of those instructors who have used cases over the years have found what they consider to be "classics." These case situations, though outdated in a chronological sense, are not outdated with respect to the power or relevance of the material contained within them. Further, students have the ability to recognize this. This is not to say that fresh material should be ignored. A balance of new and old is the key. What that balance should be is a function of the desires and experience of each individual instructor.

Where may case material be found? Typical sources of cases in print, both old and new are: 1) marketing case books, 2) marketing texts or those from other disciplines with cases included and 3) the Intercollegiate Case Clearing House (ICCH). Case materials thus obtained are usually from 12 to 36 months old by the time they appear in print. Some cases that have a perceived timeless quality will be older. Also, updated versions of some situations are often available. Generally, the ICCH has the most current material in print. A catalog of available cases may be requested from the publisher.

Case situations that apply to FIE's in your own geographic area may be obtained in conjunction with consulting tasks, contacts with former students/seminar participants or problems identified by FIE's where no consulting is involved. Situations may also be found in periodicals such as Advertising Age, The Wall Street Journal, Business Week or Fortune to name a few. Local newspapers on occasion contain ideas. Another good source of original case material is to assign construction of a written case as a classroom task. Often students have been involved in the solution of actual business problems within their own firms and, therefore access to interesting case data is granted to them or to you.

Suppose that an interesting situation with potential for class instruction arises, how may this be translated into usable case material? The next section of this work contains material that pertains to this dilemma.

Case Writing

Information Gathering Principles

Case writing begins with an organized approach to gathering the data. Actually the collecting of information should be a reflection of the solution format. That is, whenever possible that which is expected to appear in the solution should be available as deemed appropriate in case material collected and presented. If the instructor wishes to have the case "stand alone" then situation materials must be more comprehensive than those for a fragmentary case occurrence where much outside research is expected. In all cases as much pertinent data as possible should be acquired. This allows the writer much more latitude in the case construction process. He or she may then produce one comprehensive case or a series of shorter cases focused on certain issue areas or both. Also, case length or information available may then be varied according to the degree of challenge to be offered the student.

Information Gathering Process

It was noted earlier that the solution format should impact on the data gathering process. Before a specific format is presented, the underlying agenda should be discussed. This agenda consists of three basic questions that must be answered so that a viable solution to any case situation may be achieved. These queries are: 1) Where is the FIE presently, 2) Where does it wish to go and 3) How is it going to get there? The solution format sections that spring from the first question are termed "Situation Analysis" and "Opportunities and Problems." The "Goals" of the firm relate to the second question. The final question is treated in the solution format as "Strategy."

The gathering process should be concerned with attempts to answer the three questions to the greatest degree possible and just how to do this will be covered in the next major section of this treatise.

Information Gathering Format Outline

It is helpful to have an entire outline of the questions to be answered with sufficient space on the forms used

to allow for complete recording of the replies. You may also wish to get permission to record interview sessions. One advantage of this technique is that more accurate and complete information is available at the time case construction begins. Further, interesting anecdotal data and direct quotations usable in the written cases may be gleaned from the recordings. The negative aspect is that the respondents may not communicate the same information knowing that they are being recorded.

The following outline is offered as one way to logically pursue the "Situation Analysis, Opportunities and Problems, Goals and Strategy" sections of the data gathering process. It should be clear that the steps indicated are not the only path that could be followed, however, the sequence will result in a successful data gathering venture.

DATA GATHERING OUTLINE

I. Situation Analysis (Where is the FIE now?)

A. Target Market Segments

1. Present or Potential Market Segments

If the case is to deal with products now being offered then actual and potential segments as viewed by the FIE staff should be determined. If a new product is in the offing then only the potential segments would be appropriate.

a. Who Are They

What are the various buying/using segments and how are they identified by the FIE? Look for demographic and psychographic descriptors, as appropriate.

b. Where Are They

Here one should obtain specific geographic boundaries for each segment. That is, are the buyers of the product throughout the world, the US, in certain countries, in certain counties or cities or towns.

2. Segmental Buying Processes

a. What Starts People Into the Buying Process (Triggering Cues)

b. Where Do They Go For Information

c. What Factors Are Used To Choose Among Options

d. Where, When And How Is The Actual Purchase Carried Out

e. Is There Any Information On Customer Satisfaction Levels

B. Sales History - Future Prospects

The following information should be sought on a segment by segment basis, if available. Otherwise data by product line or product and/or total relevant sales information is acceptable. Also all data must be clearly bounded in time and geographically. Unit sales information is

is more valuable than dollar sales data, however, one should strive to obtain both types, if possible.

1. Industry Sales

What were total industry sales (product class sales) in the previous model, fiscal or calendar year, as appropriate?

2. Industry Sales Trends

What have been the total industry (product class) trends in sales over the past three to five years?

3. FIE Sales

What were the sales of the FIE in the previous model, fiscal or calendar year, as appropriate?

4. FIE Sales Trends

What have been the sales of the FIE over the past three to five years?

5. Industry Market Potential

What is the market potential for the industry (product class) for the next model, fiscal or calendar year? This figure would be based on the ability of the industry to reach all target market individuals with information and sufficient product to meet demand.

6. FIE Potential

What is the potential FIE share of the industry market potential for the next model, fiscal or calendar year?

C. Status Of Competition

1. Competitor Characteristics

Information on competitor characteristics should be sought. The following kinds of data are appropriate: number of firms, market share by firm, unique or strong skill areas (marketing, production, management, financial, etc.), financial resource picture and marketing strategy used.

2. Retaliation Potential

If the FIE is to disturb the marketplace, who would retaliate using what means at what time?

3. Need For Competitor

If the FIE is considering entering the marketplace with a new offering, is there room for profitable entry? What is the basis for the decision to introduce the product?

D. Environmental Forces

Are there social, legal or economic factors in the present or foreseeable future that would help or hinder FIE efforts? Again, time frame and geographic boundaries are critical considerations.

E. Product Life Cycle Position

An attempt should be made to gather data on where the target market members perceive the product/service to be in its life cycle. This is particularly critical when considering market entry with a new product. Typically the stages for life cycle are: introduction, growth, maturity and decline. This information is sought because of the impact that life cycle stage has on the latitude available in formulating marketing strategy decisions.

F. Cost Information

Data on actual or relative costs for the firm to produce or supply a product or service should be sought out. Information on start-up costs, fixed costs and variable costs, packaging and selling expenses and the like should be requested. Attempting to gather such data is often very difficult either because of availability problems or the lack of desire on the part of management to release it. However, if data is acquired, the potential for case construction and use will be enhanced. Industry cost data would also be useful, if available.

G. Distribution

Three basic types of data should be sought. The first relates to whether or not there are appropriate channels of distribution in existence and what they are. (For example one might be: Manufacturer to Wholesaler to Jobber to Retailer to Consumer.) The second question is whether or not the FIE has access to such channels. Finally, what are the product/service trends in distribution now and into the relevant future?

H. Product/Service Fit

At this juncture queries concerning how the existing/proposed product/service fits into present company marketing and production capability should be asked. A look at past product and customer groups versus those pertaining to the product under consideration will prove to be quite useful in making this judgment. The objective is to get a feeling for past experience applicability.

I. Financial Resources

First, one should explore whether or not funds are available to the FIE to carry out the venture or continue on with the one already started. Company annual reports or other financial summaries may be available. This will allow for an analysis of debt structure, retained earnings, and other factors bearing on the ability of the FIE to finance the task at hand. These data may be combined with the cost information to further clear up the picture. If additional funds will be needed a question concerning the sources would be appropriate. Financial information is often hard to come by with the exception of that provided in annual reports or quarterly tax data provided to the Internal Revenue Service.

II. Opportunities and Problems

At this time a review of each of the topical areas on which data was gathered in the Situation Analysis is appropriate. Here one should identify each of the topics from Target Market Segments through Financial Resources and ask if there are any noteworthy opportunities or problems faced by the FIE. After listing each of these two categories of information, an attempt should be made to elicit priority from "best" to "least" opportunity and "most difficult" to "least difficult" problem. Viewpoints of more than one individual would be helpful here.

III. Goals

A. Market Segments

Does the FIE have plans to attempt to reach new markets or expand product/service usage within present market segments? Data on demographics, psychographics and geographics should be sought.

B. Sales Goals

1. Profit Objectives

Questions concerning target returns or breakeven or other profit goals should be asked. In particular, ranges of acceptable profit or minimum levels information is helpful. The time constraints on profits must also be identified. If possible, data by target segment should be acquired.

2. Sales Forecast

A projection of unit and dollar sales for the next year or time period of interest should be requested. If data are available by customer type, segment, geographic region or other division used by the firm for reporting purposes, attempt to acquire it. Forecasts by month or quarter are useful, if available.

IV. Strategy

Now it is appropriate to attempt to gather information about the FIE's overall marketing strategy for the product/service type of concern over the past one to three years. Information on product, price, distribution and promotion (advertising, sales promotion, personal selling and publicity) policies should be requested. Plans concerning these policies for the ensuing year or relevant time frame should be pursued. If there are conflicting opinions or positions concerning future actions in any of these areas, they should also be solicited.

Tips For The Data Gatherer

Here are some closing notes concerning the data gathering process.

1. Always prepare a data gathering outline in advance regardless of whether you will be extracting information from written material or from individuals.
2. Always attempt to have your interview questions

answered by those individuals most closely associated with the information needed.

3. Try to get the same information from more than one source, if possible.
4. Ask for documents that shed light on the questions to be answered. Research reports, FIE data summaries, financial reports and other such materials should be sought. If these materials are proprietary (company employee eyes only) ask if you may still use them with the data disguised and/or the name of the firm changed. A simple multiplier when applied to financial and other data will often suffice.
5. Propose a procedure for review of the written case by FIE representatives before release for classroom use and/or publication. Written release forms should be employed.

Case Construction

First, the objectives to be met by the use of the case material must be established. Also the amount of outside research expected of the student is a factor. A case to be used for decisions on all marketing mix variables would generally be more comprehensive than one focused on any one or more of the individual variables. However, students could be given a comprehensive case and told to focus on specific decision areas. Cases requiring extensive secondary data research may be shorter in length since certain data may be withheld.

Having these objectives in mind, how does one approach the actual writing of the case? Recall that the outline for data gathering presented earlier was constructed with case writing as the ultimate goal. Simply put, one could produce the case by following the Situation Analysis through Strategy format. Here, the writer converts the data, as gathered, into narrative form. The information may be revealed through the use of company or author-constructed exhibits, statements made by company officials (in this case disguise the name or use the job title), conversations among executives and/or workers or comments by members of a hypothetical consulting firm. Data may be presented in the same order as gathered or it may be rearranged to add challenge and/or interest. An efficient approach to case construction is to outline the data presentation flow and then write around and through it so that it fits together properly. The outline may consist of blank sheets of paper on to which the actual information to be cited is transferred. These sheets are then ordered and appropriate narrative written to "put flesh on the bones" of the raw data. After this is completed, areas to be included in the case are selected. Transition verbiage is then written and, finally, the headings and divisions of the case are established. The data sheet approach allows the writer to control content and length of the case to suit the particular needs of the course or seminar.

In closing, although case writing is somewhat of an art, the "mechanical" suggestions concerning an organized approach to data gathering and case outlining should prove helpful to those with little experience. The more knowledgeable case constructor may also find the methodology contained in this treatise of use in future efforts.

THEORY APPLIED: EXPERIENTIAL TEACHING INTEGRATES
STUDENT LEARNING WITH COMMUNITY NEEDS

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Abstract

This paper discusses an existent course which couples theoretical learning with business application. Though many attempts have been made at such an integration, this course is unique in a number of respects. Student teams function as would actual business teams, synergistic teams are developed and students can even fire team members. The theoretical instruction is taught in the form of a complete unit, directly coordinated with the phase of work being done with a team's business client. Resultant student/business associations are so strong and mutually beneficial that complete business cooperation is received during the entire course. Businesses fully participate in and sponsor the final course seminar, and a very high percentage of team proposals are implemented by businesses. The potentials of the method are far reaching and extensions into other courses are discussed.

Introduction

It would seem somewhat redundant, but perhaps necessary, to proffer the realization that the curriculum of the business college is under attack by both the popular and academic literature; e.g., Business Week, July 23, 1979 and November 10, 1980; Time, May 4, 1981; and English and Lewison (1979). It is even more appalling to hear students remark that they get little from the classroom curriculum. One is forced to take three giant steps backward and examine his approach to his teaching methodology upon hearing such statements as:

When I saw the first 'decision tree' they drew in my managerial economics class, the only thing I could think of was that it looked like lightning going across the chalk board.

Are we indeed guilty of putting forty to fifty students into a "windowless amphitheater," cramming them with endless hours of work presented by professors who come and go, teaching the basics--management, finance, production and operations management, and marketing. True, we have them spend an additional round of hours applying the various disciplines theoretically via the case method. What are we really accomplishing in the use of cases? Hardly more perhaps, as Time (May 4, 1981) points out, than the ability to argue their views "like an executive, and to bear up under executive pressure." To argue that the case method lends little to the grasping of the discipline under study would be to miss the point of its value because, indeed, it does enable students to begin to think like executives. It also enables them to see how various concepts are applied, where they work, and where they fall apart. It does set a small stage for integrating the discipline with textbook application. The sad truth though is that too many students become 1) frustrated with "lack of information" in the case, desiring more without realizing that they will never have all the information they wish for decision making, 2) unable to see the totality of the application, and 3) convinced that this is "the way it really is out there in the real world of business"...reading is not doing--and doing is experiencing. This paper suggests a viable technique for increasing student learning by applying theory to real business

situations.

Student/Community Involvement

A new method of teaching a discipline is underway--into its fourth semester. Its revolutionary approach has met with tremendous success, both with students and community businesses that lend their support and effort to the learning process. Students and businesses profit by a unique "Cooperation between the business community..." (Chico Enterprise-Record, 21 May 1981) and the University.

Too often we have tunnel vision in our teaching approaches. Since, for the most part, our peers are teaching only theory at the freshman, sophomore, or junior levels (particularly in introductory classes), so too do we. Can one wisely and effectively integrate application with theory in the introductory classes? It appears so! Academicians often state that the business world may be best served by students who are given solid theoretical backgrounds. Such students, hypothetically, can better compare and contrast actual versus theoretical actions. The business world, however, often demands graduates who "can do something, more than...those who know something" (Done, 1979). Through this experiential teaching method, theoretical learning throughout the course is applied by students working with real businesses. That controversial line between theory and application begins to dissolve, taking with it that similar line between "student" and "professional." Students become excited and involved--often thrilled with their accomplishments. At the same time, businesses benefit from the opportunity to have fresh new points of view as to how best to solve their problems and make greater use of their scarce resources.

The Integrated Approach

At California State University, Chico, about forty students attend each of the three sections of Marketing 179--Principles of Advertising. The course is an upper-division elective. However, since approximately fifty percent of the enrolling students come from other than marketing disciplines, some leniency is exercised relative to course prerequisites. To enable numerous "communications" majors, along with other students from non-business disciplines to attend the course, the prerequisites of Principles of Marketing and Principles of Economics are waived for those students. Students, however, are divided into teams of approximately seven members where an attempt is made to mix the students on each team so that synergistic effects can be realized from their various disciplines and backgrounds.

The completion of an advertising campaign proposal for a business is a requirement of Marketing 179. The proposal is a formal, written report of the results of student team studies regarding the overall advertising requirements for the team's business. Each proposal is completed under the supervision of the lecturer in charge of the class. The purpose of the proposal is to 1) examine and discuss the issues of what the assigned business is doing, 2) compare and contrast this infor-

mation with what the business's competitors are doing, and 3) develop strategy for implementation of an advertising campaign to enable the business to reach its markets most effectively. The required proposal encourages the development of independent analyses of key variables affecting the final campaign proposal; i.e., student teams must complete the following analysis in order to develop a viable and effective advertising campaign:

1. Market analysis: Clearly and briefly define the target market(s) the team plans to use in the campaign.
2. Consumer analysis: In conjunction with the choice of a target market(s), a description of the consumer past, present, and future is developed. Use of segmentation variables such as demographics, psychographics and geographics is a must.
3. Environmental analysis: Variables in the environment that can substantially affect the campaign must be noted. Variables to be considered are: the economy, demographics, technology, regulations, and culture.
4. Industry analysis: Trends, strengths, and weaknesses in the industry must be clearly depicted.
5. Competitive analysis: Students analyze the product or service in terms of attributes, strengths and weaknesses relative to competitors' past, present and future.

Clearly, analysis of the above utilizes and integrates marketing principles. Secondary and primary data collection is a must. Library and original research must be gathered. "Real world" marketing and advertising practices must be observed. The rewards of these analyses are their obvious application to the business's problems and opportunities.

An effective proposal does not end with the analyses of key variables. Student teams are required to pinpoint problems and opportunities for the business and develop marketing and advertising objectives and strategies. Once this stage has been completed (about two-thirds through the semester), teams then enter into the creative area, developing message strategy that will best position their business within the chosen target market(s). During the oral presentation (to be discussed later), student teams are encouraged to use posters, storyboards, audio visuals, layouts, graphs, computer printouts, etc. They are also encouraged to be innovative with their campaign "creative approach"--the period of the campaign that they thoroughly enjoy and are always impatient to reach.

Student teams also develop a budget for their assigned business. It is a recommendation for advertising expenditures in connection with the proper choice and commitment to various media. However, if their assigned business already has an established budget for advertising purposes, they must work within that budget, a phenomenon that causes much consternation--but one that brings to life the realization of the real constraints that a business must work within.

In order to provide a clear picture of the proposals and demonstrate their potential effectiveness as both a pedagogical and a real-world tool, all campaign proposals are evaluated for their oral presentations (see Oral Presentation Evaluation--Appendix A) by peer students, faculty, and advertising professionals from business. This is done in a real-world setting--a Saturday "end-of-semester" Advertising Seminar. Naturally, client businesses attend the seminars and often comment,

and sometimes participate in the presentations. One client has been providing a buffet lunch for all those attending. The Saturday "end-of-semester" Advertising Seminar is the biggest reward of all team endeavors, exciting to both students and businesses: a real-world experience where things do not always go as planned, where client businesses are exposed to an oral presentation (much like a real-world advertising agency would conduct), and where student teams reap the appreciation and recognition for the tremendous effort they have devoted to their campaign proposals. Written proposals are presented to clients and the lecturer after the oral presentation.

METHODOLOGY BEHIND TEAM ASSIGNMENTS

The classes are conducted as situations are in the real world. Students receive too little of this experience. In order to accomplish this, the student teams (referred to throughout the semester as "account teams") are assigned by the lecturer. Students submit resumes on a three-by-five card, listing their major areas of concentration, their overall GPA, work history, special interest, and classes previously taken that would lend themselves to a synergistic team effort; e.g., marketing research, management, media, speech, drama, art, etc. Volunteers are solicited from each class to act as an "Account Executive."

Contrary to the normal undertaking of student projects wherein students usually team up with classmates of their own choice, teams are assigned on the basis of the resumes to insure a synergistic effect in completion of the proposal for the client business. Teams composed of individuals with diverse backgrounds and assigned by the lecturer to businesses tend to experience feelings similar to advertising and marketing teams of real businesses.

Account Executives are assigned by virtue of their seeming ability to, or desire to take on leadership. The role of the Account Executive is one of planning, organizing, directing and controlling the team effort, and acting as the liaison between the team and client business (as well as lecturer). Their responsibility is to see that a viable campaign proposal is completed, based on the required analyses, at semesters end, and the client business is presented with the complete written proposal during the Seminar. To facilitate their responsibility, unique authority is given them. The power to fire team members, who are not doing sound work toward the proposal's completion, is vested in each and every Account Executive. Team members sign contracts to the effect that they understand that a "firing" will result in a fifty percent drop in their grade. All "firings" are subject to consultation with the lecturer and once a decision has been made to "fire," the decision is upheld and students so fired fail the class. In turn, the lecturer has the right to "fire" an Account Executive for similar reasons. They too sign contracts. During the past three semesters, students have been fired, or placed on probation. Most "fired" students have returned the next semester to repeat the class.

THEORY-APPLICATION, OR CRAWL, STAND, AND WALK TALL

In order to facilitate the theoretical learning with the practical application of the course, the text, class room lecturers, guest speakers, and case analysis are integrated into a purposeful manner over the entire semester. This allows students to take things one step at a time; i.e., while many advertising textbooks start with the history of advertising or the social and

economic aspects of advertising, this course is organized into a cohesive unit which enables students to start from the beginning, build step by step (while applying learning to the application side), and develop an overall finished product--the advertising campaign proposal. To accomplish this, the course is divided into six sections:

1. Advertising as a marketing management tool which includes the advertising plan and the roles of advertising in the consumer decision process.
2. Research methodology which includes consumer, product, and market analysis--entailing secondary and primary data collection.
3. Basic media strategy which includes the advantages of the various media; print, television and radio production, as well as budgeting.
4. The creative program which examines elements of creative advertising in all media.
5. Evaluating advertising effectiveness which entails how to pretest and posttest advertising.
6. Meeting advertising's legal and social responsibilities.

Over the sixteen week semester, student teams, under the direction and guidance of the Account Executive and lecturer, actually integrate theory with application as they progress from one section to another. What actually develops is synergistic learning--theory applied.

Holistic Learning As An Offshoot

Integration of disciplines is the idealized desire of many business professors. In Marketing 179, it is happening! Students not only integrate their total marketing/communication knowledge relative to the Marketing Concept (the controllable variables, consumer behavior, and marketing research, as well as communication theory), but they learn to work together as teams to accomplish goals. Account Executives learn to be managers, coordinating the principles of management to achieve goals and manage people. Their exposure to group behavior is unequalled in any other type of learning situation. (To facilitate Account Executive learning, weekly meetings are held wherein Account Executives share their experiences and problems with other Account Executives.)

Due to the nature of this course, which decompartmentalizes each class into seven-unit sub-sections (the approximate size of each account team), a one-on-one learning experience also takes place as each team, as well as individual team members, seeks out the lecturer's guidance in putting the pieces of the puzzle together: a phenomenon almost impossible to accomplish in the average, every day course.

Application To Other Areas

While the "Theory Applied" method has been discussed as it has been implemented in an advertising course, the method lends itself quite well to many other areas. Introduction to Marketing, for instance, can be integrated into "marketing audits" for community businesses. Production Operation can be integrated into "work sampling," "queuing control," "inventory control," or "forecasting" for small businesses. Retailing lends itself well to "retail store audits," or "site location

studies." Consumer Buyer Behavior lends itself well to studying the Consumer Purchase Decision Process for various products/services in the durable goods area for small businesses. Financial Management lends itself well to profit analysis and portfolio management for community businesses. The avenues are there--and what is more important, the small businesses are there, eager and waiting to cooperate, to assist in the student learning process as well as to profit from the exposure.

Conclusion

This paper suggested, and carefully put forth how organized and structured student/community involvement can be used as both a pedagogical technique and an applied technique as a means for integrating the real-world experience in the business curriculum. For the businesses involved, the benefits are astoundingly appreciated. They take the proposals seriously and attempt to implement much of what they find. For the students involved, a few quotes might help describe their feelings:

This class has been very beneficial to my education. I have finally become completely familiar with the library facilities and have learned to work with other people.

Lori Phillips
Marketing 179 - Fall 1980

It was well worth the effort. I can walk away from this course really feeling like I benefited from it.

Linda McCall
Marketing 179 - Spring 1981

As for the future businesses that will hire them, that want students who "can do something, more than...those that know something," a quote from a recently hired student tells some of the story:

I am pleased to say that I recently accepted a position with California Broadcast Consultants, as Assistant Media Buyer. Being able to show the proposal during the interview helped me considerably.

Linda McCall
Marketing 179 - Spring 1981

What are the benefits of "Theory Applied?" For the students 1) it provides an opportunity to develop real-world experience with businesses, 2) it helps to provide practical insights into business practices and decision making, and 3) while not highlighted, it encourages the development of report writing--one problem area businesses are constantly telling business teachers about. For the businesses, it provides them, in many instances, with information which may lead to improved performance.

Appendix A

California State University, Chico
School of Business

Name of Team _____

Category

Research:

Did the team collect and assemble information necessary

to properly evaluate the brand or company; did it examine both present and potential customers for the product as well as the competition in the field; what information relates to the product itself in the marketplace?

Judge's Comments: _____

Campaign Planning:

Did the team fully and completely evaluate research data collected and reach proper conclusions based on this information; has the team stated the problem the brand or company faces in the marketplace and the means and method it proposes to solve that problem; has the team clearly indicated the goal it has for the product or company, as well as how it proposes to reach those goals; what evaluation technique has the team indicated so as to measure its success?

Judge's Comments: _____

Media:

Has the team examined the audience and selected one or more specific audiences to aim its messages toward; has a budget been determined based on product or company history, competitive levels, and/or goals set for the product or company; have the media selected been chosen so as to satisfy the objectives of the campaign; what justification has been given for media classes as well as specific media chosen; is scheduling of media consistent with overall campaign plans?

Judge's Comments: _____

Creative:

Has the team clearly set forth a creative platform, positioning plan; can the team's execution of its creative strategy be measured on its potential effectiveness and relationship to campaign planning; has the team adhered to its stated creative strategy; is there clarity and originality in execution?

Judge's Comments: _____

Presentation:

While the entire campaign is reflected in the oral presentation, the presentation itself is only a small portion of the total project. The written plan contains the entire output of the student team which usually consists of more students than those on the presentation team; therefore, the written plan effect should be reflected in all the previous categories. This category is to specifically review the actual oral presentation.

Judge's Comments: _____

Judge's Signature: _____

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THE CASE AS AN AID TO IMPARTING CONCEPTS

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Abstract

This paper takes the stand that the case itself has the potential to be used effectively as a vehicle to impart concepts. Also included is a description of how the same case can be used in a variety of teaching situations. The entire paper is based on class-tested situations.

Introduction

Traditionally, the case has not been used as an aid to imparting conceptual information. An extreme, though not uncommon, position on this may be expressed as: the lecture is used to impart concepts, whereas the use of cases can, at best, be a dilute form of giving information.

An excellent and acceptable 'middle-of-the-road' position involves the use of conceptual notes (as required reading with the case) to provide the conceptual background; and the case to use those concepts in a meaningful discussion. This is a perfectly valid teaching method. In fact, the development of the conceptual note and the teaching note may constitute acceptable research in the field.

This paper proposes another method of using cases. It takes the stand that the case itself (in a partially structured discussion) has the potential to be effectively used as an aid to imparting concepts. No quality comparison is made as to the benefits of the previously mentioned ('middle-of-the-road') position vis-a-vis this position. However, this paper will attempt to demonstrate, by way of an illustration, that the latter position (the case as an aid to imparting concepts) is an acceptable alternative. A subsidiary, but important, objective of this paper is to demonstrate how a case can be effectively used in a variety of teaching situations.

Illustration and Discussion

The basis for this illustration is a case on the Hammermill Paper Company.¹ This case is chosen as an illustration because of its flexibility in teaching use, and because the text is only two pages long (it has four advertisements as exhibits). This is not to imply that it is the ideal example of either flexibility or brevity; however, this case has been class-tested in a variety of teaching situations and has performed well in all of them. The text of the case is given in Figure 1.

FIGURE 1: HAMMERMILL PAPER CO.¹

Hammermill is a diversified company engaged in five major market areas - fine and printing papers, industrial and packaging papers, converted paper products, wholesale distribution of paper and graphic art supplies, and converted forest products. In recent years, emphasis on the last four of these groups has decreased Hammermill's sensitivity to the cyclical fluctuations that character-

ize basic pulp and paper manufacturing. This emphasis is expected to continue in the years immediately ahead, although it also expects to grow in its traditional lines of top-quality fine and printing papers. In all its market areas, Hammermill plans to achieve a product mix which capitalizes upon the strengths of high product quality, technological superiority, and marketing expertise. The company's 34 manufacturing and converting locations, 36 wholesale distribution outlets, and a superior group of independent paper merchants provide a nationwide base for manufacture, distribution, and sale of high-quality products to serve diverse and growing markets.

Sales in 1974 were \$607,488,000, compared to \$477,890,000 in 1973, a 27 percent increase. Net income for 1974 was \$35,482,000 or \$5.18 per share, approximately twice as much as in 1973.

An unprecedented combination of factors contributed to this performance. For most of the year, Hammermill pulp mills and paper machines operated at virtually full capacity. The ending of price controls in March, 1974 enabled Hammermill to realize much-needed price increases to offset higher raw material and operating costs. A favorable supply and demand balance enabled the company to schedule longer runs on paper machines and thereby gain manufacturing efficiency. Development of a more profitable product mix contributed also in a large measure to Hammermill's earnings improvement.

Advertising Program

Hammermill's particular paper products are not specifically consumer products. The average person would find it difficult to find a box of Hammermill Bond stationery, or a small supply of its other grades of paper. Nevertheless, Hammermill has been advertising its products in consumer-oriented magazines since 1912 and the objective, simply stated, is to create brand awareness and brand preference for its products.

The company believes it has been meeting those objectives and today Hammermill Bond, for instance, is better known among the general public than its next nine leading competitors combined.

Hammermill's objective essentially is to reach those people who might now--or at some future date--be in a position to specify a particular grade of paper for business usage.

With this in mind, Hammermill has been using Newsweek, Time "B", U.S. News & World Report, Business Week, and Sports Illustrated magazines.

Paper is a relatively low-interest item. Accordingly, the company's strategy is not to discuss paper per se but instead to be the subject of good graphics. Reader-ship scores on this series of ads indicate that the ads are quite appealing and, in fact, on a number of Starch Studies, its ads have had the number-one average cost ratio in specific areas.

In evaluating the ads, Hammermill changed its message slightly in 1975. First of all, in an effort to tie in slightly with the nation's bicentennial, the company

¹Charles Dirksen, Arthur Kroeger, and Frescesco Nicosia, Advertising, Principles, Problems and Cases, 5th ed. (Homewood, Ill.: Richard D. Irwin, c 1977), pp. 97-8.

narrowed the scope of its subjects from "famous letterheads of history" to "revolutionary letterheads."

At the same time, in an effort to establish more awareness of the broad range of paper grades, it has begun referring to other grades which are produced and, at the same time, it changed from the Hammermill Bond logotype signature to the Hammermill Papers logotype signature at the end of each ad.

Origin of Campaign

The origin of this particular campaign evolved a number of years back, when Hammermill first came up with the concept of "famous letterheads of history"--how letterheads for specific people, places, or events might have looked. The company produced a number of hypothetical letterheads and used them in sales promotion with its merchant salesmen distributing the letterheads to printers, advertising agencies, and other paper specifiers. The letterheads went over so well that the company subsequently conducted a contest in which it asked these people to submit their ideas of how letterheads for famous people might have looked.

The contest was a success and many of the letterhead designs submitted to Hammermill were then adapted and illustrated for use in the advertisements.

Several years later, although Hammermill believed that interest in "famous letterheads of history" had declined, it tried to find a vehicle for a similar contest. Accordingly, it conducted its "Hammermill Bond Revolutionary Letterhead Contest" in late 1974. The entries received in this contest and the letterhead designs that were submitted were so good that the company decided to continue its campaign and incorporated some of the designs into the current series of ads. Once again the readership scores confirm that this is a high-interest campaign and that it is getting readership and that it is adding to the brand preference.

Teaching Situation 1:

As a part of a one-or-two session marketing component of a course or seminar on management (or business administration).

In some colleges, freshmen are required to take a course that introduces them to each of the areas within the field of management. Also, it is not uncommon to find instances of management development seminars where technical (engineering) personnel who have potential to acquire executive positions (or who have recently acquired these positions) are exposed to the various areas of management, so that they gain an appreciation for the various sub-disciplines of management, with which they have no previous experience. A one-or-two session component devoted to marketing is not unusual in either of these situations.

These two situations are quite similar in a number of respects. Both situations require the instructor to impart, in a very brief period, some of the elements of marketing. At the same time, because of the nature of each of these situations, where a group of individuals are being briefly exposed to a large number of areas and instructors, a one-or-two hour lecture on marketing does not appear to be as effective as an interesting case. If, however, a case discussion and the imparting of concepts were mutually exclusive, the interesting (case discussion) session would fail in its primary objective of imparting basic concepts. A conceptual note is less practical, though not infeasible, in these situations because this is the participant's first exposure to marketing (also, the reading assignments are usually not

very voluminous in such situations). For these reasons, it is probably appropriate to use a brief, interesting case as an aid to imparting concepts.

This has been done by the author in each of the above situations. The teaching strategy followed is briefly mentioned below, for illustration purposes only, "rather than to represent effective or ineffective" handling of teaching situations.

The instructor asks for the facts of the case. These may come from the participants in any random fashion, but the instructor structures them according to the 'Four P's of marketing. Some of these that usually emerge are:

- a. The product is a high-quality, routinely-purchased, industrial product.
- b. The advertising objectives, audience, media used, etc.
- c. It should be premium priced in the light of its high quality and advertising support.
- d. National distribution through a wholesale-retail channel.
- e. Customer groups.
- f. Government regulation or de-regulation.
- g. Competition.

The instructor uses this to introduce and discuss concepts of the marketing mix (that the manager controls), the non-controllable factors, and their relationships to one another. Then the floor is open for (instructured) discussion. This part of the session is not discussed here, not because it is less important, but because it follows the "general" principles of case discussion. This paper has no original contribution to make here. If any other marketing concepts emerge, the conceptual background may be provided by the instructor.

At the end of the session, the instructor asks the question: What generalizable concepts of marketing (and management) does this case illustrate? This integrating question stresses the conceptual emphasis.

Two other teaching situations are described in less detail, below.

Teaching Situation 2:

In an introductory (undergraduate) course in marketing principles, this case could be used after the "4 P's" of marketing have been introduced and discussed in concept. Then, this case serves to illustrate these concepts. It can, however, be used as a vehicle to introduce and discuss new concepts (it has been so used). Some examples may be:

- a. Types of purchase situations: "Straight Rebuy", "Modified Rebuy" and "New Task" situations in industrial marketing;² which roughly correspond to the "Routinized Response Behavior", "Limited Problem Solving" and "Extensive Problem Solving" situations of consumer behavior.³
- b. Buying Roles in an organization (and the family):⁴ "Initiator", "Influencer", "Decision Maker", "Pur-

² John A. Howard, "The Structure of Buyer Behavior" in Consumer Behavior: Theory and Application, by J. Farley, J. Howard and L. Ring, Allyn and Bacon, Inc. (Boston, Mass., 1974), pp. 13-26.

³ Philip Kotler, Marketing Management, Prentice-Hall, Inc. (Englewood Cliffs, N.J., 1976), pp. 81-82, 104.

⁴ Kristian S. Palda, "The Hypothesis of a Hierarchy of Effects: A Partial Evaluation," Journal of Marketing Research, (February, 1966), pp. 13-24.

chaser", "User". Each of these roles may be played by different individuals depending upon the purchase situation (discussed in 'a.' above).

- c. Hierarchy of Effects:⁵ "Awareness", "Knowledge or Comprehension", "Attitude or Preference", "Intention to Buy", "Purchase", etc.
- d. Segmentation: What segment(s) of the population are relevant?

The number and level of concepts introduced depends on the capabilities of the participants (at that time), and on the instructor's preference and desire for structure in a case discussion. Again, an integrating question may be appropriate, as to what "generalizable" concepts of marketing the case illustrates. This emphasizes the conceptual role of the case.

Teaching Situation 3:

An advanced (senior) undergraduate course in Advertising Management.

The same case may be used in such a course as well. The students in such a course would be expected to be familiar with all the concepts mentioned in the above "teaching situations"; therefore this case could serve only to reinforce or use these concepts. However, it could be used to introduce some new information even at this stage. (This, of course, depends on the material that has been completed up until the time the case is discussed. The authors have used the case after having discussed "The advertising industry", "Advertising as a management function in a firm" and "Basic demand concepts". The following discussion assumes that background, in addition to a basic marketing course. This, of course, will vary, depending on the case and course which is being considered. The following are intended only as examples of concepts that may be introduced with the aid of this case.)

- a. Evaluation of advertising: Its evaluation in the light of its stated objectives and purpose.
- b. Media alternatives: The advantages, disadvantages, and appropriate use of each medium and media vehicle.
- c. Advertising research: A complete explanation of the advertising readership concepts of "Noted", "Associated", and "Read Most" used by Starch,⁶ Starch scores, reports and use (Starch will provide these on request).

As before, a question may be asked to determine the participants' understanding of the "generalizable" concepts of marketing that are illustrated by the case. This case or similar ones may also be used, in a similar manner, in a course on Industrial Marketing or in an introductory graduate course.

Summary and Conclusions

Split sample pre-and-post tests of how well students absorb the marketing concepts illustrated in the following pages, have led to the following conclusions:

1. The case performed as well as a lecture in terms of the learning of the concept and terminology.
2. The students who were participants in the case discussion were better able to use the concepts and illustrate possible applications, than those who were exposed only to a lecture session.

⁵Patrick J. Robinson, Charles W. Faris and Yoram Wind, Industrial Buying and Creative Marketing, Allyn & Bacon, Inc. (Boston, Mass., 1967), p. 14.

⁶Starch Intra Hooper, Inc., (Mamaroneck, N.Y. 10543) pp. 1-4.

In conclusion, certainly a case may be used with a lecture. These results (admittedly not being universally generalizable) appear to indicate that, in certain cases, a case may be effectively used instead of a lecture.

The major points made in this paper are summarized below:

1. A case has the potential to be used as an aid to imparting concepts. This is not to detract from the value of the conceptual note sometimes given along with the case. A legitimate criticism may be that the illustrative case does not impart concepts by itself; rather, it requires the teacher to do so. If this is considered to be an invalidating criticism, the case may include a discussion of some concepts by the principal characters. This would increase the length of the case, but a short one like this one could well afford it.

Methods of using the case in a variety of courses were described in this paper. These are all actual "case histories" of successful class testing. However, these methods are intended as examples only, rather than to illustrate effective or ineffective handling of case teaching situations. There is no presumption to suggest teaching style. This caveat applies equally to the following point.

2. The same case may be used in a variety of teaching situations. The discussion may be geared to the required level by the instructor who can use the case as an aid to provide the necessary information. The amount of structure and input provided by the teacher depends on the situation at hand. The examples discussed in the text of this paper are all actual class-tested examples, but are intended only as illustrations of this viewpoint.
3. The conceptual question: After a case has been discussed, the data analyzed, and recommendations have been made as to the most appropriate actions of the principal characters, it may be useful for the teacher to ask the participants the question: "What 'generalizable' concepts of marketing (or of management, finance, economics, accounting, law, etc.) does this case illustrate?" Put another way, "What did you learn from this case analysis that may be of use in other related situations?"

The use of this question, too, has been class tested. It is this author's belief that after having been immersed in the analysis and decisions of a case, the participant should be required to break away and extract generalizable concepts from it. This approach obviously cannot apply to every case, but if it can be introduced in an applicable case, it will help emphasize the conceptual role of the case. This role may not be the major role of a case discussion; nevertheless, it is an important one and a very respectable one, in an academic sense.

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DIRECT MARKETING: THE FUTURE IS NOW

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ABSTRACT

Marketing educators have an opportunity and a responsibility to serve the economic community and their students by adding a direct marketing course to their curriculum. Virtually every individual, institution or company that has a need to communicate and promote a product or service uses direct marketing.

INTRODUCTION

"A new civilization is emerging in our lives and blind men everywhere are trying to suppress it," states Alvin Toffler in his recent book *The Third Wave* [1]. There are many in direct marketing who believe an analogy could be made between Toffler's observation of society and marketing education. Marketing educators, while not suppressing it, certainly have ignored it. Direct marketing really didn't happen overnight. Montgomery Ward's first mail order catalog in 1872 marked the beginning of direct marketing. Through the years, it has been called "scientific advertising" [1], "mail order," "direct mail" and "direct response." Today, the most common term is direct marketing and 1980 sales in direct marketing were estimated to be approximately 112 billion dollars.

The purpose of this paper is three-fold: one, to inform marketing educators of the scope of direct marketing; two, to develop the need for adding a course in direct marketing to the marketing curriculum; and three, to suggest possible topic areas in such a course.

SCOPE OF DIRECT MARKETING

A milestone in the mail order saga came fifty years later in 1926 with the founding of the Book-of-the-Month Club by two veteran mail order men. They were aware of the paucity of bookstores outside the big cities and the existence of 50,601 post offices capable of delivering the mail and books economically and expeditiously [2]. The Direct Mail/Marketing Association (DMMA) had its roots about this time as did third class bulk mail.

Another milestone was reached following World War II when goods were scarce and demand high. Many specialty houses that began at that time such as Spencer Gifts, Hanover House and others are still in business. The credit card revolution (including bank cards, oil companies, American Express) had had an enormous impact on mail order growth. L. L. Bean Company, the outdoor clothing and equipment company, increased sales twelve-fold to \$60 million from 1967 to 1977 [2].

Other keystones in the development of direct marketing were such advancements as the Zip Code, census tract data, WATS lines, printing techniques and, of course, the computer. All greatly facilitated the development of direct marketing.

It's a fact that nearly every firm doing business with the public or other businesses is engaged in some form of direct marketing. Retailers such as Bloomingdale's, Marshall Field, Neiman-Marcus and others have or are establishing direct mail order operations. According to Maxwell Sroge Company (an agency/consulting firm), leading manufacturers such as Armstrong Cork, RCA, CBS, and Xerox are hopping on the bandwagon by developing

mail order businesses of their own or taking the path of General Mills and Johnson's Wax, both of whom have bought five existing mail order businesses to date. [3]

Today the trade association, DMMA, represents approximately 2300 companies involved in direct marketing. Approximately 4,000 registrants were expected at its 1981 annual convention in Atlanta (attendance has been doubling every five years). It has announced dates and places for 57 educational events in 1982. This writer believes it is significant that not one of the meetings will be held on a university campus. Furthermore, it appears academic people are seldom involved in planning and teaching such seminars.

Sales via direct marketing have doubled during the past five years. It is estimated that between 12 and 15 percent of all consumer purchases were made via direct marketing. Maxwell Sroge (one of the country's leading mail order agencies) recently declared, "mail order today is growing 50 percent faster than retailing in the United States--By 1990--it is estimated that mail order's share of consumer expenditure for department store sold goods will grow by five times [3].

As true with any rapidly growing discipline, there is some confusion on semantics. The general distinction between direct marketing and other terms is as follows:

Direct Mail--an advertising medium like magazines or television except it uses the mail to deliver its message.

Mail Order--a distribution channel--order received via the mail or telephone and delivered through the mails or similar, direct to the buyer.

Direct Response--an advertising technique--solicits an immediate action or response such as an inquiry, an order or store visit.

Direct Marketing--is the total of activities by which products and services are offered to market segments through one or more media for informational purposes or to solicit a direct response from a present or prospective customer or contribution by mail, telephone, or other access. This definition is the accepted definition of the DMMA [4].

Note that the above definition of direct marketing states "one or more media." During the past two decades direct marketing has come to mean much more than direct mail. The breakthrough in the use of media other than direct mail occurred in the late 1950's when magazine publishers solved the mechanical problems to permit the binding-in of insert cards in magazines [2]. This resulted in the center spread position of *T.V. Guide* becoming the most successful and most sought after mail position in the history of magazine publishing.

Today's direct marketer utilizes not only direct mail and space but can embrace all media. The following illustrates:

Direct Marketing Media

- A. Direct Mail
- B. Magazines
- C. Newspaper
- D. Catalogs
- E. Telephone
- F. Television
- G. Radio
- H. Statement Stuffers
- I. Coop Mailing
- J. Coupons, Package Inserts
- K. Others--Circulars, Take Ones, Catalog Bind-Ins, Sampling, Matchbook Covers

THE FUTURE IS NOW

Demographic trends will favor the growth of consumer direct marketing during the 1980's. Small households are growing for several reasons such as the higher divorce rate, delayed marriages, the baby-boom generation that is in the household formation years, etc. The 1980 census revealed that approximately 23 percent of all households are single person households. This growth of small households will benefit direct marketing as many items are purchased on a per household basis and also because the small and single person household is more likely to be limited in time available for shopping. Other factors that will add to growth of direct marketing in the 1980's is the trend to more working women in families which reduces time available for shopping and also adds significantly to a family's purchasing power. Of 14 million new jobs added in the past decade, 10 million went to women.

Today's consumer is educated and sophisticated and more skeptical of advertising. He or she wants more information and less exaggeration. In this situation more direct marketers are recognizing the significance of the marketing concept [2]. Research and planning have become essential in successful direct marketing.

New concepts are emerging in direct marketing. The need for us in marketing education to expand the horizons of our students--to better prepare them for the golden age of technology--will become obvious to anyone studying direct marketing. Leaders in the field of direct marketing have told this author that it is difficult to find men and women skilled in the field, yet the elements and techniques that work best in direct marketing are well known and easy to learn.

Virtually every company promotes through the mail. Many firms profit substantially through direct marketing; others could improve their profits from it dramatically with only slight changes in methods. As distribution and sales costs increase, it is possible to increase sales force efficiency via direct marketing through appropriate media and direct mail for firms of every size.

Concepts such as De-massified marketing, Directonic marketing, Prosumer, in this writer's opinion, need to be examined in an academic setting. Students of today will be shaping these concepts in the years to come. It is projected that by 1985 over 50 percent of the homes in this country will be wired with cable T.V. which could become the key component in a computer-linked "home information center." Some compare its impact to the transformation that came with the printing press and before that, the post office. Directonic marketing is fast becoming of age. With the coming of age of directonic marketing we will begin de-massified marketing or the breaking down of our traditional channels of distribution and communication. Prosumer--a Toffler word referring to individuals who perform for themselves services hitherto performed for

them by others--self-service gas, automatic teller machines, do-it-yourself pregnancy kits [1]. Direct marketing has just begun to help create another economy in which we manufacture goods and services for ourselves.

A DIRECT MARKETING COURSE IN THE MARKETING CURRICULUM

At this point, the reader should have a better understanding of the scope of direct marketing. There is a need for adding a course in direct marketing to the marketing curriculum as evidenced by the growth and changes that have and will continue to occur. Before identifying topic areas, this writer assumes Principles of Marketing or Introduction to Marketing courses and perhaps a Marketing Management course would precede a course in direct marketing. Also, it is assumed that students enrolled in a direct marketing course, taught in the marketing department, would not be interested in nor need a course that would focus on the mechanics of producing direct mail or catalogues. Neither should the course be overly concerned with layout, copy or printing techniques.

The objective for such a marketing course might be stated as follows: "To develop within the student an understanding of direct marketing sufficient to evaluate in a given situation the effectiveness and efficiency of direct marketing as a viable alternative or supplement to traditional channels of communication and distribution."

There are a few books that might be used as a textbook; however, it is beyond the scope of this paper to recommend a text. This writer did not use a text the first time he taught the course nor does he expect to use a text the second time the course is offered. Material is put on closed reserve in the library and students are expected to do significant reading and research as they design a direct marketing strategy using multi-media for a real or imagined product or service.

Topic areas which might be covered in a semester course, probably three hours are as follows: (Assume two previous marketing classes prior to this course.)

- A. Scope of Direct Marketing
 - Definitions
 - Facts and Figures
 - Growth and Trends
- B. Business/Industrial Direct Marketing
 - Applications, etc.
- C. Markets
 - Geographic
 - Demographics
 - Psychographics
 - Trends
- D. Media of Direct Marketing
 - Direct Mail
 - Letter, Brochure, Response Device, Envelope, Clincher
 - Space
 - Magazines, Newspaper
 - Catalogs
 - Types, Programs
 - Telephone
 - Phone-In, Phone-Out
 - Broadcast
 - Radio, Television
 - Other
 - Inserts, Coops, Coupons, Stuffers, etc.

- E. The Offer
 - Incentives, Premiums, Guarantees, Time, Payment
- F. Mailing Lists
 - Renting
 - Merge and Purge
 - House List Management
- G. Fulfillment and Customer Services
 - Standards
 - Problems
- H. Budgeting and Mathematics of Direct Marketing
 - Front End/Back End
 - Break-even
 - Planning and Analysis
- I. Testing and Research in Direct Marketing
 - What, When and How
- J. New Technology in Direct Marketing
 - Cable T.V., Qube, Viewdata System
 - Computers
 - Electronic Funds Transfer
 - Printing Techniques
 - Telephone
- K. International Direct Marketing
 - Scope and Tips
- L. Regulation and Legislation
 - Federal Trade Commission
 - Self Regulation
 - 30-day Rule
 - Mail Preference Service
- M. Ethics of Direct Marketing
 - Terms, Special Claims, Use of Lists, etc.

SUMMARY

Virtually every individual, institution or company that has a need to communicate and promote a product or service uses direct marketing. Direct marketing can be used in "concert" with other marketing channels of distribution and communication, or as an alternative to traditional channels. Marketing educators have an opportunity to serve the economic community and their students by adding a direct marketing course to their curriculum. The Future is Now in Direct Marketing.

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SEGMENTS IN THE CLASSROOM

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Abstract

This paper applies a well-known marketing concept: segmentation, to the college classroom. Segments are identified using personality traits, grade point average, course evaluation and points earned in the class. By developing appropriate teaching strategies for each segment better student performance and evaluations should result in the large enrollment classes where individualized instruction is impossible.

Introduction

Business faculty face a unique situation. University enrollments have been down as have their operating budgets. Enrollment in business has, however, been up but adequate funds for attracting new faculty are not available. Increasingly, business faculty are asked to teach more sections of larger student enrollments. With 150 and up students each semester it becomes virtually impossible to give individual attention to each student. Still to maximize learning and also to generate good evaluations individual attention is the preferred arrangement. Being impossible, an alternative is to divide the classroom enrollment into homogeneous segments. Teaching strategies can then be structured to best cover the existing segments. The purpose of this paper was to identify by factor analysis homogeneous student groups within the classroom. Segments were identified by using student evaluations, student personality data, and course performance.

Literature Review

Elementary and secondary educators have completed numerous research studies on classifying students into groups for instructional purposes. Very little classification work has been conducted at the collegiate level, collegians were the subjects of this study. Often the research at the secondary level has been conducted with the purpose of assigning students to classes. The college instructor has little opportunity to assign students to classes, thus within class groups was the focus of this study. Previous attempts to identify groups of individuals that would be homogeneous in their reaction to instruction have usually been single variable determined. With single variable grouping, risks exist that the variable alone has little influence on the responsiveness to instruction of students. One study found ability groupings, a common and logical way of grouping, had no effect on reading readiness (Ogletree, 1973). Multiple variables seemed warranted and were used in this study. The variables used in the study generally met one of two criteria: the variable was available to the instructor or it measured a dimension of personality. Personality dimensions have been found to indicate both responsiveness to instruction and satisfaction with instruction. The dimensions vary in their ability to indicate responsiveness and satisfaction. Cognitive style of the student when used as a basis of grouping was found to increase the achievement of some individuals (Bodine, 1977). Individual achievement styles, used as a segmentation variable, was found to influence satisfaction with the learning environment but did not influence performance (Helgola, 1977). Another researcher found that personality traits, such as moti-

vation, affinity to other individuals and value similarity between individuals in a group, were effective as variables to group students (Smitherman, 1980). Because the literature indicates that personality has high potential of yielding segmentation variables and because personality traits as variables have been researched on an individual basis, this study has used 15 traits to measure personality.

Methodology

The students were enrolled in a senior level marketing course. Two sections of the course, 75 students in all, were involved. As a part of the course requirements, each student was required to fill out a self and course evaluation. The form was a slightly modified one used at the University of Colorado and developed by Sandham and Christensen. One group of students also completed personal preference tests. Completion of the personality test was on a voluntary basis. The test administered was developed at the Western Michigan University testing center and is a modification of the Edward Personal Preference inventory. The tests differ in that the WMU revised edition does not force a classification on the respondent. Other information collected from the students included data customarily collected in the process of teaching and evaluating a group of students but limited here to G.P.A. and total points earned in the class. Thirty-four of the 75 students took the personal preference inventory.

Analysis

The data was analyzed using the SPSS system for data analysis (Nie, 1975). The personality, total points accumulated in the course, grade point average, and how each evaluated the course data from the 34 member group was factor analyzed. Each factor was assumed to represent one segment within the class. The overall personality data focus had not been taken in previous studies on evaluations and achievement, at least to this writer's knowledge. Total points earned in the class was included because of the general interest between a student's performance and their rating of the class, i.e., give A's and obtain high ratings. G.P.A. was included out of the concern that previous success or failures would influence expectations and thus evaluations. Finally, only one measure of class evaluation was included in the factor analysis: "Compared to all other courses that I have taken at this university this course is (1) one of the best----(5) one of the worst!" The bottom line in promotion, tenure, and merit committees seems to be the response to this question. The factor analysis used the SPSS subprogram PA2 or principal factoring with iterations using the varimax rotated factor matrix after rotation with Kaiser normalization. To determine whether a difference existed between those filling out the personal preference inventory and other students, the SPSS subprogram breakdown was used.

Results

Only one significant difference (.05 level) between the two groups using breakdown analysis in conjunction with the F-scale was detected. Those filling out the per-

sonal preference inventory had a higher grade point average. Since 29 variables were involved, however, the difference could easily have been random.

The factor analysis focusing on personality traits resulted in 6 factors (see accompanying table). Shown in the table are all factors with eigenvalues of one or more. The factors are interpreted in the following ways. Others may have different interpretations. Some teaching strategies are suggested as illustrations for the first three factors. The absurdity of recommending that there is only one way of teaching to a classroom segment is obvious. Segmentation tends to limit the number of appropriate mixes for each segment. The suggestions on teaching strategy for each class segment are given as viable possibilities not necessarily as "the" strategy.

Factor 1 - Individuals who are self-critical, guilt ridden, and feel inferior to others. They have a desire to be other dependent rather than self directed: yielding in opinions, judgments, wishes; conform to established customs. Being introverted they are not likely to ask for help. They prefer to direct interest, mind, and attention upon themselves. They have little desire for adventure, change and variety; in fact prefer that change not occur. They have little expressed desire to acquire and retain knowledge. Low factors scores on G.P.A. and course evaluations seem to indicate a lack of effect by this group. Evidently, they would respond to strong leadership, be it the instructor or other students in the classroom.

TABLE

STUDENT FACTOR ANALYSIS

VARIMAX ROTATED FACTOR MATRIX WAS PRODUCED WITH THE FOLLOWING VARIABLES AFTER ROTATION WITH KAISER NORMALIZATION

Overall Course Evaluation	Autonomy/Independent
Achievement/Success	Nurturance/Aid
Intellectual/Academic	Succorance/Comfort
Endurance/Persistence	Order/Structure
Extroversion/Outgoing	Intracception/Analytical
Introversion/Inward	Change/Variety
Aggressive/Assertive	Abasement/Self Critical
Dominance/Control	Total Points Earned
Deferent/Dependent	Grade Point Average

FACTOR	EIGENVALUE	PCT OF VAR	CUM PCT
1	4.28020	23.8	23.8
2	2.89717	16.1	39.9
3	2.26341	12.6	52.4
4	1.93182	10.7	63.2
5	1.54608	8.6	71.8
6	1.11676	6.2	78.0

Factor 2 - Success oriented individuals. They like to compete, but also succeed in doing: achieve their goals of gaining such things as wealth, power, fame, etc.; doing something of recognizable significance. In the classroom they probably would respond well to computerized marketing simulations if the instructor can effectively establish the significance of the simulation; in fact, the significance of all projects must be established for this group. They are aggressive, attacking others in a critical way. They want to dominate through force and may try dominating the class and the instructor. Finally, they have an expressed desire for order: detail, structure conciseness. They probably would not respond well to unstructured creative type assignments. Again, evaluations and grade point seem to be influ-

enced little by this group.

Factor 3 - High grade points and good total point accumulation in the course typify the members of this factor: traditionally known as the "good" student. They have indications of endurance: persistence and tenacity. They will keep at a task even if not enjoyable and with a problem situation longer than most. Like the self-critical group they usually shy away from change preferring instead more stable and secure situations. Oddly, they do not have high factor scores on intellectual orientation nor do they influence evaluations.

Factor 4 - They have expressed desire to give kindness and affection to others, obtain satisfaction from assisting others in trouble and listening to others' problems. They have an analytical nature: analyzing others, themselves, and situations. They attempt to predict what others will do. They are only slightly extroverted and unlike the "good" student tend to lack persistence and endurance. Teaming this person on projects with the "self-critical" of Factor one could result in a satisfactory and positive learning experience for both type individuals.

Factor 5 - The people who make a difference in course evaluations. The scale for course evaluation was the opposite of the other scales with 1 being high. The high factor loading apparently means that this group did not like the course and evaluated it as a much worse course than others they had taken. There are also some signs that they expressed desires opposite of succorance. They do not care to receive kindness or help from others when down. Nor do they want to be catered to in times of distress. G.P.A. and total points are not associated with this group.

Factor 6 - Are people who want others to be understanding and kind in interpersonal relationships. They want to be catered to in times of stress, want others to be sympathetic to their problems and give help when down. They also have tendencies to be aggressive and autonomic. They want to act and say what they want and feel. They express a desire to be free from conventional rules and to be independent from the rules of others. They may very well be the students who want to take a test early or turn in a test late. It's possible they would do very well on creative, unstructured assignments. Their influence on course evaluations and G.P.A. is negligible.

Summary

An instructor's influence on students derives from many factors; one important factor is the students themselves. Students vary in personality, objectives, and outlook. Ideally, treating each student on an individual basis would be best. Large enrollments and heavy class loads often rule the instructor-to-individual student relationship out. A workable and practical alternative between the individual-to-individual level and the mass is to identify segments in the classroom. Teaching strategy, projects, tests, discussion, and objectives can then be developed and implemented with the segments in mind. More specific information on teaching strategies could be generated from the correlation coefficients matrix generated in isolating factors in the factor analysis procedure. (Space limitation did not allow development of this concept in this paper.) The idea would be that the teaching strategy or tactic in question would be used in class and evaluated by the students. The evaluation would then become a variable in the factor analysis. For example, using cases in class as a means of conveying concepts-- What was the effect? Referring to the correlation

matrix generated by factor analysis and at the variable "case," the correlation between the variable and other variables could be located and interpreted. The result should be a course taught in a manner that supports learning and produces better course evaluations. Practically identifying the segments in the classroom may not be simple, but experienced instructors have long grouped their students, even if the grouping was nothing more than bright, average, and weak students. This paper demonstrates a more detailed technique of identifying segments. Further research will demonstrate whether the segments (factors) are stable across classes and instructors and focus in on the teaching strategies to use with each group.

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THE MARKETING OF PERSONAL FINANCIAL COUNSELING:
SOME PROPOSITIONS

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Abstract

Focusing on the special problems faced by the providers of personal financial counseling, this paper develops seven propositions designed to improve marketing productivity among these institutions. The basis for these propositions is the authors' observations of the financial counseling industry and a series of focused-group interviews among counselors as well as potential clients. The paper also presents an action-oriented methodology helpful for attracting and maintaining clients.

Introduction

The debate over the marketing of services and how it differs from marketing of physical goods has been a continuing one (Judd 1964; Shostack 1977; Lovelock 1980). More recently Enis and Roering (1981) made a case for the similarities between marketing of services and marketing of goods. After all, they argued, buyers purchase neither tangible objects nor intangible features; rather, they purchase a bundle of benefits. In contrast, Lovelock (1981) pointed out that, although services often compete with goods to offer similar core benefits, marketing management tasks are not the same. He cited a number of generic and contextual differences between goods and service marketing, requiring service marketers to play a number of roles not usually expected of their counterparts in manufacturing industries.

Within the services area, marketing scholars have paid very limited attention to personal financial counseling services (Kaufman and Judd 1981). The marketing of personal financial counseling services has its own idiosyncracies and it differs from marketing of other professional services in some respects. First, the demand for such services is extremely limited; only those individuals who have sufficient income and who are sufficiently motivated about financial planning will ever seek these services. Second, consumers possess a number of misperceptions about the financial counseling industry which also serve to discourage them away from providers of the services. Third, in financial counseling services, the marketer faces a formidable task of "developmental marketing." The demand for such services has to be identified, nourished, and cared for for a long period of time before it can be profitable. Finally, because of the nature of this business and the organizational environment of financial counseling firms, the individual counselors operate largely independently, only loosely attached to their firms, and obviously without the benefit of substantial carry-over effects from institutional promotion.

The purpose of this paper is to contribute to the scant literature on marketing of financial counseling services by developing a number of propositions. The primary challenge in marketing financial counseling remains to be one of attracting and maintaining customers. Therefore, these propositions are concerned with the marketer's efforts in fulfilling that challenge. The propositions that are offered are

similar to the ones suggested by Gummeson (1981) for the broader field of professional services. An integrative and action-oriented approach to build a sufficient client base is also offered in our paper.

Seven Propositions About Marketing of
Financial Counseling Services

Our observations of the personal financial counseling industry, focused-group interviews with the providers of financial planning services as well as consumers warrant the following guidelines for these organizations. These guidelines are offered in terms of a number of recommendations designed to make their marketing efforts more productive.

Proposition One: Recognize that what the consumer of personal financial counseling is paying for is the promise of a satisfactory business relationship. Providing somewhat complicated professional services, one does not have the advantage of being able to demonstrate the "product," how it can be put to use immediately, its superiority, and so on. Not until after a relatively lengthy experience does the client become convinced of the value of these services, and he/she is assured that a beneficial business relationship has been established.

It becomes very important, then, for the representative to establish and explain to the client at the outset what the promise is, what results can be expected at what time, and how satisfactory the results may be. The potential benefits of engaging in a business relationship should be explained--in very clear terms--during the initial contact with the client as well as the successive meetings. It should be kept in mind that what the consumers are really buying is a "bundle of benefits" or solutions to some of their problems rather than specific product offerings. One needs to approach them with these appeals and demonstrate how he/she can be instrumental in reaching their goals.

Remember also that many clients are seldom aware of being served well. It has been pointed out that consumers do not usually know what they are getting until they don't get it! Only on dissatisfaction do they dwell. This means that in marketing financial counseling, being appreciated is a real challenge. Hence, one needs to expend relatively more effort in calling attention of clients to your role in assisting them with reaching their financial goals.

Proposition Two: A "marketing through education" approach, where the major emphasis is on educating clients, may work very well for financial counselors. In the final analysis, the client is seeking expert advice and guidance. A financial counselor may capitalize on his/her expertise by demonstrating the intricacies of financial planning decisions.

The segment of consumers who are very interested in becoming knowledgeable about the investment decisions does not appear to be sought after by many firms engaged in investment counseling. For example, individuals are often asked to sign a power of attorney

to a bank before the bank's trust department will handle their investments. Merrill Lynch and other companies also do not appear to accommodate the needs of this segment. Merrill Lynch's "bull in the china closet" commercial gives the consumer the impression that the world of investments is too complex for them to understand, and the company is there to save the consumer from disaster of their own decisions. This attitude of keeping investments shrouded in mystery is not uncommon and along with it comes a reluctance to properly educate the clients. The opposite strategy of marketing through education of clients and seeking their active participation could be a very valuable competitive advantage for some financial counseling organizations.

Proposition Three: Understand the client's needs and motivations as the basis for successful selling. Identification of the needs and the overriding motivations of the prospect should always be the basis for efforts to tailor an appropriate "service mix" for a client.

Our research suggests that consumer motivations for seeking investment counseling are often vague and not well-defined. Investment objectives appear to vary among individuals, depending upon their family and financial circumstances. These objectives generally fall into the following broad categories: (a) Return (Income in terms of interest, dividends, etc.); (b) Financial independence; (c) Financial security; (d) Sheltering income from inflation; and (e) Sheltering income from taxation.

There may be other motivations for individuals in seeking investment counseling. Some people, for example, have a genuine interest and curiosity about financial markets. They enjoy learning about investments and want to take an active, informed part in investment decisions. These people seek and appreciate being educated. Another motive may be prestige or ego satisfaction. Being able to say that they "spoke to their broker today" or talking about the stock market can make some people feel important. In the past only people in very high income categories were privy to the investment world. Today, it is practical for people in almost every income category to engage in financial planning, but the status symbol or prestige still exists. This can be a double edged sword, as it can deter as many people as it encourages. The important point is, however, that uncovering the prospect's motivations for seeking investment counseling is the first step in successful selling. The next logical step would be to communicate to the prospect one's ability to satisfy his/her needs in the best possible way.

Proposition Four: The individual financial counselor needs to use himself/herself as a surrogate for the intangibility of what is marketed. In providing personal financial counseling, the individual counselor is probably the most important element of the marketing mix. As explained before, the counselor has to engage in substantial probing before some recommendations can be made regarding financial planning options. Also, the typical client suffers from some uncertainty and insecurity while purchasing professional services and, as a result, is looking for signs of reassurance. Finally, there is hardly any objective measure of the quality of professional services offered.

It is natural, then, for the prospect to depend largely on the appearance and the external impressions of the counselor in demanding professional services. The individual counselor can create some surrogates

for intangibility. How he/she dresses, articulates, writes, designs, presents proposals, responds to inquiries, initiates ideas, etc. can provide very meaningful cues for the prospect. Hopefully, favorable impressions will be created, and the harmony of the professional and the client--not only professionally but also in personality--will give the prospect sufficient confidence to make a commitment.

Proposition Five: The best way to acquire a client is to do it over a number of contacts. Our research suggests that most consumers approach the decision to seek investment counseling services within the following psychological framework: (a) Their intentions to seek investment counseling are often weak, not well-formed, or vague; (b) They have little or no previous experience with providers of investment counseling; (c) They perceive relatively high risk associated with the decision because of the reasons mentioned above (e.g. the difficulty to assess the quality of services in advance); and (d) The decision can be characterized as a "high involvement" situation from the point of view of the individual--it is part of his/her personality and lifestyle. A lot more deliberation and thought will be given to this decision than the decision to purchase a toothpaste or to patronize a fast-food outlet. For these reasons, the typical prospect has to be successfully led through several consecutive stages in the sales process before an account is underwritten. A phone conversation, a group discussion, even a face-to-face interaction may not be sufficient in breaking customer resistance. A good approach is to attempt to win the prospect gradually over a number of contacts (calls, appointments, seminars, etc.). This will build motivation, interest, and knowledge each time, bringing the prospect to the state of readiness to make a commitment. We propose to accomplish this in three stages (awareness, interest, and decision), as explained later.

Proposition Six: The individual financial counselor should seek to minimize the human factor in his/her efforts since time is a very scarce resource. Selling services, in general, and personal investment counseling, in particular, is a people-intensive business. One major way for successful operations is to "industrialize" efforts in order to make the best use of counselor time--a very scarce resource indeed. Ideally, the individual counselor should spend the majority of his/her time in actual counseling--something he/she can do best. Other activities such as prospecting, paper processing, form completion, formula calculation, administrative details, institutional selling, etc. should be performed by other staff to the extent possible. What is proposed here is division of labor between the counselors and the administrative support staff, and a move away from "one-person craftsmanship" in conducting business. Insurance companies long ago went to extensive division of labor in their applications processing--registering, underwriting, performing actuarial functions, issuing policies, and so on. Similar means of relieving the investment counselor from the burden of expending a lot of time for "nonproductive" tasks remain to be found.

Proposition Seven: Personal financial counseling firms need to develop an appropriate strategic marketing plan and implement them for successful operations. Providers of professional services increasingly are adopting a view of their businesses which may be named a "marketing orientation." Marketing orientation calls for a concerted effort on the part of the organization to satisfy the needs of a selected group of consumers. A marketing oriented firm would ideally coordinate its activities around a strategic marketing plan. This

plan will usually consist of two distinct yet inter-related parts: (a) Selection of a target market and a unique position for the company in the marketplace; and (b) Development of an appropriate marketing mix for the company, i.e., a combination of various means and activities with which the company can appeal to the chosen market segments.

The target market segment(s) will include a fairly homogeneous group of customers who can be served well by the company. Selection of a target market segment can be decided as a result of: (i) assessing the competitive strengths of the firm (as well as individual counselors) in relation to the competitors; and (ii) an assessment of the competitive environment and the trends in the industry. The major challenge here is to properly position the company in the eyes of the potential customers by finding a unique niche in the market. A unique position has to be developed amongst various competitors (brokerage houses, discount brokers, boutiques, insurance companies, banks, etc.) and in terms of a mix of services (insurance, bonds, pension funds, real estate, money market funds, mutual funds, etc.). Attempting to be all things to all people will usually confuse consumers. A distinctive image needs to be created and communicated to the target market segments.

A company's marketing mix will have four elements: (i) Product--the professional services; (ii) Price--fees and commissions; (iii) Promotion--ways of communication; (iv) Place--where the services can be offered. Developing an appropriate marketing mix for a company is an additional challenge. However, the firm's marketing mix is the starting point for differentiating itself from competitors. Many observers argue that the principal ingredient in the marketing of financial advice to consumers is a concerted effort to build an image (Krause 1980).

A Refined Approach to Build a Client Base

While the development of a strategic marketing plan and an appropriate image is critical, the immediate concern of personal financial counselors is how to attract and maintain a sufficient number of clients. Hence, an approach needs to be developed as a superior way of building a client base, and one which incorporates the propositions outlined above. We will now advance such an approach which can be implemented by financial counseling firms with relatively little cost. This approach is called The Sequential Screening and Refinement of Target Markets.

The basic premise of the Sequential Screening and Refinement of Target Markets (SSRTM) approach is to acquire clients over a number of contacts, inducing them to make some commitments--initially time, and then willingness to learn--each time, and ensuring their successful passage through the stages of awareness, interest, and decision. The recognition that a typical consumer will not be ready to seek counseling services as a result of just one contact leads one to employ a "gradual motivation" approach. An advantage of the SSRTM approach is that it makes the best use of the counselor time, entering him/her into the selling process only when the consumers have progressed to a psychological stage where they are more likely to make a decision to seek professional services.

The SSRTM approach divides the company/individual efforts into three parts: (a) Strategies to build consumer awareness; (b) Strategies to build desire and to motivate; and (c) Strategies to facilitate consumer decision making.

Strategies to build consumer awareness revolves around a "publicity package." This publicity package includes: 1. Company brochure: Brief information about the company, its offerings endorsements from present clients, etc. 2. Newsletter/calendar of seminars: A periodic publication informing the prospects/clients of upcoming seminars offered by the firm; introducing new product features; performance reviews; new notions about financial planning; special protection packages; and 3. Biographies of the individual counselors.

This publicity package can be mailed to selected (target) market segments--which can be better served by the firm--as well as a number of "multiplier" organizations. Some effective multipliers include: (a) professional associations and social clubs that meet on a regular basis; (b) media such as a local radio and TV; (c) selected companies; and (d) educational institutions such as vocational/adult educational institutions and colleges. These multiplier agencies should be contacted with an invitation to appear and speak for the benefit of their audience/members. Using this procedure, the staff of the financial counseling firm will be able to develop a list of prospects, filtering out from the original target market those individuals who: (a) are not eligible (likely) prospects; (b) do not have a felt need towards personal financial counseling services; (c) delegated the responsibility for financial planning to others in the family/organization; or (d) patronize other companies.

Strategies to motivate prospects and to create confidence rely upon the group education process through a series of seminars offered by the company on a periodic basis and reaching as many prospects as possible. The dates and locations of these seminars can be announced in the newsletter/calendar of seminars in advance. The basic purpose of these seminars will be to establish a dialog and to encourage prospects to learn as much as possible about financial planning issues. This will prepare them to make a greater commitment (the decision to seek your services) at a later time.

The prospect list can be further refined at this stage through the following activities: 1. Administering a brief questionnaire at the end of each seminar for the purpose of: Expanding the prospect list and obtaining feedback for the preparation of future seminars (content, time, place, etc.); 2. Telephone follow-up by staff of seminar participants with an invitation to talk to an individual counselor or to mail calendar of seminars for future meetings; 3. Telephone follow-up of drop-outs ("no shows" at a seminar) with an invitation to keep them on the mailing list for calendar of seminars.

Strategies to facilitate the prospect's decision making involve maintaining as many people as possible in the group education "pipeline." Hence, participants in a first (introductory) seminar can be encouraged to attend a second or a third seminar with the expectation that, at each time, the prospect will be moving towards a more favorable (psychological) state of mind, with greater readiness to respond favorably.

The three follow-up activities can be repeated at this stage, allowing the development of an even more refined list of prospects.

Conclusions

The financial counseling industry is undergoing rapid change. The traditional as well as newer sources of investment counseling--including insurance companies, banks, financial thrift institutions, investment firms and brokerage houses--are all vying for larger shares of the market. Understanding the needs, wants, and motivations of potential target markets as well as the trends in the industry paves the way of understanding the basis for potential demand for the industry. Those firms who understand and accommodate the target markets best will experience increased sales and market share.

Based upon our observations of the financial counseling industry, this paper sought to develop a number of propositions designed to improve the effectiveness of marketing activities by financial counselors. In addition, an action-oriented approach, the Sequential Screening and Refinement of Target Markets, was presented for the purpose of building a client base. There is, indeed, an acute need for future research in this area which will generate creative ideas for the financial counseling industry to effectively deal with their primary challenge--to generate sufficient demand for their services.

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Introduction

A major problem the service marketer faces is that the relevant research literature is laden with goods-related marketing guidelines with little attention given to services (a notable exception is Rathmell 1974). This state of affairs necessitates the selective borrowing of useful concepts and frameworks from the goods literature which are applicable to the marketing of services. Presently, a number of useful classification schemas exist in the literature pertaining to the marketing of goods which suggest important linkages between product characteristics, consumer's search patterns, and the development of marketing strategy guidelines (for example, see Copeland 1923; Miracle 1965; and Aspinwall 1973). The use of these basic classifications in a segmentation context is readily evidenced by their almost universal acceptance in the major marketing texts.

While the applicability of these classifications is generally well accepted in the goods literature, there is little discussion of the transferability of these schemas to the service sector. As a result, the primary purpose of the study is to gain some insight into the applicability of one type of classification method in the service sector. More specifically, this paper outlines and tests an empirical taxonomic approach to segmenting consumers in the service sector. The variable chosen for classification purposes is one that has received wide acceptance in the traditional goods marketing literature (see Copeland 1923; Bucklin 1963; Mayer, Mason and Gill, 1971) this being the concept of consumer search.

Search as a Basis for Classification

Consumer search refers to the processes and activities whereby consumers use internal and external sources of information to learn about the number of alternatives to the perceived problems, the characteristics and attributes of these alternatives, and their relative desirability (Engel et al. 1978). The process of consumer search is fundamental to the efficient operation of a competitively organized market economy. Bucklin states:

"If buyers fail to seek out alternative prices and, thereby, become ill informed, markets become segmented, prices rise, and consumer surpluses are transferred to the entrepreneurial sector. The value to the buyer of even a little information is striking." (Bucklin 1969)

Newman and Staelin (1972) and others (Engel et al. 1978; Newman 1976; Howard and Sheth 1969), note that a knowledge of searching behavior is fundamental to the understanding of buyer behavior and the planning of marketing programs. It is, therefore, not surprising that this concept has received considerable attention in the research literature.

One of the earliest and most used goods classification schemes in the literature is the one developed by Melvin Copeland (1923). Copeland utilized Charles Parlin's (Gardner 1944) original ideas on the division of women's

purchases into the categories of convenience, emergency, and shopping lines. Copeland develops and expands Parlin's terse analysis into the classic threefold classification (convenience, shopping, and specialty goods) based on consumer buying processes; or more specifically consumer search. The intuitive appeal of the logic of this typology has been lauded in the literature (Wills 1972; Bucklin 1963). Subsequent literature has expanded these concepts and noted the usefulness of shopping patterns as a primary segmentation criteria.

Classifications

Classification is the ordering of phenomena into groups of sets on the basis of their relationships; that is, of association by contiguity, similarity or both (Cullinan 1969). The construction of groups of sets may come first (a priori, or commonly known as typological construction) with the assignment of phenomena after the fact; or conversely, the ordering of phenomena may provide the basis for group construction (commonly known as empirical taxonomic classification). Important classification research of both types is found in all the social sciences (Cullinan 1969; Myers and Nicosia 1968; Tiryakian 1968). The importance of this research is emphasized by Myers and Nicosia:

"Man describes his environment by classifying-- by assigning meaning to objects, ideas, and people he encounters. Classifications enable him to observe and, thus, to work toward explanation and prediction. All knowledge rests on some form of classification; to classify is to begin to understand." (Myers and Nicosia 1968)

Tiryakian (1968) states that the general logic for classification construction requires that a number of methodological criterion be satisfied. These criterion are as follows:

1. The classification is comprehensive and mutually exclusive;
2. the dimension(s) which is (are) differentiated into types must be explicitly stated;
3. the dimension(s) must be of central importance for the purpose of the research;
4. criterion of fruitfulness - the typology may have heuristic significance in facilitating the discovery of new empirical entities;
5. criterion of parsimony - the fewest meaningful or significant major types to cover the largest number of observations.

Methodology

Statement of Hypotheses

Before discussing the data collection and analytical techniques utilized in the present study, it is necessary that the hypotheses on which this study is founded be explicitly stated. This study is based upon three major hypotheses which all specifically relate to the development of a valid and useful classification method of consumers in the service sector.

The three major hypotheses are as follows:

- H₁: There are consumer segments in the service sector based on search propensities which are internally consistent across independent samples.
- H₂: If internally consistent and separately identifiable search segments exist in the two independent samples, these matched segments are similar in both size and demographic makeup.
- H₃: There are significant differences across search segments on demographic characteristics.

Instrument Design

Services Selected for Study

The development of a survey instrument to collect the necessary data for a test of the proposed study posed some significant challenges. First, to insure that a wide variety of consumer's services would be selected which would accurately generate a range of responses (and to avoid a service specific taxonomy) on the search construct, a mini-field study was conducted. In this preliminary investigation, service establishments were surveyed in the geographical area of interest to identify services that varied on four dimensions found to be related to search; these being price, frequency of purchase, delivery characteristic, and Judd's (1964) service typology of owned, rented, and non-goods services (see Davis et al 1979). The eight services subsequently chosen for study are identified in [Table 1](#).

TABLE 1

SERVICES SELECTED FOR INCLUSION
IN THIS STUDY

Questionnaire Form	Service	Relative Frequency of Purchase	Price Level	Delivery Characteristic	Judd's Types
1	Dry Cleaner's Services	High	Low	Impersonal	Owned-Goods
1	Hairdresser's Services	High	Low	Personal	Non-Goods
1	Personal Auto Loan Services	Low	High	Impersonal	Rented-Goods
1	Dentist's Services	Low	Low	Personal	Non-Goods
2	Family Photographer's Services	Low	Low	Personal	Owned-Goods
2	Carpet Shampoo Rental Unit	Low	Low	Impersonal	Rented-Goods
2	Auto Repair Services	High	High	Impersonal	Owned-Goods
2	Gynecologist's Services	High	High	Personal	Non-Goods

Questionnaire Construction

The next concern became one of questionnaire length and its possible effects on response rate. As a result, two forms of the questionnaire were developed with identical scales, but with different services. The services chosen for Form 1 were a dry cleaner's services, a hairdresser's services, personal auto loan services, and a dentist's services (see [Table 1](#)). This allowed the researchers to obtain maximal amounts of information from two samples which could be used for replication purposes in this study.

The primary scales developed for investigation were for the search construct. The development of these scales proceeded in a stepwise fashion:

Step 1: Through an extensive search of the consumer behavior literature dealing with the shopping process, nine a priori dimensions of internal and external search were extracted. External search was defined as the process whereby the consumer uses sources of external information, such as mass media, personal sources and marketing-dominated sources, to learn about the number of alternative solutions to the perceived problem, the characteristics of these alternatives, and their relative desirability. Internal search was defined as the process whereby the consumer relies exclusively on information from past experiences and existing attitudes to identify and evaluate alternative solutions to the perceived problem, the characteristics of these alternatives, and their relative desirability (see Engel et al. 1978; Newman and Staelin 1972; Newman 1974; Claxton, Fry, and Portis 1974).

Step 2: These dimensions were rewritten in a services context in the form of belief statements for each of the eight services under study. Each statement was operationalized, using a five-point scale defined by the labels: Strongly Agree, Agree, Neither Agree nor Disagree, Disagree, and Strongly Disagree.

Step 3: The operationalized dimensions were submitted to a panel of judges drawn from the marketing academic community. The judges were asked to evaluate (a) the items in terms of their appropriateness in services context, and (b) to suggest possible changes that would make the dimensions more appropriate in a service context.

Step 4: These dimensions were submitted to a pretest sample where the respondents were asked to comment on any inapplicable terms and questions contained in the scales.

Sample and Data Collection

Since the research included a large array of service categorizations, two questionnaires were designed, each of which included four of the services. Seven hundred households were selected by utilizing a systematic two-stage random area sample in a midwestern community of 200,000 population. The two versions of the questionnaire were then randomly assigned to households. Questionnaires were delivered to these households by a group of interviewers. To insure adequate sample response and minimize complexities in the analysis, only female respondents were used in the study. The respondents were asked to take ten minutes of their time to fill out the survey and to then return it in a postage-paid envelope provided in the questionnaire packet. This procedure resulted in a total of 272 usable questionnaires and two independent sub-samples of 135 and 137, respectively.

Analysis and Results

The first step in the identification of search-prone segments was the development of summated indices representing the search constructs outlined above. This procedure resulted in the construction of four overall search scores for every respondent, each representing

a search propensity of that individual for each of the four services she was queried on. Again, the services chosen for study on both forms of the questionnaire were intended to be maximally different so as to generate as much variance as possible in order to insure a rigorous test of this taxonomic approach in the service sector.

First, in order to test Hypothesis 1 (there are consumer segments in the service sector based on search propensities which are internally consistent across independent samples), the subjects in each sample were grouped using the Howard-Harris clustering algorithm with the four search indices being the grouping variates. This particular clustering algorithm establishes group membership by sequentially partitioning subjects into an increasing number based upon the homogeneity of subject variable means. The variables which influence the grouping sequence are selected by the amount of variance they contribute (largest, larger, etc.). The grouping of subjects is completed when the within group sum of squared deviations, summed over all clusters (λ) is minimized. Since increasing the number of groups normally leads to reductions in λ , an elbow or steady slope criterion is generally used to indicate where further partitioning of subjects does little to further minimize the within to total sum of squared deviations.

Table 2 and Table 3 show the results of the Howard-Harris clustering procedure using the overall search measures as the clustering variates. The "elbow" criterion revealed three groups in each sample. To check the internal consistency of the search prone service segments, a set of classification rules was derived by means of multiple discriminant analysis (Calantone and Sawyer, 1978).

The discriminant analysis was set up with cluster membership as the dependent variable and search as the independent variable. Each split half was used to derive a set of discriminant functions, and the other split half was used to check the correctness of the classification procedure. The procedure correctly classified 97.81 percent correctly in Sample 1 and 94.81 percent correctly in Sample 2. Thus, one can derive a set of equations which will correctly classify the respondents into the search prone segments to which they belong, and these equations are similar for independent samples. Therefore, there is strong support for H_1 about the internal consistency of a chosen search prone segment.

TABLE 2

RESULTS OF HOWARD HARRIS CLUSTERING ALGORITHM
ACROSS CONSUMERS ON SEARCH PROPENSITIES
(SAMPLE 1, N = 137)

Service	Cluster		
	1 Mean (Variance)	2 Mean (Variance)	3 Mean (Variance)
Hairdresser	20.83 (20.09)	26.11 (10.59)	32.45 (11.26)
Dry Cleaner	17.74 (19.14)	23.92 (16.71)	28.42 (29.25)
Personal Auto Loan	24.57 (34.49)	32.56 (18.39)	36.97 (16.23)
Dentist	19.89	25.89	31.52
	n = 35	n = 71	n = 31

TABLE 3

RESULTS OF HOWARD-HARRIS CLUSTERING ALGORITHM
ACROSS CONSUMERS ON SEARCH PROPENSITIES
(Sample 2, N = 135)

Service	Cluster		
	1 Mean (Variance)	2 Mean (Variance)	3 Mean (Variance)
Carpet Shampoo	19.05 (16.58)	27.23 (14.79)	28.36 (23.84)
Auto Maintenance	20.07 (26.75)	26.90 (11.31)	31.17 (18.89)
Gynecologist	21.86 (27.59)	24.67 (12.05)	30.78 (8.69)
Photographer	23.89 (28.94)	28.40 (15.96)	33.98 (14.09)
	n = 42	n = 57	n = 36

Given the acceptance of Hypothesis 1; i.e., there are internally consistent consumer segments in the service sector based on search, a chi-square test of association was computed between sample type and cluster membership on sample sizes. The chi-square value $\chi^2 = 2.53$, $dF = 2$, $p > .10$ (Table 4) indicates the observed differences were not statistically significant; thus, the segment sizes were not significantly different. Table 5 summarizes the significant χ^2 values for the equivalent clusters in Sample 1 and Sample 2 across the demographic characteristics of age, education, occupation, household status, and income of respondents. There was only one significant difference in all fifteen tests of cluster similarity, this being on age of respondents in Cluster 1 across Samples 1 and 2.

TABLE 4

CHI-SQUARE TEST OF ASSOCIATION BETWEEN SAMPLE TYPE
AND CLUSTER MEMBERSHIP ON SAMPLE SIZE

Sample	Cluster			
	1	2	3	
1	35	71	31	137
2	42	57	36	135
	77	128	67	

$$\chi^2 = 2.53, dF = 2, p > .10$$

However, this one significant difference is not interpretable due to the chance criterion of running several χ^2 analyses over a set of measures. Therefore, the researchers must also accept H_2 and argue that the matched clusters are indeed similar in terms of size and demography.

TABLE 5

SUMMARY TABLE OF SIGNIFICANT CHI-SQUARES (χ^2)
COMPARING EQUIVALENT CLUSTERS IN SAMPLES 1 AND 2
ACROSS DEMOGRAPHIC CHARACTERISTICS

	Demographic			
	Age	Educ	Occup Status	Income
Cluster 1	.01	N.S.	N.S.	N.S.
Cluster 2	N.S.	N.S.	N.S.	N.S.
Cluster 3	N.S.	N.S.	N.S.	N.S.

The final hypothesis to be tested is that there are significant differences across search segments on the five demographic characteristics of interest. However, the results displayed in Table 6 indicate that there are no discernible differences across the search segments on the demographic characteristics. There were only two cases in Sample 1 (age and household status) where statistically ($p < .05$) significant differences were found to exist. These differences were not replicated in Sample 2, therefore H_3 must be rejected and one must conclude that the search segments are indeed similar in demography.

TABLE 6

SUMMARY TABLE OF SIGNIFICANT CHI-SQUARE (χ^2)
ACROSS CLUSTERS IN SAMPLES 1 AND 2 FOR EACH
DEMOGRAPHIC VARIABLE

Demographic	Sample	
	1	2
Age	.05	N.S.
Education	N.S.	N.S.
Occupation	N.S.	N.S.
Household	.05	N.S.
Income	N.S.	N.S.

N.S. $p > .05$

Conclusions and Implications

This paper demonstrated a methodology for segmenting the service sector. Although search is only one possible means for accomplishing this purpose, the relevant literature suggests that it is indeed a viable one. The basic purposes of and methods of classification were then briefly discussed with this followed by an explication of the methodological criteria for sound classification construction. Hypotheses for testing the consistency and significance of the proposed taxonomic classification were then posited and empirically tested in this study.

Overall, it could be argued the taxonomic classification developed met four of the five criteria outlined by Tiryakian, these being criterion (1), (2), (3) and (5). Specifically, criterion (1) is satisfied by the fact that each and every service consumer can be classified in only one of the three types identified (i.e., a high, medium, or low search propensity individual). Criterion (2) and (3) are satisfied because the construct of search has been explicitly stated and has been shown (through past literature) to be of central

importance to the research at hand. Finally, criterion (5) appears to be satisfied because of (a) the nature of the clustering routine (hierarchical with the goal of explaining the phenomenon of interest in as few groups as possible) and (b) the acceptance of Hypotheses 1 and 2. Hypotheses 1 and 2 suggest that internally consistent classifications have been identified in separate samples that are characteristically similar in terms of both size and demography.

Tiryakian's criterion (4) met with little success in this endeavor. Hypothesis 3 was rejected; i.e., the search segments isolated were indeed similar in terms of the demographic characteristics of age, education, occupation, household status, and income. This test, although limited at best for a test of fruitfulness, dealt with the question of relevance of the taxonomy in the context of managerial decision-making. Ideally, the service marketing manager would like to have distinct market segments with unique characteristics who can be easily identified and reached for purposes of marketing program formulation. Demographically, these segments were not distinct, which is counter to the above objective.

Therefore, while this taxonomic approach appeared to generate a sound classification scheme, the fruitfulness criterion needs to be substantially tested in the future. Some possible variables which need to be investigated using this schema would be the concept of perceived risk, psychographic variables, motivational concerns, other demographic variables, and the range of variables typically associated as segmentation dimensions (i.e., benefits sought, usage patterns, marketing factors, etc.). Overall, further study needs to be attempted in the application and transference of both concepts and methodologies from the goods sector to the service sector.

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UTILIZATION OF SEGMENTAL ANALYSIS AND PERFORMANCE MEASURES

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Abstract

A mail survey of manufacturers' marketing managers is used to examine the utilization of various segmental bases in marketing control and to examine the performance bases used to evaluate the segments. Respondents were found to rely most heavily on sales volume measures as opposed to profitability measures of performance.

Introduction

Marketing expenditures have been expanding in the past decade. Accompanying this increase has been a need for better data on marketing performance. In most enterprises, a small portion of the territories, customers, orders or products is responsible for the bulk of sales and profits (Wolfe, 1962). Nevertheless, certain territories, customers, or products may be receiving a disproportionate share of financial resources and of management time, possibly to the detriment of more profitable areas. In one manufacturing firm, for instance, 46 percent of the accounts were so unprofitable that they were responsible for a net loss amounting to 44 percent of the company's total net profits (Sevin, 1965, p.1). The possibility for misallocation of resources in cases such as this is immense.

Marketing control is particularly vital in a time when costs are escalating, inflation is present and environments are changing; yet, in spite of the growing need for improved marketing control, many companies use less-than-satisfactory procedures for controlling their marketing effort (Kotler, 1980, p. 628). This situation exists because data for measuring the performance of distinct segments of a business may not have been properly kept. Too often, segments have been examined in terms of sales volume alone. Yet, as the illustration above indicates, not every dollar of sales returns the same percentage of profit. A method that can be used by marketers to improve effective decision-making is segmental analysis (Mossman, 1974; Beik, 1973). A segment is a component of a business that can be measured in terms of costs, revenues, or profitability. Examples of segments in which marketing performance is evaluated include individual products, customers, salespeople, geographic areas, and order sizes. Groupings of categories may also be used in evaluating marketing performance (Jackson, 1980).

The performance of each segment may be evaluated based on measures such as the following:

Sales volume in dollars or units, sales volume as compared to a predetermined objective or quota, sales volume as compared to previous years' sales, expenses, contribution to profit (sales less all direct costs), net profit (sales less direct and indirect costs), and return on assets committed to the segment.

Despite the importance of segmental analysis and marketing control, little empirical evidence exists concerning the types of segments that businesses actually utilize when analyzing performance or the measures that they use for evaluating performance.

The one study that did investigate the use of cost and profitability analysis is almost ten years old and examined only segments utilized for evaluating promotional expenditures. ("Report by the Committee on Cost and Profitability Analysis for Marketing"). That report found that the most frequently utilized segments, in order of magnitude, were product lines, customers, sales territories, salespeople and order sizes. Furthermore, it was found that more firms used full costing than direct costing. With the exception of this single study, however, little is known of the measures currently used to evaluate the marketing performance of firms.

The Study

The purpose of this study is to identify segments in which performance is actually being measured and the measures that are being used. In order to examine these areas, a survey was conducted among manufacturing firms in Arizona. A questionnaire was first developed to examine the two broad areas of interest: the extent to which segmental analysis is used, and the measures used to evaluate segment performance. The following segments were examined: products, customers, sales territories, geographical areas, and order sizes. For each segment, respondents were asked if they specifically evaluated performance in that area; and if so, which measures of performance were utilized. Care was taken to emphasize that the information reported should reflect measures actually used, not merely those which should be used.

The performance measures used were:

Sales volume, sales volume as compared to a predetermined quota, sales volume as compared to previous years' sales, expenses incurred, contribution to profit (sales less direct costs), net profit (sales less direct costs less allocated indirect costs), and return on assets committed.

The category of "other" was included for the recording of responses that might not have been suggested on the questionnaire. In addition, several corporate demographic questions were included in order to describe the sample.

The questionnaire and self-addressed stamped return envelope were mailed to a random sample of marketing executives chosen from the Directory of Arizona Manufacturers. The study was limited to manufacturers in order to provide a more homogeneous set of performance measures for the respondents. A total of 211 questionnaires were mailed out.

Results

Fifty-seven questionnaires were returned for a response rate of 27 percent; of these forty-eight were usable. Average dollar sales volume of the respondents was almost \$25 million and ranged from under \$500,000 to over \$100 million. Sixty-five percent of the respondents were industrial manufacturers and the remainder produced consumer goods.

Analysis by Products

The first area explored was the analysis of the performance of individual products or product lines. Eighty-five percent of the respondents indicated that they analyzed the performance of products. Measures used by those firms that did evaluate the performance of products are shown in **Table 1**.

TABLE 1
PERCENTAGE OF FIRMS EVALUATING PRODUCT PERFORMANCE USING VARIOUS BASES*

Bases	Percentage
Sales volume by product (units or dollars)	88
Sales volume as compared to a predetermined quota by product	44
Sales volume as compared to previous years	71
Expenses incurred by product	34
Contribution of product to profit (sales less direct costs)	68
Net profit of product (sales less direct costs less indirect costs allocated)	63
Return on assets committed to the product	37

*N = 41
Source: Survey by the authors.

As shown in the table, sales volume is the most typical measure used for evaluating performance, with sales volume as compared to previous years as the next most frequently used measure. Two measures of profitability were also ranked high, the contribution of the product to profits and the net profit of the product. All other measures were mentioned by less than 50 percent of the respondents evaluating products. Interestingly the least utilized measure was the expense category. It appears that more firms are interested in sales analyses or in the bottom line and fewer firms really analyze expenses separately.

Analysis by Customer

The next area evaluated was the analysis of customer performance in which sales, profits or other measures are used to examine the firm's performance in serving various groups of customers. When asked if they evaluated the performance of customers or groups of customers, 63 percent of the respondents indicated that they did analyze the performance of customers. Measures used by those thirty firms who evaluated the performance of customers are shown in **Table 2**.

TABLE 2

PERCENTAGE OF FIRMS EVALUATING CUSTOMER PERFORMANCE USING VARIOUS BASES*

Bases	Percentage
Sales volume by customer (units or dollars)	100
Sales volume as compared to a predetermined objective set for the customer	17
Sales volume as compared to previous years	73
Expenses of carrying the customer	50
Contribution of customer to profit (sales less direct costs)	47
Net profit of customer (sales less direct costs less indirect costs allocated)	40
Return on assets committed to the customer	7

*N = 30
Source: Survey by the authors.

Sales volume is clearly the most common base for evaluating customers and was used by all the firms that evaluated customers. Sales volume as compared to previous years' sales was also widely utilized. Customer expenses were used by half of the respondents to evaluate customers. Profitability measures were also used by some respondents, but to a lesser degree.

Analysis of Salespeople

Analysis of individual salespeople was the next segment evaluated; 79 percent of the respondents indicated that they analyzed the performance of individual salespeople. Of the thirty-eight firms that did evaluate the performance of individual salespeople, an overwhelming percentage evaluated them based upon sales volume, as shown in **Table 3**.

TABLE 3

PERCENTAGE OF FIRMS EVALUATING SALESPEOPLE USING VARIOUS BASES*

Bases	Percentage
Sales volume by salesperson (units or dollars)	95
Sales volume as compared to a predetermined quota set for the salesperson	55
Sales volume as compared to previous years	66
Expenses salesperson incurs to obtain sales	63
Contribution of each salesperson to profit (sales less direct costs)	32
Net profit of salesperson (sales less direct costs less indirect costs allocated)	24
Return on assets committed to each salesperson	8

*N = 38
Source: Survey by the authors.

TABLE 5

PERCENTAGE OF FIRMS EVALUATING
PERFORMANCE OF ORDER SIZES BY VARIOUS BASES*

Bases	Percentage
Sales volume by order size (units or dollars)	93
Sales volume as compared to a predeter- mined quota set for each order size . .	13
Sales volume as compared to previous years.	52
Expenses incurred in relation to size of order	73
Contribution of a particular order size to profit (sales less direct costs) . .	47
Net profit of each order size (sales less direct costs less indirect costs) . . .	60
Return on assets committed to a particular order size.	27

*N = 15

Source: Survey by the authors.

The next most popular basis for evaluating performance seems to be expenses incurred in relationship to the size of the order. Interestingly, net profit of each order size is utilized by 60 percent of the firms doing any analyses in this area. This represents the largest percentage of respondents in any segment analyzed in terms of the use of a profitability measure. It is interesting to note, however, that only 47 percent of the respondents evaluated order size based upon contribution to profit while 68 percent of the respondents evaluated products using contribution to profit, despite the fact that order size may be one of the more significant determinants of direct marketing expense.

Summary and Conclusions

The most popular segment for evaluating marketing performance was by type of product (utilized by 85 percent of the respondents); this was followed by analysis of salespeople (79 percent); customers (63 percent); geographic areas (60 percent); and order sizes (31 percent). Multiple segments seem to be evaluated by most firms; more than 60 percent of the respondents evaluated all segments except order sizes. However, most firms are not evaluating all segments, as is evidenced by the fact that only 31 percent of the firms evaluated order sizes. Many firms seem to be missing an opportunity to control a very manageable part of their business when they fail to evaluate the sales and profitability of various sized orders, particularly during a time of rapidly escalating distribution costs. In addition, analysis by order size when used in combination with other segments can provide valuable information as to sources of variation in order size. Various sized orders may be attributed to customer types, salesperson performance, product types or categories, or geographic area performance.

In terms of the measures used to evaluate segmental performance, the most widely used measure by far was sales volume (used on an average by 93 percent of the respondents who indicated they evaluated individual segments); this was followed by sales volume as compared to previous years' sales (69 percent). Other measures experienced dramatically less use with expenses being used by 52 percent of the respondents; contribution to profit (46 percent); net profit (44 percent); sales volume as compared to a quota (38 percent); and return on assets committed to the segment (20 percent).

The next most popular measure was sales volume as compared to previous years sales. This was followed closely by analysis of sales expenses by salespeople and sales volume as compared to a predetermined quota. Despite the literature stressing the need to evaluate the profitability of salespeople a substantial decline was shown in the percentage of firms reporting use of any profitability figures when evaluating salespeople (Goodman, 1970). Evidently the call for using profitability measures to evaluate salespeople has not been widely accepted by manufacturing firms. Two possible explanations for the respondents' failure to evaluate salesperson profitability may be the lack of available data, or the lack of internally agreed upon methods for allocating expenses.

Analysis of Geographic Areas

The fourth area explored was the evaluation of marketing performance with respect to the contribution of individual geographic areas such as states, regions, zip codes and the like (Lewis, 1970). Sixty percent of the respondents indicated that they did analyze performance on a geographic basis. Table 4 indicates that of those firms analyzing performance on a geographic basis, the most prevalent method of analysis was by sales volume of each area.

TABLE 4

PERCENTAGE OF FIRMS EVALUATING
GEOGRAPHIC AREAS BY VARIOUS BASES*

Bases	Percentage
Sales volume by area (units or dollars)	93
Sales volume as compared to a predeter- mined quota set for the area.	41
Sales volume as compared to previous years.	76
Expenses incurred for sales to a particular area	55
Contribution of a particular area to profit (sales less direct costs) . .	34
Net profit of each area (sales less direct costs less indirect costs allocated) . .	38
Return on assets committed to a particular area	21

*N = 29

Source: Survey by the authors.

Next to sales volume, the two most popular measures were sales volume as compared to previous years' sales and analysis of expenses of each geographic area. Again, the use of profitability measures seems to drop off substantially. Thus, firms do not seem to go much further than sales analysis when evaluating geographic areas.

Analysis of Order Sizes

The last area explored in the research was the performance of various order sizes such as the analysis of the performance of large orders versus small orders (Bleckle, 1957). This is a natural type of analysis and is important for determining alternative forms of shipping, quantity discounts, differentiated sales commission rates, etc. Only 31 percent of the respondents indicated that they performed such analyses. As shown in Table 5, sales volume by order size was the most popular measure of performance.

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As would be expected, sales volume was the most prevalent measure utilized to evaluate the performance of segments. Surprisingly, only 25 percent of firms evaluate segment sales performance against a predetermined objective or quota. In an era of increased accountability, one would expect this percentage to be higher. Since no longitudinal data are available, it is difficult to determine whether any progress has been made in the last few years in using profitability measures rather than volume to evaluate segmental performance. The marketing concept clearly encourages the consideration of profitability when evaluating private sector marketing decisions. Perhaps our practice is not as well developed as our philosophy.

On the bright side, firms do seem to be using multiple measures of performance of the segments which they evaluate. Use of multiple measures should make firms more cognizant of the actual performance of each segment since they can evaluate several behaviors simultaneously.

Given the small sample, a need definitely exists for more research in this area. Hopefully, this study will identify directions for further research and suggest areas where firms should become more active in marketing control. If the sample in this study is representative of the larger population of manufacturing firms, then marketers have a long way to go in the area of control--especially in the adoption of profit-oriented reporting systems for segmental analysis.

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CONSUMER'S SATISFACTION/DISSATISFACTION
WITH A MEMBERSHIP-BASED SERVICE ORGANIZATION

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ABSTRACT

This study examines consumer's satisfaction/dissatisfaction with a membership-based service organization. It found that initial motivations in getting a membership is significantly related to satisfaction. Also, it found a correlation between satisfaction and a display of certain behavior as a member such as carrying a membership bumper sticker on his car.

INTRODUCTION

It has been argued that consumer behavior differs significantly in terms of evaluating the quality of services versus products. Consumers do not have the same clearly defined and well operationalized criteria to judge service quality as they do to judge product quality. This is because services are by definition intangible, thus there is greater room for "subjective" (i.e., unoperationalized) judgment on a consumer's part. All bank customers, for example, may concur with the importance of "services" at the teller windows, yet the teller services could mean quite different things to different customers. They may mean courtesy to some while efficiency to others. Further, "courtesy" may be operationally defined in a number of different ways such as "smile," "greetings" and/or "tone of voice," which in turn are based on very subjective judgments. As a result, evaluating the quality of services is often made differently from that of products.(4)

Unlike the evaluation of product/service quality, on the other hand, "satisfaction" has been measured in most instances rather uniformly with the same measurement instrument common to both services and products as evidenced in the study by Day, et al.(1)

Using the 4-point scale, Day, et al. reported that extreme satisfaction or dissatisfaction was more often associated with high price, "big ticket" products such as automobiles and washers while it was least often associated with low priced, non-durable products. Interestingly, services were between high priced durables and low priced non-durable products in terms of satisfaction.(1) The researchers reasoned that high priced durable products were very important shopping decisions to consumers while low priced non-durable products were not. Similarly, they reasoned that services in general fell between high priced durable and low priced non-durable products with respect to their importance, though there were some exceptions such as legal and medical services.

Such a generalization of satisfaction with both product and service categories, however, may not be always warranted. Day and Bodur reported widely varying satisfaction scores over 73 categories of various services.(2) They found from 49% of respondents being dissatisfied with auto repairs to only 6% of them dissatisfied with savings and loan associations. In summary, it seems fair to conclude that satisfaction scores are item specific, be it a product or service.

Given this background, this study examines customer satisfaction with automobile club services, a unique category of services in that there are two important components in automobile club services; first, auto club membership represents one's state of belonging to a club, not consumption or usage of a specific service. Another

component is usage of a specific auto club service(s) such as emergency road service or travel service. The auto club membership resembles a type of insurance in that a consumer knows benefit can accrue to him if and when club services such as emergency road services are needed and used.

In this context, this study keys itself to satisfaction/dissatisfaction with an auto club membership rather than with its specific service. To find who are satisfied members and why they are satisfied seems to provide useful managerial information for membership-based organizations in general and auto clubs more specifically. This study probes the following hypotheses.

HYPOTHESES

Hypothesis 1: Those who are satisfied with the auto club membership are older, less affluent and less educated than those who are dissatisfied members.

It has been reported that those who take action on their dissatisfaction in terms of complaining tend to be younger, more affluent, better educated, and more politically active than those who do relatively little complaining.(3,5) In reality, a threshold level for complaining action on dissatisfaction may vary widely among individuals. If it is more or less constant among individuals, however, it seems reasonable to hypothesize that the satisfied members are older, less affluent and less educated than the dissatisfied members.¹ As for age, to the extent to which age is reflective of the length of membership, age appears to be related to satisfaction due in part to the fact that extremely dissatisfied members would likely leave the auto club, hence those who have been with the club tend to be at least not dissatisfied with the membership.

As for affluence, affluent members may be less satisfied with the auto club membership because they could afford a wider range of alternative services in the marketplace than less affluent members. They may be quite accustomed to the excellent services provided by many exclusive membership-based organizations such as country clubs to which they can afford to belong. By the very virtue of its broad membership base, the auto club may have to provide as good quality services as the exclusive membership-based organizations. Lastly, education is also hypothesized as being related to satisfaction, for it may yield differential expectations, thus differential satisfaction. In short, the better educated may have higher expectations, hence they would be less satisfied with the membership.

Hypothesis 2: Those who joined the auto club because of family/friends influences to be less satisfied with the auto club membership than those who did the same for service-related reasons.

¹Whether or not the satisfied members are politically active was not considered in this study. An analysis of psychographics as related to satisfaction will be made in a separate research.

In the preliminary research, a large proportion of the club members indicated the primary reason of joining the auto club was the influence of family/friends. It was then hypothesized that those members who joined the club due in main to family/friends influences would be less satisfied with the auto club membership than those who joined for other reasons, such as good towing and travel services. The former (those who joined for family/friends influences) was thought to have vague and often too high expectations of the auto club membership, while the latter (those who joined for other reasons) was thought to have joined after they carefully examined the cost-benefit of club services. It is fair to infer that the friends and family members who influenced others to join the auto club were likely to be satisfied members themselves, which in turn tend to help raise others' expectations of the membership exceedingly high.

Hypothesis 3: Those who are more aware of various club services tend to be more satisfied with the club membership than those who are not.

Those who are well aware and informed of various club services are thought to have more realistic expectations about the club services, thus they tend to be more satisfied with the club membership than those who are not.

Hypothesis 4: Those who have favorable opinions of the services they have at least once used tend to be more satisfied with the club membership than those who have not used any services.

Hypothesis 4 posits a rather obvious relationship, thus its real intention is to determine the degree of relationship in members' minds between satisfaction with the membership per se and evaluation of the club's services. As discussed at the outset of this paper, the very fact that the membership makes one eligible to use various club services as well as the fact that it would make him feel secure, for example, about driving a car because of the emergency road service protection seems to warrant differentiating the two variables from each other, namely, satisfaction with the membership versus evaluation of the services.

Hypothesis 5: Those whose problems with the auto club were properly and expeditiously solved tend to be more satisfied with the club membership than those whose problems were not.

The auto club receives a large number of complaints, for example, about VISA charge card, auto insurance, travel service, and road service. Hence, members whose problems were properly and expeditiously solved tend to be more satisfied. Even without any problems encountered before, those who think their problems would be promptly dealt with are also more likely to be satisfied. In other words, those who believe their auto club to maintain a "We Care" attitude toward them are more satisfied than those who don't.

Hypothesis 6: Those who are satisfied with the club membership are more likely to display overt behavior such as putting membership stickers on a car bumper than those who are not.

A cause-effect relationship between satisfaction and such overt behavior as putting a bumper sticker and carrying a membership card is moot, for satisfaction affects and is affected by overt behavior. The goal is to discover whether or not and to what extent the relationship between satisfaction and overt behavior exists.

Such overt behavior would enhance club membership identification. This is especially true since club membership means a matter of "belonging" rather than the usage of specific services. The behavior referred to here thus could be construed as "tangibilization" of the membership.

Hypothesis 7: Those who are satisfied with the club membership express a higher level of membership renewal intention than those who are not.

This last hypothesis deals with a well-known relationship between satisfaction and membership renewal intention. The membership renewal is likely to be affected by a number of variables including competitive environment, an increase in the membership fee and reassessment of one's need for the club membership. In addition to these variables, one's intention to renew the membership also seems to be directly influenced by whether or not he is satisfied with the auto club.

METHODOLOGY

In primary data collection, one of the large automobile clubs in the Midwest has cooperated with the authors for the dual purpose of its own proprietary research and the present study. This automobile club has a state-wide operation with approximately 1.2 million members.

A random sample of 3600 auto club members was stratified according to urban-rural geographies within a state. This stratification was necessary since the auto club has a quite different type of operational network in the urban versus rural areas. During the first week of April, 1981, four-page long questionnaires were mailed out, which were followed by reminder notes a week later. They disclosed the identity of the auto club and the purpose of the study. 789 out of 831 responses returned were usable, which resulted in 21.9 percent response rate.

Key questions involved in the hypothesis testing were overall satisfaction with the auto club membership and one's feeling of belongingness to the auto club. Most of these questions used a modified 3-point Likert scale, namely the response alternatives being either agree, neither, or disagree.

The data collection was terminated four weeks after the initial questionnaire mail-out. The usable sample of 789 was validated against the auto club member population with respect to age and income; it was then weighted to reflect the actual population.

ANALYSIS

According to responses to a question about overall satisfaction with the auto club membership, 73.3 percent (578) of the respondents indicated satisfaction, while 4.3 percent (34) of them reported dissatisfaction and 19.5 percent (154) said "neither."² The response to this question provides a pivot for testing the hypotheses in this study.

Concerning Hypothesis 1, data in [Table 1](#) revealed significant difference with respect to age, namely younger members tend to be less satisfied with the auto club membership than older members. Also, data in [Table 2](#) showed a curvilinear relationship where those with college degrees were less satisfied than those with either more than or less than a college degree. With respect

² 2.9% (23) of the respondents did not answer the question.

to income, it was found that income was not related to satisfaction. This result could be explained by the fact that the annual membership fee³ accounts for a smaller proportion of income among affluent (higher income earning) members than among less affluent members. Affluent members may therefore, have fewer expectations, and they may be less likely to be dissatisfied with the auto club membership than less affluent members. If this is the case, such tendency would offset the relationship assumed in Hypothesis 1. That is, affluent members would be less satisfied with the auto club membership because they could afford a wider range of alternatives in the marketplace than less affluent members.

Hypothesis 2 posited a relationship between the reasons for joining the auto club and satisfaction. Data in **Table 3** clearly support the present hypothesis. For example, 93.0 percent of the respondents who indicated the primary reason for joining was the fact that the club offered the "best services" were satisfied with the club membership. On the other hand, 73.3 percent of those who joined the club because of the family influence were satisfied.

TABLE 1 - Relationship Between Age and Satisfaction with the Membership¹

	Age			
	18-24	25-34	35-49	50+ Over
Satisfied	67.4%	74.3%	76.0%	88.1%
Neither	26.9%	21.8%	19.2%	9.5%
Dissatisfied	5.7%	3.9%	4.8%	2.4%
Base	(264)	(280)	(125)	(105)

¹Chi-square test is significant at 1%.

TABLE 2 - Relationship Between Education and Satisfaction with the Membership¹

	Age				
	High		Some College	College Degree	Grad. Work
11 yrs. School or less					
Satisfied	84.9%	77.2%	72.1%	65.5%	74.3%
Neither	12.4%	19.2%	23.0%	28.3%	22.8%
Dissatisfied	2.7%	3.6%	4.9%	6.2%	3.0%
Base	(73)	(193)	(265)	(145)	(101)

¹Chi-square test is significant at 1%.

TABLE 3 - Relationship Between Reasons for Joining the Auto Club and Satisfaction with the Membership¹

	Reasons for Joining the Auto Club					
	Best Services	Clubs Variety	Friends of Services	In- fluence	Family In- fluence	Auto Insurance
Satisfied	93.0%	87.7%	85.1%	81.1%	73.3%	68.4%
Neither	7.0%	12.3%	13.2%	17.0%	22.3%	25.3%
Dissatisfied	0.0%	0.0%	1.7%	1.9%	4.3%	6.3%
Base ²	(171)	(244)	(288)	(106)	(386)	(237)

¹Chi-square test is significant at 5%.

²Multiple responses.

³The annual membership fee is \$25.

TABLE 4 - Relationship Between Number of Services Members Are Aware of and Satisfaction with the Membership¹

	Number of Services Members Are Aware Of		
	6 or Less Services	7 to 9 Services	10 or More Services
Satisfied	74.3%	70.9%	81.4%
Neither	20.4%	25.1%	15.0%
Dissatisfied	5.3%	4.0%	5.6%
Base	(269)	(247)	(247)

¹Chi-square test is significant at 5%

TABLE 5 - Relationship Between Evaluation of Auto Club Services and Satisfaction with the Membership¹

	Evaluation of Club Services			
	Good	So-So	Poor	Never Used
Satisfied	85.7%	42.3%	20.0%	56.4%
Neither	13.4%	47.2%	6.9%	40.4%
Dissatisfied	.9%	10.5%	73.3%	3.2%
Base	(540)	(142)	(15)	(92)

¹Chi-square test is significant at 1%.

TABLE 6 - Relationship Between Problem Resolution and Satisfaction with the Membership¹

	Problem Resolution			Problems Never Encountered
	Well Handled	So-So	Poorly Handled	
Satisfied	87.3%	63.8%	41.7%	69.2%
Neither	11.8%	32.2%	34.8%	27.4%
Dissatisfied	0.9%	4.0%	23.6%	3.4%
Base	(331)	(149)	(72)	(237)

¹Chi-square test is significant at 1%

This seems to imply that "passive" reasons for joining the club such as "family/friend influence" may lend themselves to rather vague (and if anything, perhaps extremely high) expectations of the membership. In short, the members who joined for the passive reasons are not as satisfied as those who did the same for more "active" reasons such as the quality and variety of club services and club reputation. The service related reasons were labeled as "active" ones since those who joined for them sought and evaluated the information about the club services. They did not want for someone to tell them about the club. It was inferred that those "friends and family members" who influence others to join the auto club tended to be satisfied members themselves. Hence, they might help raise others' expectations quite high.

Two anomalous findings need to be mentioned with the data in **Table 3**. First, the "club's reputation" was cited by a high proportion of satisfied members as a primary reason to join the auto club. It is not directly related to the club services. Hence, it was not further considered in the present hypothesis testings. Secondly, the data showed that those who joined the auto club for its auto insurance were least satisfied. Since auto insurance was one of the key club services, this finding was clearly an anomaly to the above conclusions on hypothesis-testing. Evidently, the members' expectations of the auto insurance was not fully met.

Hypothesis 3 postulated a linear relationship between

awareness of club services and satisfaction, that is, the more aware, the more satisfied. Data in **Table 4** indicate those who are aware of 10 or more services are more likely to be satisfied than those who are aware of less than 10 services. Further, the data show those who are aware of 6 or fewer services are slightly (but not statistically significantly) more satisfied than those who are aware of 7 to 9 services. Such a curvilinear relationship, therefore, support only partially the linear relationship assumed in this hypothesis between awareness and satisfaction.

Hypothesis 4 addressed rather conventional wisdom of a positive linear relationship between one's evaluation of the club services and his satisfaction with the membership. Data in **Table 5** unequivocally proved the hypothesis to be case. Beyond the hypothesis testing, however, a couple of points should be noted. First, even when members do not evaluate club services to be good, i.e., either "so-so" or "poor," a surprisingly large proportion of them still expressed their satisfaction with the membership. For example, 42.3% of the members who evaluated the club services to be so-so still expressed their satisfaction with the club membership per se. It is concluded from the results that the membership means more than a sum of the club services in the members' minds. It is analogous to the assurance offered by emergency road service in making its members feel secure while driving a car. Additionally, **Table 5** shows that 56.4 percent of those who have never used even a single club service reported their satisfaction with the club membership. This finding further substantiates the point that membership is worthwhile in and of itself to members regardless of whether a particular service is used or not. In short, satisfaction with the membership is not necessarily predicated on the evaluation of specific services as such.

Hypothesis 5 concerned itself with one of the most important aspects of any service industry, namely, a resolution of problems customers encounter. Data in **Table 6** clearly supported this hypothesis. Less than one percent of the members whose problems were handled well expressed their dissatisfaction with the membership whereas 23.6 percent of those whose problems were poorly handled were dissatisfied. Certainly, in the first instance, the auto club must deliver the best possible services to its members. A failure to do so would cause overall dissatisfaction with the membership as demonstrated in the preceding Hypothesis 4. Yet, in reality a satisfactory delivery may not always be possible. Then, the auto club must guarantee the satisfactory handling and resolving of its members' problems, otherwise, a large number of dissatisfied members would result from this. In this sense, problem resolutions become a critical, if not last, battleground.

Hypotheses 3,4 and 5 above all dealt with members' attitudes toward the club services. On the other hand, Hypothesis 6 addressed a possible relationship between members' satisfaction with the membership and their tendency to display overt behavior, namely, the notion of "tangibilizing" the membership by, for example, placing a membership bumper sticker on his car. Data in **Tables 7 and 8** confirm this hypothesis to be the case. Those who are satisfied with the membership are far more likely to have placed a club membership bumper sticker on their cars than the latter. Here, a word of caution is in order in terms of a cause-effect relationship. It is not clear which causal relationship is correct, either satisfied members are likely to display the aforementioned behavior or those who display the behavior tend to be more satisfied. All one can conclude is that there is a significant relationship between satisfaction and overt behaviors which "tangibilize" the club membership. Such tangibilization of the membership can be said to indirectly affect as well as be affected by

one's satisfaction with the membership.

Hypothesis 7 dealt with a relationship commonly held between satisfaction with the membership and the likelihood of membership renewal. It was clearly supported with the data in **Table 9**, to wit, the more satisfied, the more likely to renew the membership. It also should be noted that 26.7% of 566 satisfied members expressed only a 50-99% probability of renewing the membership. Hence, satisfaction is only a "necessary" condition but not a "necessary and sufficient" condition for membership renewal. Needless to say, other factors such as membership fee, availability of alternatives in the marketplace and a change in one's lifestyle would all contribute to one's renewal decision.

TABLE 7 - Relationship Between the Membership Card Being Carried with Them and Satisfaction with the Membership¹

	Do You Carry a Membership Card With You?	
	Yes	No
Satisfied	73.6%	50.0%
Neither	22.8%	28.6%
Dissatisfied	3.6%	21.4%
Base	(742)	(47)

¹Chi-square test is significant at 1%

TABLE 8 - Relationship Between Bumper Sticker Being Placed on a Car and Satisfaction with the Membership¹

	Have You Placed a Club Membership Sticker on Your Car?	
	Yes	No
Satisfied	87.0%	70.8%
Neither	11.4%	23.5%
Dissatisfied	1.5%	5.7%
Base	(480)	(309)

¹Chi-square test is significant at 5%

TABLE 9 - Relationship Between Satisfaction with the Membership and Likelihood of Membership Renewal¹

	Likelihood of Membership Renewal			
	100% Sure	50%-99% Sure	Less Than 50% Sure	
Satisfied	71.7%	26.7%	1.6%	(566)
Neither	34.1%	60.6%	5.3%	(170)
Dissatisfied	9.4%	50.0%	40.0%	(32)

¹Chi-square test is significant at 1%

CONCLUSIONS AND IMPLICATIONS

This study has proven many widely held hypotheses. They are Hypotheses 3, 4, 5 and 7, which addressed awareness, service evaluation, problem resolutions and membership renewal as related to satisfaction with the club membership, respectively. Therefore, managerial implications from these results are apparent and well known. Management of the auto club should inform and educate its members about its services as much as possible, thereby helping its members favorably assess the cost-benefit of the membership. Also, the management should provide its members with the best possible services and must attempt to completely and expeditiously resolve any problem

which the members have. The management should stress a "We Care for You" attitude with expeditious problem resolutions. With these measures, trite as they may sound, satisfied club members would likely renew their membership.

This study has also made interesting and unique findings with Hypotheses 1, 2 and 6; concerning demographic profile of the satisfied club members, reasons for joining the club and "tangibilization" of the membership. Significant differences in demographic profile between the satisfied and dissatisfied members were revealed. That is, the younger, the more satisfied, and those with college degrees were least satisfied with their club membership than those with either less than or more than a college degree.

Secondly, this study has shown that those who joined the auto club for "passive" reasons such as family/friend influences were not as satisfied with the membership as those who did the same for more "active" reasons such as the quality and variety of the club services.

Finally, this study found a significant relationship between the members' display of overt behaviors about their memberships and their satisfaction with it. Satisfied members were found more likely to carry their membership card with them and were more likely to place a club membership bumper sticker on their cars than less satisfied members.

These findings appear to have important implications to management. First, a lower membership fee may apply to younger members in order to counter the lower level of their satisfaction. Such differential membership fees would make good sense if the usage of the club's services is positively related to members' age, that is, the older the more use of services. Data compiled by the auto club in question confirmed such a relation between age of the members and their use of the emergency road services. With new membership fee schedules based on a sliding scale, the auto club may be able to enhance the members' renewal rates, resulting in an expanded membership base.

Secondly, the auto club may wish to develop a segmentation policy according to educational levels of its members in an attempt to raise satisfaction level among members with college education. Operationally, it may develop communication packages specifically aiming at the different market segments.

Thirdly, the auto club management should intensify its efforts in informing and educating its members about its services and their benefits specifically those members who joined the club as a result of their friends/family influences. It seems likely that this segment is not well informed of the various services, yet their expectations tend to be quite high due to the influences of friends/family who are most likely satisfied members themselves. As a consequence, they may not appreciate the real benefits of the membership as much as other members, notably, those who joined the club for service-related reasons, tend to be more realistic about the cost-benefit of the membership. This leads to a conclusion that effective communications would be instrumental in more successful management of memberships.

Finally, the auto club management should "tangibilize" its membership as much as possible by, for example, making the bumper sticker more attractive, and introducing new items such as a key holder and a desk calendar. "Tangibilized" membership takes a form of a tangible object which acts as a constant reminder of the club membership. Certainly, the "tangibilized" membership alone is not sufficient to make the members feel satisfied with

the membership without attendant quality services, nonetheless, it reinforces the members' feelings of belongingness to the club.

This paper has focused on satisfaction with a specialized type of service, auto club membership. While much has been written concerning the difference in satisfaction between services and products and more specifically, between various services, the findings of this study have common implications to the management of membership based organizations. Any membership-based organization must provide its members with some satisfaction out of just being a member regardless of the level of service usage. In sum, there is a perceived value inherent in the membership in itself, as well as a possible use of the services. It is important to monitor one's satisfaction with the membership, independent of his evaluation of the service quality.

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SALESMEN AND SALESMANAGERS - ARE THEY SATISFIED WITH THEIR JOBS?*

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Abstract

In the 1980's it is important that Marketing managers create an environment in which they and their employees can work at acceptable levels of satisfaction. Specifically, perceived need and job satisfaction among commissioned salesmen and salesmanagers is of major concern. Measurable variables of job satisfaction and need satisfaction must be identified and evaluated.

The research findings presented in this study indicate that the Job Description Index (JDI) and the Porter questionnaire can be valuable instruments for establishing trends of perceptions of job and need satisfactions among salesmen and salesmanagers. Marketing managers who are facing the more complex organizational problems of human resource development will find the analysis of great value.

Introduction

Human Resources Management has become a popular concept in the lexicon of business, and it is gaining prominence in the specific area of personal selling and sales management. Historically, the sales effort has centered on individual efforts highly motivated by lucrative commissions in a mass marketing technology. A new era of sales effort appears to be developing, with the short run considerations of monetary rewards being supplemented with long run considerations of security, self-esteem, social acceptance and self actualization. (4, 6, 9, 10, 11, 13) In this new era, the challenge for sales management promises to be the professional development of salesmen within a climate of long term employment and satisfaction.

Purpose of Study

The purpose of this paper is to investigate job satisfaction and perceived need satisfaction among commissioned salesmen and commissioned sales managers. An important question is whether salesmen perceive job satisfaction differently than persons in more structured (salaried or other wage rate basis) occupations. An additional concern of the study is whether or not there are differences between the perceived need satisfaction of salesmen and salesmanagers.

The overriding purpose of this study is to empirically investigate measurable variables of job satisfaction and need satisfaction in order to better understand their implications for developing a professional sales force in the emerging era of "Human Resource Management."

Background

The operational definition of job satisfaction for this study was developed by Patricia C. Smith. Smith and her associates developed a descriptive instrument for measuring job satisfaction. The instrument, the Job Description Index (JDI), operationalizes job satisfaction through an evaluation of questionnaire responses in the

areas of Work, Pay, Promotion, Supervision, and Co-workers. (12)

A study by Porter provided the instrument used to evaluate differences in perceived needs. Porter's format is a thirteen item questionnaire resulting from factor analysis of a lengthy list of individual questions. (10) Porter examined the following hypotheses:

1) A difference exists between the satisfaction offered by a position and the satisfaction that should be offered by that position, as perceived by respondents.

2) That these perceived differences between what is and what should be will be reduced at higher levels of management.

Porter also weighted respondent answers in terms of the individual's perceived importance of the question area. Thus, Porter's method operationalized satisfaction similarly to the JDI, but rather than using job-related variables such as Work, Pay, Promotion, Supervision, and Co-workers, he used need areas (including Security Needs, Social Needs, Esteem Needs, Autonomy Needs and Self-actualization Needs). Porter's classifications parallel Maslow's Need Hierarchy. (6,7)

Both the JDI and Porter's questionnaire format are used in the present study as operational definitions of job satisfaction and perceived need satisfaction. The published findings of the studies using the JDI provide an empirical base for comparing the current responses of salesmen and salesmanagers. These comparisons are the basis for developing one of the hypotheses presented below.

Hypotheses

The following Hypotheses were investigated in the current study:

- H₁ Commissioned salesmen and salesmanagers are not as satisfied with their jobs, as persons in more structured occupations.
- H₂ Pay will be ranked lower than other observed job satisfaction variables by commissioned salesmen.
- H₃ Significant differences exist between salesmen and salesmanagers in perceived need satisfactions.

The nature of these hypotheses suggest a comparison of the results of previous studies using the JDI and the current findings. Also, the hypotheses suggest a difference between salesmen and salesmanagers in the area of perceived need satisfaction. Finally, the hypotheses investigate whether Pay remains the most important job satisfaction factor for salesmen.

*The authors would like to thank David Holt, a former student at New Mexico State University, for his help in the data collection and analysis used in this paper.

Previous research in the area of sales management related to job satisfaction supports the hypothesis that salesmen tend to be less satisfied with their work than persons in more structured occupations. (3, 4, 9) A study by Dawson suggests that lack of esteem and self-respect may be the two most frustrating aspects of sales jobs which detract from job satisfaction and impair productivity. (4) Self-esteem, which includes self-respect is imbedded in both the JDI and Porter questionnaires as well as in other behavioral works. (1, 3, 4, 6, 13, 15) Chris Argyris, along with other behavioral scientists, point out that job satisfaction plays an important role for motivation and managerial considerations for human resource development. (5, 7, 14)

Measuring satisfaction involves a key concept set forth by Herzberg that the opposite of satisfaction is not necessarily dissatisfaction, but rather the lack of satisfaction. (6) Smith, et. al., also support this concept closely. (15) The JDI is an instrument that analyzes job satisfaction, but does not say anything about job dissatisfaction. The items on the JDI are developed for "Yes", "no", or "uncertain" responses, and are weighted to yield a maximum score of 54 on a 0 - 54 point scale. The score of 27, for example, says nothing of the value of the response until it is compared with other scores in the response group. However, an individual score of 27 within a response group where the mean is 32 indicates that the respondent is less satisfied in a particular area than are his co-respondents.

The published results of JDI studies from among structured occupational groups forms a significant base of Neutral (mean) scores with which data from this study can be compared. The major drawback to the JDI is that JDI scoring will place a response somewhere along a scale of job satisfaction relative to other response groups, and does not indicate a casual relationship or even whether the scores are important. (2, 13) As such, the JDI is descriptive. However, it does provide an objective basis for management inquiries.

Porter's questionnaire format deals with perceptual differences in need categories among respondents and includes a procedure for weighting the importance a respondent attaches to the particular area of questioning. (10) Therefore, the Porter instrument is also a descriptive instrument.

Methodology

This study is based upon a randomly selected sample of 135 commissioned salesmen and salesmanagers in the real estate industry in Southern California. Questionnaires were mailed directly to the selected sample subjects. Useable information was obtained from a total of 96 respondents. This provided a usable response rate of 71%. Of the 96 respondents, 24 were field-level sales managers and 72 were salesmen who were paid entirely by commission, without bonuses or base guarantees. All respondents were men and full-time employees of their respective firms. For control purposes, the sample frame was limited to individuals between the ages of 21 and 40 who had been employed in their particular positions in excess of six months. Respondents completed both the JDI and the Porter questionnaires.

Findings

TABLE I indicates the results of comparing the JDI scores of commissioned salesmen and salesmanagers with the JDI neutral (mean) score developed by Smith (12) for structured occupations. **TABLE I** indicates whether or not a significant difference (based on Student's t Test

with an alpha level of .01) exists between salesman and salesmanager response and the JDI neutral scores. Salesmen response is separated from salesmanager response and the collective response scores are also included.

The results in **TABLE I** are somewhat surprising in that salesmanagers responded as having a higher level of satisfaction than respondents in structured occupations as measured by the JDI. Salesmen, on the other hand, were less satisfied than both the salesmanagers and structured occupations in the areas of Work and Supervision. The variables dealing with Co-workers, Promotion and Pay provided comparisons that are possibly more surprising. All three variables (Co-workers, Pay, and Promotion) were ranked higher by salesmen as a group, than by the respondents in the more structured occupations. The relatively high measure of satisfaction for Pay by the salesmen does not completely support Hypothesis H₂. However, two other areas of job satisfaction (Promotion and Co-workers) did receive higher ratings.

TABLE I

COMPARISON OF JOB DESCRIPTION INDEX NEUTRAL SCORES AND COMMISSIONED SALESMEN AND SALESMANAGERS MEAN SCORES

Scale Variables	JDI NEUTRAL SCORE*	Mgt.	STUDY MEAN Salesmen	SCORES Total
WORK	26	28***	19***	21***
PAY	22	42***	29***	32***
PROMOTION	20	48***	41***	42***
SUPERVISION	33	34	31***	32***
CO-WORKERS	32	32***	33***	33***

*Source: Smith, P.C. et al. The Measurement of Satisfaction in Work and Retirement: A Strategy for the Study of Attitudes. Chicago: Rand McNally, 1969;

**Scoring on a 0-54 scale; n = 72 for salesmen, n = 24 for salesmanagers, Total n = 96.

***Figure at the .01 level.

TABLE I also indicates whether or not there was a difference in the combined mean scores of salesmen and salesmanagers with the neutral JDI scores. In all but one instance (the supervision variable) there is a significant difference at the .01 level. Each mean score must be evaluated in relation to other mean scores to determine a positive or negative difference, however the overall trend indicates that commissioned salesmen and salesmanagers, as a group, may be more satisfied with their jobs than persons in more structured occupations. The results do provide partial support for hypothesis H₁.

As indicated above, the respondents also answered the Porter instrument in addition to the JDI. The Porter format measures perceived needs along a need hierarchy of categories including Security Needs, Social Needs, Esteem Needs, Autonomy Needs, and Self-actualization Needs. Specifically, the Porter instrument measures perceived notions of respondents concerning what "is" and what "ought to be" in the categories under study. In addition, Porter's questionnaire provides a means for establishing "how important" the described situation is perceived to be by the respondent. An example of a Porter questionnaire item is as follows:

The feeling of self-esteem a person gets from being in my position. . . .

- a. How much is there now? (MAX) 1 2 3 4 5 6 7 (MAX)
 b. How much should there be? 1 2 3 4 5 6 7
 c. How important is this to me? 1 2 3 4 5 6 7

The above formulation is utilized to measure each of the perceived needs in the Porter formulation. The questionnaire measures not only if there is a difference in the "what is" and the "what ought to be", but also the relative importance of each item.

TABLE II indicates by count the number of respondents who perceived a deficiency corresponding to each questionnaire item (the difference between questions "a" and "b"). The table separates and compares commissioned salesmen and salesmanagers. The Chi-square Test of Independence was used to determine differences between the responses of commissioned salesmen and salesmanagers.

TABLE II
 NEED-FULFILLMENT DEFICIENCIES
 OF COMMISSIONED SALESMEN AND SALESMANAGERS

Questionnaire Item	Count Salesmanagers (n=24)	(percentages) Salesmen (n=72)	Significant Differences Between Groups (Yes or No) (Alpha = .01)
Security Needs			
Item Ia	16(66.6%)	77(100%)	Yes
Social Needs			
Item IIa	4(16.6)	17(23.6)	No
Item IIb	21(87.5)	23(31.9)	Yes
Esteem Needs			
Item IIIa	10(41.6)	61(84.7)	Yes
Item IIIb	3(12.5)	9(12.5)	No
Item IIIc	2(8.3)	61(87.5)	Yes
Autonomy Needs			
Item IVa	3(12.5)	2(2.7)	No
Item IVb	1(4.1)	9(12.5)	No
Item IVc	2(8.3)	27(37.5)	Yes
Item IVd	2(8.3)	30(41.6)	Yes
Self-actualization Needs			
Item Va	4(16.6)	43(59.7)	Yes
Item Vb	3(12.5)	61(84.7)	Yes
Item Vc	7(29.1)	61(87.5)	Yes

The results indicated in TABLE II are somewhat mixed, however a trend emerged in some areas. Both salesmanagers and salesmen perceived a deficiency in Security Needs; the salesmen indicated a proportionate higher deficiency as a group. The respondents split on Social Needs. Neither salesmanagers nor salesmen perceived high deficiencies on the first question (IIa) and there was no significant differences in the responses of the two groups. For the second question (IIb) in Social Needs, salesmanagers perceived a high deficiency while salesmen perceived a low deficiency, and there was a significant difference in the proportionate responses.

In the category of Esteem Needs, salesmen indicated a higher deficiency for two of the three items, while both salesmanagers and salesmen perceived a low deficiency in question IIIb. A significant difference in response was measured for questions IIIa and IIIc.

Salesmanagers indicated little or no deficiency in the category of Autonomy needs. Salesmen were mixed in responses to individual questions; the first two questions having low deficiencies and the last two questions having high deficiencies. In the category of Self-actualization Needs the differences were most notable. Salesmen perceived substantial deficiencies in the area of Self-actualization, while salesmanagers perceived few deficiencies. Similarly, the differences in group responses were significantly different for every question

in the item.

The implications of these findings are that salesmen and salesmanagers perceive Security Needs to be most deficient and the Self-actualization Needs have the widest disparity in group responses. The other categories of Social, Esteem, and Autonomy Needs reveal no distinct ranking of responses or statistical differences between groups.

TABLE III indicates the count of respondents in each category important to each of the questionnaire items. Again, a Chi-square Test of Independence was used to evaluate differences between groups for each item on the questionnaire.

TABLE III
 MAXIMUM IMPORTANCE OF NEEDS
 OF COMMISSIONED SALESMEN AND SALESMANAGERS

Questionnaire Items	Count Salesmanagers	(percentages) Salesmen	Significant Differences Between Groups (Yes or No) (Alpha = .10)
Security Needs			
Item Ia	1(4.1%)	28(38.8%)	Yes
Social Needs			
Item IIa	0(0.0)	13(18.1)	Yes
Item IIb	16(66.6)	51(70.8)	No
Esteem Needs			
Item IIIa	21(87.5)	67(93.1)	No
Item IIIb	20(88.3)	67(93.1)	No
Item IIIc	21(87.5)	50(69.4)	No
Autonomy Needs			
Item IVa	23(95.8)	43(59.7)	Yes
Item IVb	20(83.3)	37(51.3)	Yes
Item IVc	19(79.2)	18(25.0)	Yes
Item IVd	20(83.3)	21(29.2)	Yes
Self-actualization Needs			
Item Va	24(100.0)	61(84.7)	Yes
Item Vb	24(100.0)	51(84.7)	No
Item Vc	19(79.2)	49(68.1)	No

Salesmanagers perceived Security Needs to be least important among the categories followed by Social Needs, Esteem Needs, and finally, Self-actualization Needs as the most important. It is also noted that while salesmanagers ranked both Security and Social Needs very low in importance, they ranked Esteem, Autonomy, and Self-actualization Needs very high in importance.

Salesmen, as a group, ranked Security needs as least important, but ranked Esteem Needs as having greater importance than the remaining categories. Self-actualization Needs was ranked second in importance by salesmen, followed by Autonomy Needs, Social Needs, and Security Needs.

The findings presented in TABLE II and TABLE III show some differences in the perceived need satisfactions of commissioned salesmen and salesmanagers, but the extent of the differences does not allow for conclusive acceptance of Hypothesis H₃ (significant differences exist between salesmen and salesmanagers in perceived need satisfactions). Both salesmen and salesmanagers attached great importance to Self-actualization Needs, and both groups indicated that substantial deficiencies exist in the satisfaction of Self-actualization Needs.

Implications

If the theme holds true that marketing concepts for sales management are on the brink of a Humanistic Era, then the deficiencies noted through the Porter analysis may point toward important implications for sales management reappraisal. Management may want to understand

these deficiencies and underscore the magnitudes of perceived need deficiencies to better align motivational policies and sales training.

Specifically, the intuitive feeling and initial hypothesis of this paper that salesmen are less satisfied with their jobs than persons in more structured occupations lacks support. The JDI comparisons indicated that salesmen were more satisfied overall than persons in more structured occupations. In addition, the high level of satisfaction with "pay" noted in the JDI analysis shakes the second hypothesis that pay is no longer a motivator, and the implication is that perhaps management of commissioned salesmen should make further inquiries into pay as a motivator and satisfier. Additional research into the area of "pay" might help direct salesmanagers of the proper means of utilizing incentive pay systems.

The Porter format analysis indicated some interesting trends. The hypothesis (H₃) that a significant difference exists between salesmen and salesmanagers is partially supported by the findings. Salesmen as a group indicated higher overall deficiencies than salesmanagers and magnified this result by a greater weight attached to the importance of the deficient areas. The primary implication is that management must be concerned with means of upgrading levels of satisfaction among lower management and nonmanagement personnel especially in the areas of Esteem and Self-actualization.

Conclusions

The results of this study have been surprising in some instances, shaking the intuitive research hypotheses set forth at the beginning of the paper. Clearly, pay as a motivator is not dead, and for commissioned salesmen pay may be a significant motivator. The intuitive feeling that salesmen are less satisfied than persons in structured occupations is unfounded, based on the results of this study.

The underlying contention that this study presents is that marketing managers must create an environment in which they and their employees can work at acceptable levels of satisfaction. Human Resource Development, particularly in terms of commissioned salesmen, may be a function of developing an environment in which differences in perceived needs, especially in those areas considered very important, are reduced. This demands specific research for further description of needs and need deficiencies, however, and the development of a body of data for predictive bases in delineated work groups.

The JDI and Porter questionnaires provide researchers with two valuable descriptive tools which can make research into the area of job satisfaction more complete. Specifically, the JDI and Porter instruments provide a means of collecting descriptive data for indexing trends. The research findings presented in this study indicate that the two instruments can be valuable for establishing trends of perceptions among different groups of respondents. Marketing managers who are facing more complex organizational programs in human resource development may find such analyses of great value.

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TESTING THE PIMS MODEL ON LONGITUDINAL DATA FOR STRATEGICALLY HOMOGENEOUS FIRMS

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Abstract

The claims of the PIMS model is evaluated by testing the performance of a surrogate model on the brewing industry. The model is then compared to models developed specifically for that industry.

Introduction

One factor that contributes to the controversy surrounding the Profit Impact of Marketing Strategy (PIMS) project is that the actual model has never been fully specified nor its results fully reported. However, some aspects of the project and the model are common knowledge. SPI claims that its multiple regression model is able to identify "universal truths of the marketplace" that apply equally well in a variety of industrial sectors and time periods (Gale, 1978). These "truths" are said to represent stable relationships that exist between the profitability of a business and certain strategic factors of that business and its market. For example, pricing and promotional policies can be evaluated in terms of their influence on a business unit's performance when information on other business factors such as product quality and market factors such as expected growth are considered for that unit. The relationships are stable, SPI argues, because the model is cross-sectional, pooling data from more than 1,000 businesses of various four-digit SIC sectors. SPI asserts that findings from time series data would be less stable, and therefore less valid than cross-sectional findings, because time series data are subject to confounds from the external environment, such as changes in technology (Gale, 1978).

Many researchers, however, directly or indirectly question the methodology used by PIMS, suggesting that caution be taken when interpreting the findings of the model. For example, in a critique of the PIMS model, Anderson and Paine (1978) take issue with the cross-sectional data base. They point out that in using cross-sectional data, SPI has made the questionable statistical assumption that data from many different industries can be pooled and then treated as a homogeneous population. This is a methodological problem that has been pointed out by Bass, Cattin, and Wittink (1976). They demonstrated that regression coefficients of inappropriately pooled data are invalid, or at least different from results obtained if homogeneous populations are maintained. Porter's (1978) theory of strategic groups suggests that even within the same industry, firms are rarely homogeneous in terms of their competitive strategies. An industry, according to this theory, is composed of clusters or groups of firms, where each group consists of firms that follow strategies more similar along a variety of specified dimensions to each other than to the other firms within the industry. Theoretical dangers exist, therefore, in arbitrary pooling of cross-sectional data at industry levels. Furthermore, the existence of strategic groups

implies that the performance of each group cannot be satisfactorily explained by the findings of a single regression equation drawn from a widely diverse sample of businesses such as those included in the PIMS model (Patton, 1976). Naylor (1978) questions SPI's use of a cross-sectional model to find "common truths" relevant to any particular business given that different businesses and industries have different market demand relationships, production technologies, accounting structures, and so forth. The literature suggests that industry-specific models will be superior to the PIMS model in explaining the performance of that industry (Patton, 1976, and Thiel, 1978).

Finally, given the short time period (10 years) covered by PIMS data base, it is possible that the relationships found by PIMS are aberrations peculiar to that time period. The concept of strategy as a dynamic long-term phenomena implies that general relationships are determinable only over a long time horizon. The strategic concept, of course, does not specify what period is long enough, so perhaps PIMS has indeed captured some general relationships. However, this cannot be determined because no one outside of SPI is known to have tested the PIMS model. Kirchhoff and Kirchhoff (1980) stated that "no published information exists on the application of longitudinal multiple regression analysis to the data base that PIMS now possesses." In other words, many of the PIMS' findings can be accepted only on faith.

The purpose of this study is to begin to resolve some of the controversy surrounding PIMS. The PIMS model as it is described in the literature will be tested using longitudinal data for a particular industry and the strategically homogeneous groups of firms within that industry. While the universal truths of PIMS cannot be tested directly, due to data limitations, inferences about the universality of these truths will be made by the test of the overall model. The model will then be compared to performance models developed specifically from data on firms that participated in the selected industry. If the model, as a whole, is able to perform as well as described by SPI in its ability to explain the variance in performance for particular situations, then the truths of PIMS can be accepted with more confidence.

Method

The basic purpose of PIMS is to determine the profit impact of various marketing strategies. Several models have been alluded to in the literature. There is a single equation regression model with 37 independent variables and 58 interaction terms. These 95 terms explain 80 percent of the variance of ROI. There also appears to be a single equation regression model which explains 75 percent of the variation in ROI with 27 "profit influencing" factors (Schoeffler, 1975). Finally, there is a "limited information model" which

focuses on the 18 most powerful influences on ROI. This model explains more than 60 percent of the observed variation in ROI and is recommended by SPI for use "where information is limited" or "where easy explainability of research findings is important" (Abell and Hammond, 1979). For the purposes of this study, the limited information model (LIM) will be used (see Abell and Hammond for a description of the LIM variables).

Data availability is the largest single problem of this study. The task of obtaining a reliable set of time series measures for the variables of the limited information model for a particular industry can be prohibitively expensive and time consuming. To overcome this problem, this study will use the data from the brewing industry for the period 1952 to 1974 because it is readily available, having already been gathered from a variety of public sources. A complete description of the industry and data is provided in the works of Hatten (1974) and Patton (1976). Though this data base has some limitations for this study as will later be described, it may represent the best available source of data to replicate the PIMS study.

Aside from data availability, the brewing industry is selected for a number of reasons. First, the brewing industry during this period represented one of the few remaining large single product industries. Many of the brewing firms, particularly the industry leaders, were undiversified and produced relatively homogeneous products in a common external environment; thus they all participated in a single business as the term is defined by SPI. Second, the eleven companies for which data are available provide a sample size sufficient for most relevant statistical methodologies when the data is pooled across time and across firms. Third, the industry is divided into three strategically homogeneous groupings. Hatten (1974) and later Patton (1976) determined these groups by using discriminate analysis techniques. The three groups are referred to as national, large regional and small regional brewers. Fourth, because the data base is longitudinal, rather than cross-sectional, and since the industry was quite mature, the long term relationship of ROI with its performance predictor variables can be investigated without being overly concerned about external industry shocks confounding the results. Finally, performance models have already been developed for the brewing industry. This will allow for a direct comparison between the explanatory power of the two modeling approaches; the PIMS approach which is based on a diverse sample of businesses, and the industry specific approach which is modeled from a more homogeneous population.

Because of the nature of the brewing industry, not all 18 variables will be applicable. The degree of vertical integration does not apply because the firms in the sample were not vertically integrated. Few brewers introduced new brands during the time span under study so a measure of this variable is also viewed as not applicable. Length of production cycle (LPC) was substituted for relative product quality (RPQ). This was done because we could not obtain a RPQ measure. RPQ is a subjectively derived measure based on the respective producer's opinion. However, LPC is generally held among brewers to be an indicator of quality and therefore will be a suitable proxy for RPQ. Measures R & D to sales could not be obtained. However, the results of the test should not be greatly affected by this deletion due to the maturity of the industry and the lack of any significant innovations alluded to in the literature on the industry. Similarly, percentage of employees unionized, percentage of customers equaling 50 percent of sales, and purchase amount of immediate

customers are also not available, but again results of the test should not be greatly affected due to the competitive structure of the industry during the period studied. A measure of productivity used in the previously cited brewing studies is substituted for the PIMS measure of productivity. Finally, we used return on equity as the performance measure rather than return on investment because the former was more readily available. This will not pose any serious problems since the debt levels of the brewers did not vary much over time and therefore ROE will be an approximate linear transformation of ROI.

It is recognized that given the limitations of the data only a surrogate of the limited information model can be tested. To the extent that the surrogate model and the measures are not an accurate replication of the LIM, the findings of this study may be erroneous. However, based on an understanding of the brewing industry during the observed time period, the authors believe that the excluded variables would contribute only marginally at best to the explanatory power of the model. For this particular industry situation, therefore, the surrogate model may well be a close approximation of the LIM. Furthermore, the need to obtain insights into both the claims and criticisms of PIMS is believed to be important enough to justify the approach.

Findings

The regression results obtained from applying the surrogate of the limited information model on the brewing industry data are summarized in [Table 1](#). It appears that the relationships found by PIMS are stable over time. Over 60 percent of the variation in performance, measured here by ROE, is explained during the twenty-two year period for which the model was tested on the brewing industry data. This finding confirms SPI's claim for this model. Because 95.7 percent of the observations of this sample occurred before 1972, the first year of the PIMS data base, it appears that the PIMS cross-sectional model may indeed have captured "truths" that are relevant to any time period. This is reinforced by the high F-values for the overall significance of the equations. The above finding is interesting for two reasons; one, that PIMS used a single measure to evaluate performance, and two, that this measure ROI, may inhibit long term goal attainment due to its apparent emphasis on short term performance. Regarding the first point, it is generally accepted that firms have multiple performance objectives; e.g., sales, market share, production efficiency, as well as profitability measures such as ROI, and that these objectives may be interdependent (Patton, 1976, and Thiel, 1978). Furthermore, how a firm allocates its resources towards the attainment of these objectives is likely to change over time. The findings of this study argue that ROI may in fact act as a reliable proxy for performance, at least for the sample in question. Regarding the second point, the time series approach allowed this study to investigate the long term relationship of ROI with its performance predictor variables. We conclude that the ROI criterion employed in the PIMS program may be a suitable global criterion for the measurement of strategic performance. It also appears that the "universal truths of the market place" are relevant to a particular business situation. [Table 2](#) indicates that the model explained at least 62.6 percent of the variance of performance when it was applied to the brewing industry and to the three distinct groups within that industry. The fact that the model performed as well as claimed at the industry level is of interest since industries are said to differ from each other in terms of general strategic considerations (Porter, 1978). It is difficult, therefore, to conceptualize how the findings of a single regression

equation drawn from a widely diverse sample of industries could apply to a specific industry. Industrial organization theory, however, may provide an explanation. It states that industries are not homogeneous in terms of strategies. The brewing industry in particular was found by Hatten (1974), Patton (1976) and Thiel (1978) to be heterogeneous. It is quite possible that, due to heterogeneity of industries, the same factors that influenced the cross-sectional model may have influence at the industry level as well.

TABLE 1

SUMMARY OF REGRESSION RESULTS OF PIMS MODEL ON BREWING INDUSTRY, 1952-1974

Group	N	Pooled N	F-Value	R ²
Indus	11	207	27.44	.627
Natnl	3	61	37.03	.900
Lrg	3	59	6.59	.627
Sml1	5	87	24.30	.795

It is much more difficult to explain why the PIMS model performed satisfactorily at the strategic group level. Industrial organization theory states that groups within an industry develop in reaction to differing threats and opportunities facing them in the external environment (Porter, 1978). Each group will therefore follow its own unique strategy for maximizing its performance. Testing the surrogate model on data from firms that are homogeneous in terms of strategies should represent a more stringent test of the claim by SPI that they have uncovered the "universal truths of the market place" than the test of the model at the industry level. Because the surrogate model performed at least as well as claimed when tested against three strategically homogeneous groups, PIMS may well reflect truths of the marketplace.

An obvious point that is noted from Table 2 is the very high correlation coefficient (R²) achieved by the model within the national group. Two problems are suspected for this occurrence. The first problem is data availability. Often measures are defined only at the national level. Variables such as market and concentration should be broken down into geographic markets because market structure is known to vary from one geographic region to another (Scherer, 1980). For example, a regional brewer may have insignificant power when compared on a national scale, yet in fact it may be a formidable competitor in its own region. One possible cause, therefore, for the high R² of the national group relative to the other groups is that the market structure variables tend to be derived from national statistics and thus may represent more reliable measures for the national group. A second possible cause for the high R² may be due to the fact that the sample of firms used in developing the PIMS model are overrepresented by industry leaders. The median size firm from the PIMS sample in 1977 ranked second in its served market (Hatten, 1974). The variables selected in the model may, therefore, do a better job in explaining the larger, national firms.

The fact that the limited information model does explain at least 60 percent of the variance in performance may not be as exciting as it is apparently perceived by those who support the model. The general consensus of studies on industrial organizations is that market share and concentration alone explain approximately 35 percent of the variance in performance (Shepherd, 1980). It may be surprising, given the precise nature of business and economic variables which tend to measure a multitude of effects, that the remaining 25 percent of the variance could not be

explained by an additional sixteen variables. The same argument applies to the remaining 35 variables of the 37 variable model that claims to explain 75 percent of the variance. In addition, it may well be that in a competitive environment, the residual 40 (or 25, depending on the model selected), percent of the variance, means the crucial difference for the practitioner between success and failure of his enterprise.

A major criticism of the PIMS model is that it suffers from the problems associated with multicollinearity. Multicollinearity occurs when a dependent relationship exists between the independent variables. As this dependency increases, it becomes increasingly difficult to determine with confidence the estimates of each coefficient. The magnitude and even the direction of the relationship between the independent and dependent variables may change. It is quite likely that any regression model which contains many (e.g. 18 or 37) economic/business measures will suffer from this problem. Schoeffler (1975) acknowledged the existence of multicollinearity in the PIMS model. He stated that, "since the key variables employed to explain performance are highly multicollinear, one should not attach much importance to the coefficients of the individual variables and hence also to the significance tests of such coefficients." The literature about PIMS, however, does not specify how highly multicollinear are the independent variables. Table 2 may provide some clues. It lists all the multicollinear relationships that have an inner correlation of higher than arbitrarily determined cutoff of 0.69. Table 2 will likely not duplicate a comparable table developed from the data base of SPI due to differences in sample and in the manner which some of our variables are defined and measured. However, judging from the table, the problems of multicollinearity in the PIMS model may be serious enough to question the reliability of the 3 x 3 matrices developed by SPI from its regression model. These matrices, which relate variables two at a time to ROI, are considered to be the single most important contribution of SPI. Due to the high incidence of severe multicollinearity, the regression coefficients for each individual factor are not reported.

Table 2

SUMMARY OF MULTICOLLINEARITY BETWEEN VARIABLES

Variables	IND	NTNL	LRG	SMLL
1. MRKT SHR/ RLTV MRKT SHR	.93	.80	.84	.87
2. MRKT SHR/ CNCNTRN	---	.85	.75	---
3. MRKT SHR/ GRWTH	---	.71	.70	---
4. CPTL INTNSTY/ INV INTNSTY	.81	.80	.83	.78
5. CPTL INTNSTY/ CPCTY UTLZ	---	---	(.92)	---
6. CPTL INTNSTY/ RITV PRICE	---	---	(.70)	---
7. QITY/ CNCNTRN	---	(.71)	---	---
8. QITY/ GRWTH	---	(.77)	---	---
9. % INEST/SLS CPCTY UTL	---	---	(.83)	---
10. MRKTG EFFT/ RLTV PRC	---	---	---	.88

As was concluded earlier, the PIMS model appears to perform at least as well for specific situations as SPI described. It would be interesting to compare the results of the PIMS model as developed from its

surrogate on the brewing industry with models developed specifically for that industry. Models developed from relatively homogeneous population are predicted to have results that are more valid than the results of PIMS. Such models have been developed for the brewing industry by Hatten (1974), Patton (1976), and Thiel (1978). **Table 3** compares the results of Thiel's first stage regression estimates using the limited information model. (Thiel's model was selected because it outperformed the earlier two models.) In all instances, Thiel's model is superior both in terms of R^2 and F. In addition, The R^2 's achieved by Thiel were all comfortably above the .80 level. SPI has said that .80 appears to be the upper limit for the larger PIMS model. The results suggest that while a general model is good, a model developed specifically for a single business environment is better.

TABLE 3

COMPARISON OF FIRST STAGE REGRESSION ESTIMATES OF THE PIMS AND THIEL MODELS

Group	PIMS		THIEL	
	F-Value	R^2	F-Value	R^2
Indus	27.44	.626	45.3	.827
Natnl	37.03	.900	50.3	.966
Lrg	6.59	.627	13.6	.891
Smll	24.30	.795	39.5	.932

Single multiple regression models, such as the PIMS model have two essential weaknesses in strategy research. One is that they assume only one performance goal. The other is that these models assume that the direction of influence flows from the independent variables to the dependent variables. In reality, the reverse may be true. For example, performance may be a function of market share, but market share may also be a function of performance. By introducing one or more additional equations into the model and then considering all the equations simultaneously, the two way flow of influence can be disentangled. For example, Patton (1976) defined three performance measures; i.e., ROE, market share and growth. Establishing an equation to explain each of the three performance measures, he then applied his multiple equation model to the Hatten (13) data and found a strategic relationship to profitability different from those found by Hatten's single equation model. Thiel refined Patton's model, and by using two stage least squares to explain profitability, he obtained R^2 statistics superior to those obtained using first stage least squares for all but the national group. The F-values for all four groups are clearly higher for the two stage model than for the PIMS model. (**Table 4**) Though previously it was concluded that ROI represents a suitable global criterion, Thiel's study lends support to the need for sorting out the interdependence of strategic decision variables by using the simultaneous equation approach.

Conclusion

This study represents to our knowledge the first attempt by any researcher outside the SPI to replicate the findings of the PIMS model. In so doing, a number of points appearing in the literature were addressed which question the validity of the model.

Overall, it appears that the PIMS model using only twelve of the eighteen variables specified in the limited information model, behaved in the manner predicted by SPI. These results came as a surprise to the authors of this paper who did not expect the general model to apply to specific situations. However, we found that the model likely suffers from a high degree of

multicollinearity. We therefore must question the reliability of the 3 x 3 matrices developed by SPI which attempt to relate variables two at a time to profitability. We also found that models developed specifically for an industry in question outperform the more general PIMS model, suggesting that industry modeling may provide management with more practical information than that which can be obtained from SPI. Finally, we found that simultaneous equation models which recognize that managers have goals other than profitability outperform single goal models in their ability to explain performance.

TABLE 4

COMPARISON OF REGRESSION ESTIMATES OF THE PROFITABILITY EQUATIONS BETWEEN THE PIMS MODEL AND THE THIEL SIMULTANEOUS EQUATION MODEL

	Indus		Natnl		Lrg		Smll	
	PIMS	THIEL	PIMS	THIEL	PIMS	THIEL	PIMS	THIEL
R^2	.63	.83	.90	.94	.68	.86	.80	.92
F	27	73	37	64	7	20	24	54
No. of Vrbles	12	15	12	16	12	15	12	16

Our study tested a surrogate of the PIMS model on only one industry sector during a time period characterized by a relatively static competitive environment. The surrogate is not intended to explain performance as well as the limited information model in industries characterized by a different competitive environments, nor within the brewing industry after 1974 when its structure began to undergo rapid changes. However, the surrogate is believed to approximate the performance of the limited information model for the sample selected for this study. To the extent that the surrogate provides results comparable to the limited information model, inferences can be made concerning the claims and the criticisms of PIMS. Additional studies are needed, however, that test the PIMS model in a variety of sectors and time periods before we can conclude with more confidence whether the findings of the cross-sectional model does in fact represent the "universal laws of the market place."

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A NEW ERA: OVERCOMING POTENTIAL CONFLICT BETWEEN
MARKETING MANAGEMENT AND MIS

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Introduction

To achieve organizational objectives, marketing managers must cooperate with executives from other business functions. Despite this well-known premise, many modern and profitable companies are experiencing serious conflict between marketing and other company departments. Previous writers (Kotler 1978 and Shapiro 1977) have dealt with interdepartmental rivalries between marketing and: manufacturing, research and department and public relations. These writers showed how each of these reported business functions were unique and how intergroup rivalries developed with marketing.

Personnel from the Management Information System (MIS) department is another business area that may be frequently in an adversary position with marketing. In a highly technological society along with rapid market changes and requirements, numerous intraorganization opportunities and interfaces occur between marketing and MIS. If the intergroup relationships are not properly managed, malcontentment can surface. The following quotes dramatize the individual complaints between marketing and MIS.

MIS is suppose to be a service organization, but marketing is not being provided with information necessary to perform our function. (V. P. of Marketing)

Our systems must be developed to support the business which is very difficult because of marketing's inability to specifically define company strategy. (Director of MIS)

Unfortunately, a dearth of literature exists on the numerous problems and conflicts that could exist between marketing and MIS. Given the critical need for a synergistic approach with the interdependency requirements between MIS and marketing, it is critical to understand and overcome the murky relationships that often exist between the two dynamic areas. The purpose of this paper is to: (1) examine some of the salient reasons for potential poor relations between the two areas and (2) offer some corrective steps that might prevent and/or overcome the detrimental conflicting behavior.

Marketing's Maturation

It is axiomatic that marketing is starting to mature from a pure selling function to a total integrative marketing system. For purposes of identifying the discrete evolutionary stages, Kotler has divided the transition into five stages: selling, selling and additional support functions, separate marketing functions, modern marketing department, and market-oriented companies.

Attendant with each stage are increasing sophisticated requirements for utilizing and supplying relevant management information. The informational needs of marketing have moved from a simple single system to a complex, plural, and strategic-based information system. At the risk of oversimplifying it, marketing people want timely and responsive information in a meaningful format that will enable them to better predict and/or react to the dynamic changes in the marketplace. However, marketing managers are not infallible in predicting the future.

Hence, they find it tedious to pinpoint and stabilize strategy. Since MIS executives desire well-defined information requirements before developing systems to support marketing's information requirements, one can easily speculate on the number of daily conflicts that might prevail. Unfortunately, the adversities between the two department become more intense as both functions mature in their application within organizations. The relationships between the two emerging areas could become more difficult as companies try to adopt full marketing orientation (Kotler defines it as strategic market development) while shifting from data processing to an administrated management information system. Regrettably, marketing frequently argues that MIS people lack creativity by being overly concerned with mundane accounting applications. Table 1 illustrates the conflict dialogue that might be acrimoniously directed by each group.

TABLE 1
Conflict Dialogue

<u>Information Requirements</u>	<u>Marketing's Demands</u>	<u>MIS Rebuttal</u>
<u>Timeliness:</u>	I need it now.	Difficult to run--must be scheduled.
<u>Variety:</u>	I need it in another format.	Data cannot be accessed that way.
<u>Decision:</u>	I need the following simulation: _____	My people are not familiar with that technique.
<u>Additional:</u>	I need a new report to: _____	The data does not exist.
<u>Accuracy:</u>	These reports do not agree.	We've overtaxed capability of system.
<u>Requirements:</u>	I want a system to: _____	Provide detail definition of requirement.
<u>Strategic:</u>	Can't be specific--Market too uncertain.	Our long range plans cannot include your generalities.

To partly overcome contradictory behavior, it is fruitful to have more empathy for the role and scope of MIS.

Information System Maturation

The Data Processing industry has evolved historically through several generations tied to the technological advancement of computers. The last ten years have established the technical capabilities which have had greatest impact on MIS and organizations it serves; data base, communication, large scale integration/MOS memory.

Growth of MIS as a business discipline and as a function within the organization has been suggested by Nolan (1979) to follow six distinct stages of application, with these five having varying degrees of realization; cost reduction, application proliferation, moratorium and control, integration, and data administration. MIS as an emerging department is generally designated as Data Processing or EDP in early stages before achieving full MIS recognition. As the growing function passes through the five stages, expansion of both its role within the company and its capability to provide information services accrues.

Incompatibility between marketing's stage of development within a particular company, and the development of MIS, is a potential source for conflict due to the mismatch between expectations and capabilities to provide information. It might generally be expected that both functions evolve equally in a growing, well-balanced organization. In practice, however, the maturation of these overhead operations will occur at different rates subject to limited financial resources, shifting management emphasis, and varying personal philosophies of those who manage marketing and MIS. It can be seen in Table 2 that marketing has several opportunities to be dissatisfied with insufficient MIS capabilities.

Considering first a fully evolved MIS, there must be specific management definition of information requirements supporting business strategy, prior to development of long-term data base and communication structures. Marketing, as the purveyor of an important component of company strategy, is expected to provide vital input to a well established MIS planning process. When the marketing function is represented by nothing more than a selling organization, or a weakly-conceived marketing function, MIS will be dissatisfied with the inability or the unwillingness of marketing to provide specification. Marketing in this case, though its information expectations may be relatively low, will become victim of their lack of involvement. They will find themselves disregarded by a sophisticated MIS which must seek strategic direction solely from top management. Under direction

of a vice president of marketing in a progressive marketing department, the caliber of marketing managers will exist to demand a new complete and usable management information system.

With the inverse situation, where the maturity of the marketing organization exceeds that of MIS, marketing's dissatisfaction with MIS becomes more pronounced. Sophisticated marketing management will be interested in establishing a complete marketing information system (MDSS)," as described by Little (1979) in the Journal of Marketing. The MIS organization which has not evolved to full data base capabilities cannot begin to satisfy these requests. At the initiation stage, MIS can only be concerned with cost reduction, people-saving systems. During the proliferation phase, MIS is equipped to give superficial support for basic marketing systems.

The proliferation of systems coverage for all company operations usually results in fragmented, stand-alone data sets which provide very little cross-functional or decision-oriented information--the antithesis of the MIS concept. The control and integration phases create a moratorium for major new system undertakings and will leave marketing, as with other departments, without a promise for system relief. As MIS matures, decentralization of resources can specifically begin to address marketing system issues. System specialists and distributed processors and data bases (utilizing minicomputers) will significantly improve the timeliness and quality of information provided. While resources under fully developed MIS have become better balanced to support marketing (and all other subsystems), the need for structure definition increases.

For marketing in particular, consolidation of dispersed data to provide information for measurement, historical comparison, and market analysis is impossible without a pre-defined means of data retention and retrieval. The fully mature Marketing and MIS organizations are well equipped to become mutually involved with providing the solutions to these issues. Again, whether this is sufficient for a particular marketing organization depends upon its position of evolution within the company.

TABLE 2
Marketing/MIS Conflict Relative to Maturity

<u>Marketing:</u> MIS	<u>Stage 1</u> Selling	<u>Stage 2</u> Selling & Other	<u>Stage 3</u> Marketing Dept.	<u>Stage 4</u> Marketing Orientation
<u>Stage 1</u> Cost- Reduction (Acctng)	Low Expectation Low <u>Capability</u> Low Conflict	Higher Market Expectation Low <u>MIS Capability</u> Marketing Dissatisfied		
<u>Stage 2</u> Proliferation	Low Market Expectation <u>Responsive MIS</u> Low Conflict		Higher Market Expectation MIS stretched, <u>unsophisticated</u> Marketing dissatisfied	
<u>Stage 3</u> Control, Integration		Cost justified <u>MIS capability</u> Low Market Expectation Low Conflict	Higher Market Expectation Marketing dissatisfied	
<u>Stage 4</u> Data Administration	Low Market Capability, Expectation High <u>MIS Expectation</u> , Structure MIS dissatisfied			High Expectation High <u>Capability</u> Low Conflict

It is equally important to consider the trend toward distributed data processing, which, in essence is a catalyst promoting a synthesis of the marketing system and traditional information processing. In an organization with a mature, state-of-the-art MIS, marketing may find itself being a "laggard" adopter of the MIS capability--stemming from marketing's own disposition toward traditional fragmented data processing. However, DDP, while forcing some dissemination of the data processing responsibility actually overcomes some of marketing's myopic view of the company's information processing and transcends marketing into a "do'er" element of the MIS--hence, an active rather than passive role. Thus, MIS maturity is further enhanced since the information system is viewed no longer by marketing or DP management as an isolated staff group. In the essence, this philosophic and organizational trend within MIS actually necessitates participation by marketing which in turn directly contributes toward marketing's maturation.

Managing the Conflict

The conflict between marketing and MIS is an emerging situation which is directly affected by the emergence of the relatively new business disciplines, themselves. This newness for marketing and MIS makes one suspect that the conflict itself has not yet fully emerged. Issues creating dissatisfaction will become more intense and more frequent with the growth of interdependency between the evolving functions. Early phases of conflicts relative to imbalanced maturity of the functions gives way to harder conflicts related to incompatibility of role factors. Typical of any incompatibility, there exist differences which are irreconcilable, meaning that the conflict cannot be completely eliminated. (In fact, a little controlled intergroup conflict can be healthy to promote integrity, checks and balances, creativity; alternatively a little conflict can prevent inertia and a complacent marketing program. The degree of conflict is the element for marketers to control.)

Recognizing various limitations and constraints within an organization, marketing managers can play a key role in assuring high performance levels between the two departments. To save space, certain procedural tasks--which might be adopted--are enumerated as follows:

BALANCING THE TWO STAGES OF DEVELOPMENT: Management control systems should integrate MIS budget controls/service objectives with the marketing strategic objectives of sales, market share, profit margins, and so on. Expectations should be mutually agreed upon.

EQUAL REPORTING RELATIONSHIPS: Marketing and MIS should have similar levels and degrees of authority to create mutual respect and satisfaction.

DEVELOP A MARKETING INFORMATION SYSTEMS SPECIALIST: The individual should speak the language of systems from a marketing viewpoint and define marketing information requirements to support decision making and control. The individual should help with the MIS planning process and identify proper MIS technical resources, specifications and processes that are germane to marketing.

FORMAL TASK FORCE MARKETING AND MIS COMMITTEE: Select people from each function should periodically meet to facilitate communication, identify problem areas, define marketing informational needs, and educate members on the latest advances being made in both marketing and MIS.

MARKETING MANAGEMENT INVOLVEMENT IN DETERMINING MIS DIRECTION: The chief marketing executive should

have input on the organization's future role and scope of information services. Through a top management policy making MIS steering committee, the marketing chief executive can define requirements while understanding and improving MIS deficiencies.

Conclusion

The conflict between marketing and MIS may be a new and growing behavioral problem in modern companies. Both corporate functions are being recognized as significant areas by top management in the era of reindustrialization. Consequently, the suggestions herein will help to overcome mutual dissatisfaction and misunderstandings between the two powerful business functions. While providing a company with better competitive strategy, effective managing of conflict will enable both functions to derive more satisfaction from their interrelationships and spawn responsive decision type information for marketing.

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Abstract

Importance-Performance analysis is a technique for relating the measurement of attribute importance and performance to the development of marketing programs.

An empirical test demonstrates that Importance-Performance analysis may be used to obtain a powerful determinant of consumer satisfaction, thus strengthening the case for its use in developing marketing strategy. Also shown is a rigorous, empirical procedure for identifying the most crucial product attributes in terms of their need for managerial action.

Introduction

Importance-Performance analysis is an easily applied technique for measuring attribute importance and performance, that can indicate which elements of the marketing mix should be emphasized (or de-emphasized) in marketing strategy. The technique and its merits were discussed by Martilla and James (1977).

The present work is an extension of the 1977 paper by Martilla and James and demonstrates additional applications by relating Importance-Performance Analysis to consumer satisfaction. Whereas the 1977 paper was a (intuitively appealing) normative one, the present work includes an empirical test of the model's capability for quantitative explanation and analysis.

In the 1977 paper, for each product attribute, importance ratings were obtained from a four-point scale ("extremely important" to "not important") and performance ratings were obtained from a four-point scale ("excellent" to "poor"). Attributes were then classified according to the relative importance and performance ratings. Remedial action was recommended for those attributes which the customers believed to be very important but were rated low on performance. Mere maintenance was recommended in the attributes where both importance and performance were high and where both were low. Finally, the attributes of high performance but low importance were judged to be of possible overkill, but it was recognized that there may be other good reasons for continuing with the practice. In fact, to summarize the conclusions, the major recommendation was to concentrate on those attributes that were judged important but had a low performance.

The present work expands on the above technique by using the "Control System Model of Consumer Behavior" postulated by Sethna (1976). This model is described in Appendix 2. The hypothesis here is that the greater the discrepancy between the importance of an attribute and the performance of a product on that attribute, the greater is the consumer's dissatisfaction with the product (and, therefore, the greater the need for remedial action). The above hypothesis is empirically tested in this paper. If the hypothesis is found to hold true, it will support the contention that Importance-Performance Analysis may be used to indicate marketing strategy to increase consumer satisfaction.

Data were collected on three brands of breakfast food, by the use of mail questionnaires sent to 1100 households, of which 955 were returned (a response rate of 87%). Data on performance and on importance were col-

lected on seven attributes for each brand. The questions were similar to those used by Martilla and James. Importance was measured on a three-point scale (In forming an opinion (of Brand j), how important are the characteristics....Does "Attribute i" matter to you: A Great Deal(3), Somewhat(2), Very Little(1).) Performance on each attribute was measured on a seven-point scale, but was transformed to a three-point scale to be consistent with the Importance rating (for example: "Delicious Tasting(3) to "Not Delicious Tasting(1)"). Data were also obtained on Satisfaction with the brand (a four-point scale from "Extremely Satisfied" to "Not Satisfied") and on Prior Purchase (actual number of units of particular brand reported purchased in the previous period.

Analysis and Results

A factor analysis was performed on the seven attributes to reduce the multicollinearity. Three attributes -- "Good Source of Protein", "Filling", and "Goodness as a Snack" -- were expressible in terms of the other attributes; therefore, the remaining four attributes (shown in Table 1) were used in all tests.

An additional concept, the "Importance-Performance Error" (abbreviated as "Error"), is introduced here for convenience. An "Error" or discrepancy (between importance and performance ratings) may be computed for each attribute (this was done for each brand) consistent with Martilla and James' recommendations for actions in their 1977 paper. For example, if, for Brand j, Attribute i had a high importance rating and a high performance, only maintenance is required, therefore an error value of zero is assigned; $E_{ij} = 0$. Similarly, if importance and performance are both low (or both at the middle of the scale), no action is recommended and E_{ij} is again = 0.

If the performance rating is higher than the importance rating overkill is possible, but disinvestment in that attribute may or may not be appropriate. Two different operationalizations of the Error are tested here. Operationalization "A" is consistent with taking remedial action to reduce overkill. If, for example, Attribute i has a low importance but a high performance on Brand j, remedial action is necessary to reduce overkill and a positive value is assigned to E_{ij} , for the "A" Error.

Operationalization "B" is consistent with not taking any remedial action to reduce overkill. Therefore E_{ij} is assigned a value = 0 for the "B" Error if importance is low and performance is high on Attribute i. These are illustrated in Figures 1 and 2.

In either of the two cases discussed above (Operationalizations A and B), action is recommended for those attributes for which the Importance rating is higher than the Performance rating. In this paper, we distinguish between a relatively small discrepancy and a relatively large one, because of the assumption that a larger error or discrepancy causes greater dissatisfaction. If the importance of Attribute i is at the top of the scale and the performance of Brand j on that attribute is at the bottom of the scale, the error or discrepancy is at its maximum; $E_{ij} = 2$ is the assigned value. If the performance rating is closer to the importance rating, a lower discrepancy exists; $E_{ij} = 1$ is the value assigned. Oper-

FIGURE 1

"A" Errors or Discrepancies (E_{ij}) between Importance and Performance on Attribute i for Brand j . Remedial Action Necessary to Reduce Overkill.

IMPORTANCE \ PERFORMANCE	HIGH	MEDIUM	LOW
	HIGH	0 (No remedial action)	1 (Reduce Overkill)
MEDIUM	1 (Discrepancy exists, Improve)	0 (No remedial action)	1 (Reduce Overkill)
LOW	2 (Great Discrepancy, Improvement necessary)	1 (Discrepancy exists, Improvement necessary)	0 (No remedial action)

FIGURE 2

"B" Errors or Discrepancies (E_{ij}) between Importance and Performance on Attribute i for Brand j . No Remedial Action to Reduce Overkill.

IMPORTANCE \ PERFORMANCE	HIGH	MEDIUM	LOW
	HIGH	0 (No remedial action)	0 (No remedial action)
MEDIUM	1 (Discrepancy exists, Improvement necessary)	0 (No remedial action)	0 (No remedial action)
LOW	2 (Great Discrepancy, Improvement necessary)	1 (Discrepancy exists, Improvement necessary)	0 (No remedial action)

ationalizations A and B are summarized in **Figures 1 and 2**. (The reader who is disturbed by the above discussion is referred to the Martilla and James (1977) paper for the rationale. Also, see Sethna (1976, 1977) for similar operationalizations and tests.)

If the above representations of Importance-Performance Errors can be shown to be determinants of consumer satisfaction, Importance-Performance analysis may gain empirical validity as a diagnostic tool of marketing strategy (assuming, of course, that increased consumer satisfaction is an important goal of marketing strategy and planning). This empirical test is described below.

Using the above assigned values of E_{ij} , a regression analysis was performed with Satisfaction as the dependent variable. The independent variables used are: E_{ij} on each attribute, and the Purchase variable. The results for one brand are given in **Table 1** and are discussed below. The results for the other brands are similar to these and are given in Appendix 1, and are shown only to illustrate the reproducibility of the overall conclusions.

TABLE 1
REGRESSION RESULTS

DEPENDENT VARIABLE : SATISFACTION		
INDEPENDENT VARIABLES	"A" ERRORS	"B" ERRORS
ERRORS ON:		
Taste	-0.441*	-0.469*
Substitutability for a meal	-0.101*	-0.098@
Nutrition	-0.143*	--
Value for money	-0.205*	-0.246*
PURCHASE	0.142*	0.170*
R^2	0.45	0.49

* $\alpha = .01$
@ $\alpha = .30$

The following conclusions may be drawn from **Table 1**:

(i) The standardized regression coefficients shown are in the appropriate direction (the Importance-Performance Errors have a negative effect on Satisfaction and Purchase has a positive effect on Satisfaction), and of significant magnitude (in most cases).

(ii) The errors on certain attributes (Taste, Value for Money) have a greater impact on Satisfaction than do the others. This has useful implications for the practicing manager, discussed later in this paper.

(iii) The "B" Errors contribute to a higher R^2 value (.49) than do the "A" Errors (.45). This is intuitively plausible, since having an importance rating lower than the performance rating need not necessarily reduce consumer satisfaction.

Implications and Conclusions

The analysis and results given above demonstrate the following points:

Importance-Performance analysis can be used in a quantitative analysis of marketing strategy. This work has demonstrated that the "Errors" that emerged from the Importance-Performance analysis explain a significant proportion of the variance of the dependent variable, Satisfaction. The greater the discrepancy between the importance and the performance, the less the consumer's satisfaction with the brand and, therefore, the greater the need for remedial action.

Importance-Performance analysis may be used, as shown in this paper, as a powerful tool in marketing planning. For instance, in the test of Brand X, two attributes emerge as being more crucial than the others. These are "Taste" and "Value for Money". The strategy implications may be that resources should be devoted more to improvement of these attributes than to the others (if the performance of Brand X on these is significantly below than the importance). It is important to note that no claim is made that these results are generalizable to the other brands in this product category. It is the procedure that may be generalized to different products and situations.

By using a procedure similar to the one shown in this paper, a manager may be able to identify the attributes which are most crucial to the determination of consumer satisfaction, (and perhaps to the success of the product). This finding may have considerable utility in (re-) allocation of resources so as to concentrate on the product design and advertising aspects of those crucial attributes.

APPENDIX 1

TABLE 2
REGRESSION RESULTS

BRANDS Y and Z

DEPENDENT VARIABLE : SATISFACTION

Independent Variables	BRAND Y		BRAND Z	
	"A" Errors	"B" Errors	"A" Errors	"B" Errors
ERRORS ON:				
Taste	-0.393*	-0.463*	-0.453*	-0.463*
Substitutability for a meal	--	--	-0.106@	-0.171@
Nutrition	-0.139@	-0.137@	--	--
Value for Money	--	--	--	-0.182@
PURCHASE	--	--	0.159@	0.104@
R^2	0.25	0.31	0.37	0.50

* $\alpha = .01$

@ $\alpha = .30$

APPENDIX 2

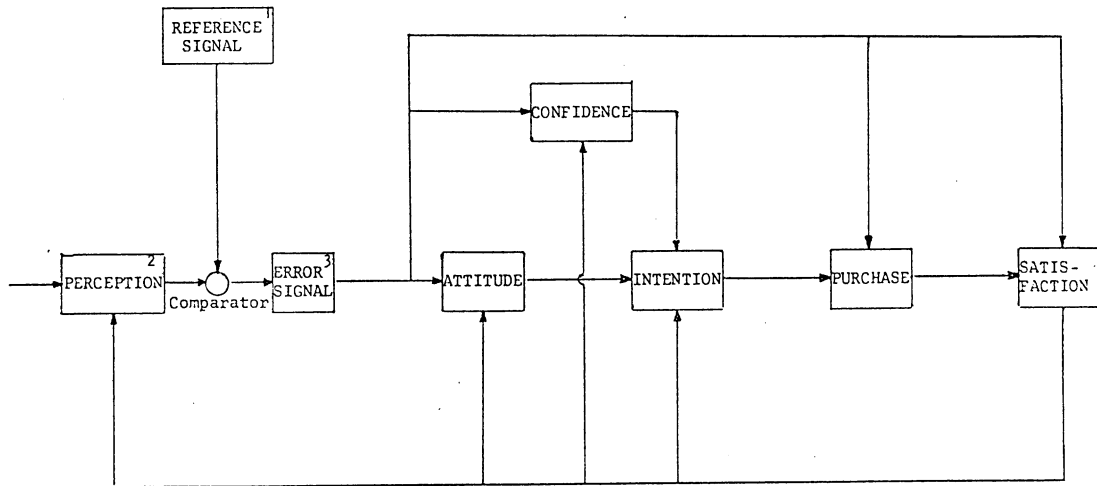
THE CONTROL SYSTEM MODEL OF CONSUMER BEHAVIOR

The model is shown in **Figure 2** and some relatively new constructs that are used in the model are defined below. A verbal description follows of the functioning of the model in the Buyer Behavior context.

The individual has his Perception² of a brand. This perception is compared with his Reference Signal¹ by which he evaluates the brand. The discrepancy between the two gives rise to an Error Signal.³ Since this discrepancy between the Reference Signal and the Perception of a brand is uncomfortable to live with, the individual will tend to behave in a manner so as to reduce a large Error Signal to some acceptable minimum, if not to zero. This is the equilibrating tendency that is common to some behavioral models. Therefore, this Error Signal, if large enough, will have a negative effect on the individual's Attitude toward the brand and on his Confidence. This lowering of Attitude and Confidence will decrease his Intention to Buy and the likelihood of Purchase of the brand. This is because Attitude and Confidence have a positive relationship with Intention, and Intention with Purchase. Through this Attitude and Confidence \rightarrow Intention \rightarrow Purchase chain, the individual will tend not to buy a brand if it generates a large Error Signal, or, in other words, if his Perception of the brand differs from his Reference Signal by a large

FIGURE 3

THE CONTROL SYSTEM APPROACH TO CONSUMER BEHAVIOR



1. Reference Signal: frame of reference by which a buyer evaluates a brand. It is n-dimensional, since a buyer evaluates a brand on n-dimensions or choice criteria.
2. Perception: the buyer's evaluation of a particular brand on the same n dimensions that constitute the reference signal.
3. Error Signal: a difference function of the reference signal and error signal which measures the undesirable discrepancy between the two. (The precise operationalization is given later.)

amount. Purchase of the brand (and the Error Signal) leads to Satisfaction (or dissatisfaction) with the brand. This control system model hypothesizes a closed-loop phenomenon. Therefore, Satisfaction has a positive feedback effect to Attitude, Confidence, Intention, and to the Individual's Perception of the brand. These feedback linkages complete the closed-loop flow. A low Satisfaction reduces the individual's Perception rating of the brand and increases the Error Signal, which further reduces Attitude, Confidence, and Intention. These three variable scores are also simultaneously lowered because of the low score on Satisfaction. Therefore, as a result of these flows, a brand which generates a large Error Signal and leads to a low Satisfaction score will tend not to be re-purchased, and the equilibrating tendency of the system will be satisfied.

In the previous discussion, we have seen how a brand, which differs from the individual's Reference Signal considerably, will tend not to be bought because of the way the control system functions--mainly because of the Error Signal and the feedback effect of Satisfaction. Let us now consider the reverse case--that of a brand which closely matches the Reference Signal. In such a case, the discrepancy between the Reference Signal and the Perception of the brand will be low. This generates a low Error Signal. Although the individual would ideally prefer a zero Error Signal, in a behavioral context this is rarely possible and certainly not probable, so he can live with a certain acceptably low error. This error does decrease Attitude and Confidence and through them, Intention and Purchase. However, if the Error Signal is sufficiently low, the scores on these variables will not be significantly decreased. (In the case of a nonlinear control function, they may not be decreased at all.) Purchase of the brand and a low Error Signal give rise to a high score on Satisfaction, which works through its positive feedback linkages. The score on Perception increases. This further reduces the Error Signal which increases the Attitude and Confidence and, through them, increases Intention and Purchase. Attitude, Confidence, and Intention are simultaneously increased by the high score on Satisfaction. All these

flows lead to an acceptably low Error Signal, Purchase of the brand, and a high Satisfaction score. Again, the equilibrating nature of the system has been satisfied.

We can also consider the case of a brand whose Perception is close enough to the individual's Reference Signal to lead to a low Error Signal, and through the Attitude and Confidence Intention chain, to Purchase. If the individual fails to be satisfied with the brand, however, he will have a low Satisfaction score and this will lower the Perception score, increase the Error Signal and decrease the Attitude, Confidence, and Intention scores. By this mechanism, the individual changes his Perception of the brand and experiences a large Error which he cannot live with. Therefore, after one or two cycles, he will tend not to buy the brand, so as to restore equilibrium.

Here we have seen how the control system works so as to decrease purchases of a brand generating a large error signal and increase purchases of a brand generating a low error signal. On the other hand, theoretically, this is only one of many ways that an individual could adjust to a large error signal. Some of the other methods are mentioned below:

- a. The error signal may not be strong enough to motivate the individual to purchase but may lead to overt search. (Seek out advertisements, technical reports, advice of reference groups, etc.)
- b. The individual may change his perception of the facts or attributes of the brand. Festinger [4] calls this "opinion change." After a purchase, this may lead to "dissonance effects on perception."
- c. The individual could accept only those environmental inputs that make the perception of his existing choice consonant with the reference signal and ignore all other inputs. More subtly he may mentally distort dissonant information. In the literature, these are called perceptual bias and perceptual vigilance and defense.

d. Theoretically, one option remains. Since the error signal is some difference function of the reference signal and perception, the individual could change the reference signal to become consonant with the perception of the brand. From what has gone before it appears that this is the least likely alternative, since the reference signal is analogous to a goal or motive and is determined by a higher-order system (within the individual).

Although the presence of a large error signal may lead to behavior other than purchase or non-purchase of a brand, its most direct impact would, in general, be on the purchase variable rather than on "perceptual vigilance", "dissonance", etc. Besides, the Purchase construct is more directly operationalized, measured and tested. For this reason, the Purchase construct is used in the model to be tested. It is worth noting, however, that the presence of these factors (a through d above) may distort the Error Signal→Purchase relationship.

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SEX DIFFERENCES IN ATTITUDES TOWARD UNITED WAY

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Abstract

This study reports on sex differences in attitudes toward a particular metropolitan United Way organization found in a large sample size survey. Although previous studies with different objectives have not found major differences according to sex, several significant findings were made on variables which correlate highly with the size of the contribution. Possible explanations for the results are offered as well as a strategy to deal with the situation in future campaign group solicitation meetings.

Introduction

Many local United Way organizations have faced very difficult times during the past few years for a variety of reasons. One major factor has been the high rate of inflation. While many United Ways have been able to average around 10 percent in annual increases in pledges over the past several years, this generally has not been sufficient to keep up with the increases in operating costs of the member agencies. Another cause has been cuts in the federal government's Title XX program (which helps finance certain United Way agencies). The Reagan administration's interest in further spending reductions in social programs certainly is not encouraging to local United Ways. In addition, the number of local and national nonprofit organizations has grown rapidly (Bates 1976), causing United Way to have to be more competitive in attracting contribution dollars. Although a well-known organization, United Way in fact receives less than five percent of America's charitable giving. The overall effect of the difficulties mentioned above has been a decline in the percentage of member agency funding and in many instances the denial of worthy agencies into local United Way membership.

As Shapiro (1973) and Kotler (1975) and others have argued, nonprofit organizations can benefit from the application of marketing concepts and marketing research. The national United Way organization is becoming more interested in marketing and is increasing its use of marketing research (United Way of America 1979). Local United Ways are also being strongly encouraged to conduct market research within their service areas. This paper will report on a portion of the results obtained in a local United Way survey conducted during the 1980 campaign. While this particular survey yielded many interesting results which may help local staff and volunteers develop promotion and communication strategies for the future, the focus of this report will be on the discovery of significant differences between male and female respondents, and the subsequent development of a marketing segmentation strategy for use in the group solicitation process portion of the campaign.

Methodology

In the Fall of 1980 a survey instrument was prepared and administered to a large sample of employees in a major metropolitan area. The respondents represented a cross-section of 14 different blue- and white-collar employers in the community. The survey was administered either during or after group solicitation meetings conducted by United Way staff at the employer's place of business. The completion rate for the survey was very high, perhaps due to the fact that the employees were being given an extended break period to attend the group meeting. No previous study of this type had been conducted in this

local United Way's service area. The statistical analysis was done with the SPSS program. The two-way contingency tables developed using sex as one of the categorical variables had sample sizes of about 1200 employees, after allowing for occasional missing values. The composition of the samples was almost exactly 50 percent female and 50 percent male. All findings were shared with the employers who helped furnish the sample base.

Sex Differences

A good deal of the interest in the crosstabulation analysis of the survey results concerned the contribution variable asked about in the final question: "What was or will be your contribution to United Way for the coming year?" Several possible responses were offered, ranging from "No contribution" to "Over \$500." While this contribution variable did show a highly significant ($\alpha < .01$) association with the sex variable, this was anticipated since overall females' income was significantly less than males income. This finding was therefore not of particular interest.

The finding of other significant differences according to sex was not generally anticipated by either the researchers or by the local United Way staff. A national United Way study (United Way of America 1979) conducted by a major market research firm in both 1976 and 1979 did not even use respondent sex as a classification variable of interest. A United Way study by Keating et al (1981) found that sex was a non-significant independent variable in a multivariate probit analysis where the dependent variable was dichotomous (respondent contributed, or did not contribute). Another recent study (Yavas et al 1981) used discriminant analysis to classify respondents as donors or nondonors to a local United Way. In none of the six models developed did respondent sex enter the discriminant function.

While we are interested here in some sex differences which were found, it should be pointed out that men and women were very similar on many of the demographic questions used in the survey. In particular, no significant sex differences existed according to respondent age, marital status, number of people in the household, years lived in the area, union membership, having received assistance from a United Way agency in the past, and other variables.

However, many of the survey questions which were more attitudinal in nature showed surprisingly strong ($\alpha < .05$) differences between the sexes. These results are shown in **Table 1**. The first column of **Table 1** lists specific attitude/belief questions for which significant differences between men and women were noted, while the second column indicates the direction of the findings. The third column indicates how the particular attitude/belief question was associated with the contribution variable (the last question on the survey) in a two-way contingency table. Clearly the findings in the second column of **Table 1** would be of less interest if the survey questions being considered were statistically independent of the contribution variable. Five of the six male-female differences reported in **Table 1** did occur for questions which were strongly associated with the contribution variable.

Discussion

Survey questions 1d, 1i, and 2 (see **Table 1**) yielded

TABLE I. CROSSTABS SHOWING SEX DIFFERENCES

Survey Question	Finding*	How Survey Question Correlates With the Contribution Variable*
ld. United Way agencies do not do enough for the average, middle class person	Women more likely to agree; men more likely to disagree	Disagreement with ld is associated with larger contributions
lg. United Way agencies charge fees for the services they provide	Women more likely to agree; men more likely to disagree	- - -
li. Local United Way agencies can provide health and social services more efficiently than State or Federal Government can	Women more likely to disagree; men more likely to agree	Agreement with li is associated with larger contributions
2. About how much of the money raised by Metro United Way is actually distributed to the various United Way agencies?	Women rate United Way's fiscal efficiency much lower than men do	Higher efficiency ratings are associated with larger gifts
3. The "Pressure" question	Women much more likely than men to report feeling pressured to give	Not feeling pressured is associated with larger contributions
4. Amount learned about United Way during this year's campaign	Women more likely than men to report having learned things they didn't know before	Having learned more is associated with larger contributions

* All findings report yield a Chi-square value significant at .05 or smaller

similar results. In each case women tended to report a more negative attitude/belief toward the statement than did men, and in each case the more negative feelings were associated with small contributions.

Survey question number 3 was primarily intended to get a reading on the employee's feeling of pressure to give as a result of the group meeting conducted by the United Way staff members, although it is possible that some employees may feel pressure to give from their employers prior to the meeting. If so, this is likely to also be picked up by this question. In any event, women were much more likely to report feeling pressured, and the indication of feeling pressured was strongly and negatively associated with the size of the contribution.

Question lg was interesting in that it revealed a major misconception about the local United Way. While it is true that the great majority of the community's United Way agencies do charge fees (on a sliding scale according to ability to pay), only 35 percent of the sample responded "agree somewhat" or "strongly agree." It is not clear why women were more likely than men to agree with this statement; however, overall responses to this question were found to be independent of contribution size.

Questions 4 was an exception to the pattern of most of the others in that it showed women more likely to report responses associated with larger contributions -- women reported more often than men that they had learned "some" or "very much" new about the United Way during the 1980 campaign.

In addition, a further analysis of giving by income levels showed that women employees gave less than men even when income levels were comparable.

Taken as a whole, the results presented above strongly suggest that women's attitudes/beliefs with respect to United Way on contribution-related statements were more negative (or less positive) than men's, and that perhaps women in general were less educated about some of the workings of the local United Way and its sixty-plus agencies serving the metropolitan area. A possible though untested reason for women being less informed could be that in general men have been in the work force for more years and that through the annual United Way campaigns at their place of work have become more acquainted with the United Way than have women. Another explanation hypothesized is a beneficial effect of national United Way promotions made by football players which are televised primarily during National Football League games and are presumably seen by more men than women.

In the past, group solicitation presentations have not differed according to the sexual composition of the employee audience, even though many meetings do involve a heavy proportion of one sex or the other. It has been decided that in the future that the message will vary somewhat for those group meetings which have predominately female attendees. In the coming campaign such meetings will tend to be a bit more basic and educational about the local United Way organization. Specifically, these meetings will place more emphasis on exactly what activities and agencies are associated with United Way, how dollars are allocated to agencies, the role of volunteers in setting policy, and who the recipients of United Way assistance are. Specific facts to counter misconceptions will be used, and agencies which tend to help primarily women may be highlighted. The closing of the meeting may be altered somewhat to deal with the problem of women feeling more pressured to give. Another part of the survey showed that employees strongly favor

the group meeting process over other forms of solicitation such as by mail, requests in the pay envelope, or one-on-one. Accordingly, group meetings would seem to be the ideal format to deal with some of the sex differences which have been found. While not all United Way solicitation is conducted through group meetings, this format is used heavily enough to make the effort of developing different messages well worthwhile.

Summary

A large sample size survey revealed significant differences according to sex in attitudes on important issues concerning the United Way organization in a particular metropolitan area. These differences were generally unanticipated, and suggested that overall men were better educated than women about the United Way. Some means of attempting to deal with these differences in the future were discussed. The results also suggest that other studies involving the United Way or similar organizations should include sex as a classification variable.

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PERCEIVED RISK AND VOTING BEHAVIOR

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Abstract

The purpose of this pilot study is to conceptualize the application of perceived risk to voting behavior, to measure the perceived risks voters associated with specific candidates, and determine if there is any relationship between the voters' risk perception and their actual voting pattern.

Introduction

Perceived risk has been a popular area of research in marketing for well over a decade. Yet, though a plethora of articles have been published in marketing and some psychology journals, the theory has not attracted much interest from other disciplines such as political science, which often borrow from the field of marketing. It is a recognized fact that getting a particular candidate elected to an office is primarily a marketing function. Presumably then, the concept of perceived risk, as it might affect the voting behavior of individuals, would be of great interest to political scientists. However, little is found in the literature which examines voting behavior from the perspective of risk taking. Could a voter choose the candidate for whom to vote based on minimizing the perceived risks on one candidate vs. an alternative?

Perceived Risk

In the field of marketing one of the more popular theories to research has been that of perceived risk and its influence on consumers' buying patterns. Since the concept was introduced by Bauer (1960) in the 60's, many have studied the various components of risk taking by consumers. Most of these studies can be classified into several broad categories.

Bauer (1960) and Cox (1967), who were two of the earlier researchers in perceived risk, concentrated on identifying and studying the component parts of consumer risk taking. Bettman (1973;1974) and several others (Cunningham, 1967; Jacoby and Kaplan, 1972) have also made major contributions to the conceptual development of the theory. Other research has concentrated on the relationship of risk taking and the demographic and psychological characteristics of the consumer. Such areas as personality (Dash, Schiffman, and Berenson, 1976; Schaninzer, 1976), self confidence (Bell, 1967), and age (Schiffman, 1972) have been investigated as factors influencing risk taking.

Product characteristics have also attracted the attention of perceived risk researchers. Several have explored the question of new product adoption and risk taking (Popielary, 1967), while others have looked at risk at the brand level (Peter and Ryan, 1976). Store patronage preference has proven to be a popular area of perceived risk studies (Prasad, 1975; Hisrich, Dornoff, and Kernan, 1972), along with other shopping methods such as telephone shopping (Cox and Rich, 1964).

Finally, the strategies used by consumers to reduce risk have been the focus of studies by several investigators. Repetitive consumer behavior (Sheth and Venkatesan, 1968); warranties and service contracts (Perry and Perry, 1968); and other risk reducing strategies (Roselios, 1971) have been explored. In addition, a number of articles have concentrated on various sources

of information and their effect on risk taking and risk reduction (Woodside, 1972; Woodside and Delozier, 1976; Barach, 1969).

However, all of these articles have dealt primarily with profit oriented marketing. Little research has focused on the transferability of the theory of perceived risk to the area of non-profit oriented marketing. One exception to this are the studies done by Clabaugh, Riecken, and Yavas (1981) into the risks associated with the purchase of used merchandise in Goodwill outlets. Even these studies involve profit to the organization, although the money is then used for public benefit.

Marketing of political candidates to the voters has "come to the vanguard" over the past several decades. In this non-profit area, many sophisticated marketing techniques are now being utilized to "sell" a candidate to the people. Though research has investigated the factors which influence a voter to cast his vote for one candidate over another, none of this effort has examined perceived risk as a potential component of the voting decision.

Voter Decision Behavior

A vast amount of research has accumulated concerning the behavior of the American voter. In fact, in 1972 an annotated bibliography was published listing over 2,200 research reports conducted between 1954 and 1971 on the topic (Smith and Garrison, 1972). Numerous other articles have been published since 1971. It is somewhat surprising, given the effort which has been expended studying the behavior patterns of voters, that little of the work examined by the author has mentioned anything resembling the concept of perceived risk as a potential factor in voting decisions. Most of the articles examined concentrated on one or more of the following five factors.

1. Party Affiliation

Many of the studies have found that the dominant influence on voting patterns has been party affiliation, i.e., being a member of the Democratic or Republican party. Shapiro (1969) found that party affiliation, along with the candidates' personal qualities, were strongly correlated with voting intention. He, along with other researchers (Stokes, 1962), demonstrated the effect of party affiliation on voting. However, this serves to be a more important factor in state and local elections than national elections (Boyd, 1969). The amount of effort expended by a party to influence the voters through precinct activities seemed to increase the influence of that party on the voting patterns (Crotty, 1971). One explanation of elections, primarily presidential races, where there were significant numbers of defections, lies in the theory of "cross-pressure" (Boyd, 1969). This occurs when a person's attitudes about a political party, the nominee of that party, and the policies of that party are incongruent with each other. When this occurs, the person is more likely to vote for the candidate of another party (Boyd, 1969).

2. Candidate Attributes

Another popular explanation of voting behavior is the

perception of the personal characteristics of the candidate. Many studies have found this factor to be important (Shapiro, 1969; Boyd, 1969; Nygren and Jones, 1977). Such things as personality (Feltner and Goldie, 1974), incumbency (Cover, 1977; Cowart, 1973; Nelson, 1978), and perceived competency (Nygren and Jones, 1977), have positive effects on a candidate's chances of being elected. By the same token, some evidence exists that a known corrupt or dishonest politician will lose votes.

3. Characteristics of the Voter

The demographic and socio-economic characteristics of voters have also been of interest to political scientists as variables affecting voter behavior. Social class and status have been found to influence voting patterns, although the total effect has not been clarified (Foladare, 1968; Alford, 1963). It has also been found that female voters make the choice using different criteria than do males (Feltner and Goldie, 1974). Religion (Alford, 1963), socialization (Feltner and Goldie, 1974), education (Bishop, 1976), and race (Knoke, 1974) have all been subjects of studies. Finally, Brody and Sniderman (1978) found that personal concerns seemed to have a significant influence on the decisions making process of voters. Although the precise effect is uncertain, they felt that, particularly as a means of rewarding or punishing incumbents, voters evaluate candidates in terms of their ability to be "somewhat helpful" in solving the personal problems of the voters.

4. Political Issues

The importance of issues as a determining variable of an individual's voting patterns has been disputed over the years. In their classic work *The American Voter*, Campbell, et. al. (1960) concluded that in the 1956 elections, only 18% to 36% of the voters, depending on the specific issue, were concerned and knowledgeable about the issues. Of these "concerned voters" many were firmly committed to a given party and supported the views of that party. Therefore the actual number of voters making decisions solely on issues was probably considerably lower than the 18% to 36% initially indicated. Since that definitive study of the 50's, however, many researchers have hypothesized that voters have become more issue oriented. Repas (1971) found that voters considered at least a few substantive issues at the time of election. Others (Key, 1966; Shapiro, 1969; Boyd, 1969) have also found issues to be an important criteria for choosing to support a given candidate.

One set of issues in particular has been studied in several articles. These issues, such as taxes, unemployment, inflation rate, etc., are generally grouped under the title of economic issues. Some researchers have found economic issues to have an important effect on election results (Weatherford, 1978; Fair, 1978), while others question the significance of the role of economic issues (Holloway, 1979). The emergence of special interest groups who encourage voting for a given candidate based on a single issue has further confused the understanding of the role of political issues in a campaign (Holloway, 1979; Sheingold, 1973; Knoke and Long, 1975).

The controversy on the question of voting behavior based on issues is best demonstrated by the examination of two articles. The first of these by Miller et. al. (1976) concluded that the American voter has become better educated and more sophisticated during the period from the late 50's to the early 70's. They found that, although party affiliation was still of major

consequence, ideological and policy voting were shown to be of much greater importance than they were given credit for during the fifties. In fact, they proved to have a slightly higher effect on the 1972 presidential race than did party affiliation, with the personal attributes of the candidate coming in as a close third. Such issues as the Vietnam war, amnesty, military spending, urban problems, aid to minorities, civil liberties and others were the issues which contributed to the explanation of the vote in 1972. Economic and cultural issues were less potent concluded the article. This article was shortly followed by another by Popkin et. al. (1976). Popkin's comments heartily disagreed with both the Campbell book (1960) and with Miller's article (1976). The findings of Popkin's research suggest that both Campbell and Miller used faulty techniques to arrive at wrong conclusions. They suggest that a "fresh approach may begin with the idea that the voter is using his vote as an investment in one or more collective goods, made under conditions of uncertainty with costly and imperfect information" (Popkin, Gorman, Phillips and Smith, 1976, 803-804). They suggest that party affiliation, ideology and information from special interest groups are means by which the voter decreases the costliness of information. They suggest further that, since the voters are interested in maximizing the "collective goods" which they may receive, the perceived competence of the candidates becomes relatively more important than party, ideologies, or issues.

5. Sources of Information

Sources of information are the means through which the voter receives information in order to make a decision. These sources include television, newspapers, political party platforms, mailings, and peer group interaction. These factors are not independent of each other.

Television has become the main source of information for the voter about candidates, issues, and party policies, particularly in national elections (O'Keefe, Mendelsohn, and Liu, 1976; Atkin and Heald, 1976). Because of the widespread use of and trust in television reporting, candidates have started using professional campaign managers. This combination often bypasses the party machinery and has contributed to the decline in party affiliation. (Atkins and Heald, 1976). Newspapers, with their campaign articles and editorials, periodically assume a leading position as a source of information (O'Keefe, Mendelsohn, and Liu, 1976; Atkin and Heald, 1976). The ability to predict which media will be most effective for which party, candidate, or issue and at which level has not yet been validated. Although newspaper and television campaign reports are trusted, they have been contradictory, negative, and incomplete. This discrepancy has left many voters confused and therefore inactive (Graber, 1976; Gilsdorf, 1973; Graber, 1976).

The political party position is sometimes the determining source of information. As mentioned earlier, the voter seems to be relying less and less on the party position, which means that the political parties are becoming a less important information source. The precinct worker is still a source, but primarily for local contests (Crotty, 1971). Mailings, especially by the incumbent, can be an effective source of information and votes (Boor, 1978; Cover, 1977).

Peer groups still comprise a very large source of information. These groups are in all facets of the voter's life: occupation, religion, ethnic group, social group, and neighborhood (Robinson, 1976; Popkin, Gorman, Phillips, and Smith 1976; Sheringold, 1973). The flow of information is in a downward fashion from opin-

ion leaders to those with some interest and/or knowledge to the uninformed or inactive. The path of greatest influence seems to be from the opinion leaders to uninformed (Graber, 1976; Gilsdorf, 1973; Graber, 1976). Those with some knowledge appear to have made up their minds already and are not duly impressed with more information. The tendency seems to be party-line voting as long as some information is received by the voter through the media. When virtually no information is received, the voter normally will not vote (Zukin, 1977).

Perceived Risk as a Determinant of Voting Behavior

As demonstrated above, there has been little, if any, application of perceived risk theory to voting behavior. In product choice behavior, however, there are many marketers who believe that perceived risk provides at least a partial explanation of consumer behavior. If individuals use this strategy to select a product, it does not seem too farfetched to anticipate voters using the same approach when faced with selecting a given candidate from alternatives. A voter is confronted with the same elements in his decision as is a consumer, i.e., the risk of making a bad choice and the unpleasant consequences that could result. The risks involved in making a bad choice may differ somewhat from those perceived by consumers, but several (financial and safety for example) may be common to both situations. By the same token, the consequences involved would differ somewhat, possibly with some of the consequences associated with voting being much more devastating (i.e., war, depression, etc.) while others are of lesser importance than in consumer decisions. However, the basic principle of perceived risk and risk reduction would remain essentially the same.

If there is any validity to the concept of voters using the perceived risk strategy, one would expect to find some common risk reduction tactics being used by voters in their behavior pattern. In fact, some actions taken by voters would seem to suggest that they do try to reduce risks. For example, regularly voting a "straight ticket" for the political party with which they are affiliated could be interpreted as similar to brand loyalty, a common tactic of some consumers. Relying on "expert" opinions such as political analysts and the media may also be construed as a risk reduction technique. In addition, such things as following the advice of organizations such as unions, religious groups, professional groups, or special interest groups; voting for incumbents; and making the decision based on one issue may all be methods of reducing risk.

Some recent phenomena may also indicate the presence of risk as a determinant of voting patterns. In several of the recent presidential elections, some analysts attributed the voting pattern partially to an "anti vote" as opposed to a "pro vote." In other words, some voters were voting against one of the candidates instead of voting for the candidate they actually cast a ballot for. The Nixon-McGovern race and the more recent Reagan-Carter contests are good examples. Another indicator of the role of risk in voting is the emergence of the National Conservative Political Action Committee which funded an extensive campaign to defeat selected liberal candidates for office. The main thrust of their campaign was to disseminate negative information concerning the liberal candidates. This could be interpreted as an attempt to increase the voters perceived risk of the selected politicians.

Considering the similarities between consumer choice decisions and voter decisions and the potential for explaining some of the actions of voters, it seems reasonable to examine if perceived risk does play a role

in voters' behavior patterns. This study is a modest attempt to initiate research into this area.

Methodology

Several weeks before the 1981 elections two questionnaires were mailed to 461 households in the metropolitan Muncie, Indiana area. Each household in the sample was selected from the telephone book using systematic random sampling. Each household was instructed to have two eligible voters independently complete one of the questionnaires and return it to the researchers. After the election each of the individuals who had completed the original questionnaire was again contacted by mail and asked to indicate for whom they voted in the presidential, gubernatorial, and senatorial races. A total of 134 sets of questionnaires were ultimately found to be completed sufficiently to be included in the study. Demographically, the final sample seemed to represent a broad spectrum of the Muncie community as demonstrated in Appendix A.

In addition to qualifying questions, demographics, the questions concerning party affiliations, the initial questionnaire was designed to measure the perceived risks each voter associated with the major candidates in each of the races and the relative importance of the various types of risk. The subjects were asked if they were registered to vote, planned to vote, and if they had already determined who they were planning to vote for in each of the races. After those questions, they were given a definition of a particular type of risk, (Appendix B illustrates the definition of each of the types of risks), for example, the risk of a financial loss, then they were asked to indicate the degree of risk of financial loss which they associated with each of the presidential candidates on a five point scale. After the subject was given an opportunity to evaluate the candidates on each of the various risks, they were then asked to indicate the relative importance of each of the risks. Again a five point scale was used for this purpose. Upon completion of the section concerning the presidential race, the voters went through the same sequence for the gubernatorial and senatorial candidates. Finally, they answered questions on their party of registration, how often they vote a straight ticket, and which party they normally support when they do vote a straight ticket. The second questionnaire simply asked the respondents to indicate for whom they finally voted.

In order to analyze the data, the ratings assigned to the candidates on each of the types of risk were multiplied by the level of importance the respondent attached to the risk. The resulting products of the different risks associated with a given candidate were then summed to produce a single variable as an index indicating the cumulative risk associated with a given candidate. This index was used to analyze the data.

Results

Table VII (Appendix C) summarizes much of the data collected. It is evident that financial loss ($\bar{X} = 4.6$ with 5 = Extremely Important), safety loss ($\bar{X} = 4.5$) and loss of pride ($\bar{X} = 4.2$) were the major concerns to the respondents in the presidential race, with benefit loss ($\bar{X} = 3.9$) also being important. This trend held true in the gubernatorial and senatorial campaigns also, except benefit loss became more important than pride in these two races. It should also be noted that in each of the campaigns, the winning candidate, on the average, was considered to be less risky than their opponents based on the Total Risk Index. Reagan (Risk Index = 57.1) appeared to be perceived of significantly less risky than either Carter (69.7) or Anderson (68.3). By the same token Orr (50.0) was perceived

less risky than Hillenbrand (55.7) and Quayle (52.0) less risky than Bayh (62.3). Upon closer examination, it will be noticed there is only one instance where the losing candidate was perceived as less risky than the winner, that concerns the pride loss where in the gubernatorial race, Hillenbrand (\bar{X} Risk = 2.1) was considered less risky than Orr (\bar{X} Risk = 2.8).

The same results found on Table VII were further confirmed on Table VIII (Appendix C). This table shows that in each case the candidate who won the election was ranked lowest in perceived risk by the majority of the respondents. Whereas Carter and Anderson were considered less risky by 23.1% and 9.7% respectively by the respondents, Reagan was considered less risky by 50% of the respondents. Comparable results occurred in the gubernatorial and senatorial campaigns. Table IX simply shows the number and percentage of the respondents who voted for each of the candidates.

Appendix D shows the results of crosstabs and chi square calculation comparing the perceived risk index with the actual vote of all of the respondents and of only those respondents who had not made a decision before completing the questionnaire. In most of the cases, the X^2 was significant at the $<.05$ or less level. When considering all respondents, Tables X, XIII, and XIV, the level of significance was less than 0.0001. This held true for the presidential race (Table X, $X^2 = 61.86$, $p < 0.0001$), the gubernatorial race (Table XII, $X^2 = 38.99$, $p = 0.0001$), and the senatorial race (Table XIV, $X^2 = 69.09$, $p < 0.0001$). In the case of the undecided respondents, the sample size was too small to consider each race separately (Table XI, XIII, and XV) so the three races were combined in one table (Table XVI) where the perceived risk index and votes were compared for the Republican candidates versus the Democratic candidates. As the table indicates, there is a significant relationship ($X^2 = 7.44$, $p < .05$) between the risk index and the voting pattern.

Discussion

This study would seem to confirm that perceived risk does have a significant relationship with voting behavior. Unfortunately, due to the late timing of the survey, approximately 85% of the respondents had already determined for whom they were going to vote. This clouds the interpretation of the statistics using all of the questionnaire. With this group it is difficult to know whether the indicated perceived risks preceded their decision making or if their stated perceived risks were developed to support the decision they had already made. One conclusion which evolved is that very few of the committed respondents changed their minds during the last week and a half to two weeks of the campaign. This would be important in determining the scheduling of promotional activities.

More revealing is the analysis of the undecided respondents. The significant results of this comparison would strongly suggest that the risks associated with each candidate as perceived by the voters do affect their voting behavior. At the very least, considerably more research into the application of the marketing theory of perceived risk as it relates to voting behavior would appear to hold potential as an extension of non-profit marketing.

Appendix

Appendix A Demographics

Table I

Sex		
	Number of Respondents	%
Male	70	52.2
Female	64	47.8

Table II

Age		
	Number of Respondents	%
18-20	5	3.7
21-30	27	20.1
31-40	21	15.7
41-50	18	13.4
51-60	30	22.4
61-70	24	17.9
71 & UP	9	6.7

Table III

Household Status		
	Number of Respondents	%
Single	35	26.1
Married/no children	18	13.4
Married/children at home	34	25.4
Married/empty nest	42	31.3
Other	1	0.7
No Answer	4	3.0

Table IV

Occupation		
	Number of Respondents	%
Unemployed	1	0.7
Unskilled Blue Collar	6	4.5
Skilled Blue Collar	13	9.7
Lower Level White Collar	10	7.5
Higher Level White Collar	44	32.8
Housewife	18	13.4
Student	15	11.2
Retired	23	17.2
No Answer	4	3.0

Table V

Party Registration		
	Number of Respondents	%
Republican	56	41.8
Democrat	45	33.6
Independent	24	17.9
Other	2	1.5
No Answer	7	5.2

Definitions of Risk

Financial Loss: If the President of the U.S. does a poor job, YOU may suffer financially through higher inflation, unemployment, increased taxes, or other financial losses.

Safety Loss: If the President of the U.S. does a poor job, YOU may have certain risks to your safety through crime, war, nuclear accidents, or sickness.

Personal Benefit Loss: If the President of the U.S. does a poor job, YOU may have a decrease in the services you now enjoy such as education, highway maintenance, health programs, and recreational programs.

Ego Loss: Sometimes when you vote for a President who does a poor job, you may feel disappointed with yourself for voting for that candidate.

Pride in America: If the President of the U.S. does a poor job, our relations with other countries may become worse and you might lose your pride and confidence in America.

Appendix C

Raw Data And Computed Risk Index

Table VI

Number Of Respondents Who Had Previously Decided For Whom To Vote

	Decided		Undecided	
	Number	%	Number	%
President	115	85.8	19	14.2
Governor	112	83.6	21	15.7
Senator	116	86.6	18	13.4

Table VIII

Candidate With Lowest Risk

	# of Respondents	% of Total Sample
	# of Respondents	% of Total Sample
Presidential		
Reagan	67	50.0
Carter	31	23.1
Anderson	13	9.7
Tied	15	11.2
No Answer	8	6.0
Gubernatorial		
Orr	79	59.0
Hillenbrand	39	29.1
Tied	13	9.7
No Answer	3	2.2
Senatorial		
Quayle	60	44.8
Bayh	43	32.1
Tied	25	18.7
No Answer	6	4.5

How The Respondents Voted

	Number	%
	Presidential	
Reagan	77	57.5
Carter	45	33.6
Anderson	8	6.0
Other	1	0.7
No Answer	3	2.2
Gubernatorial		
Orr	77	57.5
Hillenbrand	51	38.1
Other	1	0.7
No Answer	5	3.7
Senatorial		
Quayle	74	55.2
Bayh	54	40.3
Other	1	0.7
No Answer	5	3.7

Appendix D

Chi Squares

Presidential X^2
Table X

Candidate With Lowest Risk Index X Vote Of Respondents			
Risk Index/Vote	Reagan	Carter	Anderson
Reagan	61	4	2
Carter	5	23	3
Anderson	3	8	2
Tied	6	6	1
$X^2=61.86$		significance=0.0000	

Table XI

Candidate With Lowest Risk Index X Vote Of Undecided Respondents

Risk Index/Vote	Reagan	Carter	Anderson
Reagan	4	1	0
Carter	0	2	2
Anderson	1	1	0
Tied	2	4	0
$X^2=11.38$		significance=0.0772	

Gubernatorial X^2
Table XII

Candidate With Lowest Risk Index X Vote Of Respondents		
Risk Index/Vote	Orr	Hillenbrand
Orr	60	17
Hillenbrand	11	28
Tied	4	6
$X^2=38.99$		significance=0.0000

Table XIII

Candidate With Lowest Risk Index X Vote Of Undecided Respondents

Risk Index/Vote	Orr	Hillenbrand
Orr	6	7
Hillenbrand	0	5
Tied	1	1
$X^2=3.60$		significance=0.1652

Senatorial X²
Table XIV

Candidate With Lowest Risk Index X Vote Of Respondents		
Risk Index/Vote	Quayle	Bayh
Quayle	55	2
Bayh	9	34
Tied	6	17
$X^2=69.09$ significance=0.0000		

Table XV

Candidate With Lowest Risk Index X Vote Of Undecided Respondents		
Risk Index/Vote	Quayle	Bayh
Quayle	0	0
Bayh	2	8
Tied	1	7

Table XVI

Candidate With Lowest Risk Index X Vote Of Undecided Respondents In All Three Races		
Risk Index/Vote	Republican Candidates	Democratic Candidates
Republican Candidates	10	8
Democratic Candidates	2	15
$X^2=7.44$ significance<.05		

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MARKETING MARKETING TO VOLUNTARY ORGANIZATIONS

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Abstract

The substantial gap between marketing academics and managers in the voluntary sector could be bridged by marketing executive education to managers in voluntary organizations, by delivering MBA skillsbanks to voluntary enterprises, by academic research on the market for volunteers, by further adapting marketing concepts to voluntary settings, and by debating marketing philosophy with practitioners in voluntary organizations.

Introduction

In recent years, marketing scholarship addressed to non-profit organizations has made encouraging gains. In terms of scholars involved, research undertaken, practitioners consulted, literature generated, teaching materials produced, and academic forums mounted, the level of activity has advanced substantially.¹

A further measure of this progress is the widening range of non-profit organizations which have been studied. By that test, too, non-profit marketing is a catholic subject.

However, there is one kind of non-profit enterprise which has received relatively little attention from marketing faculties. It is the non-profit organization which is heavily reliant on volunteers. Developing generalizations as to what non-profit enterprises fall at various points on a spectrum signifying modest to substantial use of volunteers is an exercise in taxonomy which has not been undertaken. However, for illustrative purposes, some tendencies can be suggested. With major individual exceptions, one might expect that toward the "light user" end of the scale would fall, for example, most churches, trade associations, co-operatives, hospitals, and educational institutions. Toward the middle might be many consumer groups and arts and cultural organizations. Toward the "heavy user" end one might find most service clubs, environmental groups, neighbourhood groups, and, above all, social service agencies. (One might argue that governments, almost alone among non-profits in their power to expropriate revenues, have little need for unpaid help).

There is between managers in voluntary organizations and marketing departments in business schools a substantial gap. The purpose of this paper is to examine that gap: to cite its dimensions, to consider its causes, and to suggest some remedies.

Evidence of The Gap

First, consider some of the evidence of the gap on the voluntary sector side. Of the over 100 associate editors of what is arguably the most important scholarly journal focussing on voluntary enterprises, namely the Journal of Voluntary Action Research, none are marketing academics. Predictably, then, the proportion of its articles dealing with marketing is very low. On the board of the Association of Voluntary Action Scholars, no marketing scholar is to be found. Of the

¹ Christopher H. Lovelock and Charles B. Weinberg, "Public and Nonprofit Marketing Comes of Age," in Gerald Zaltman and Thomas V. Bonoma (eds.) Review of Marketing 1978 (Chicago: American Marketing Association, 1978), pp. 413-452.

many presentations made at the 1981 conference of the Association For Volunteer Administration, the Association of Volunteer Bureaus, and the Association of Voluntary Action Scholars, none dealt explicitly with marketing.

These are evidences on the voluntary sector side of the gap. And what of the business school side? Of the twenty-five degree, diploma, or certificate programs which focus on the management of organizations which are voluntary, none are sponsored by business schools.² In the journal literature on marketing in non-profit organizations, the number of articles which consider how marketing may have to be modified to fit a voluntary setting is small. Again, while university executive development courses draw encouraging numbers of managers from governments, they attract relatively few administrators from those non-profit organizations which are heavily reliant on volunteers. One could explain this failure to penetrate the voluntary sector market by claiming that managers in voluntary organizations do not take courses aimed at improving their administrative skills. But that is not the case. On the contrary, there is a lively traffic in workshops for volunteer administrators and even a considerable effort to have these experiences count toward a professional certification. However, these courses do not normally come from business schools and do not usually include what those at this conference would regard as a professional marketing component.

Individually, these observations are inconclusive, but taken together they seem indicative. It is difficult to avoid the conclusion that, despite the considerable progress made on some parts of the frontier of non-profit marketing, there is not yet, across any sizable front, an easy and instructive interaction between academics in the marketing field and practitioners in the voluntary field.

Closing the Gap

To close the gap, several initiatives might be taken on the voluntary sector side. However, here the emphasis should be on what we in the business school can do.

Marketing Professional Development Programs

Marketing academics could give leadership to the task - because it is essentially a marketing task - of bringing executive seminars, certificate courses, and degree programs to voluntary sector managers.

Of these three kinds of "offers", the one involving the least dislocation, and therefore warranting first attention, might be the executive seminar. With judicious selection from the conventional marketing curriculum (by borrowing more heavily from the literature on marketing communications than on pricing, for example), one could build an executive seminar from existing course modules.

Thus one might economize on some parts of the product design. Existing marketing-for-non-profits courses usually do so.

² John Weber, "As You Like It; Degrees, Certificates, and Other Educational Programs For Volunteer Administrators," Voluntary Action Leadership, Summer, 1980, pp. 32-37.

Concerning other features of the total offer, however, both energy and inventiveness may be called for. This is because, in the voluntary sector, while the need for marketing training is large, the demand for it is thin. It is constrained by the small size of some voluntary enterprises, by the remoteness of others, by the unwillingness of some boards to invest in executive education, by the pervasive scarcity of resources for any discretionary purpose, by the lack of bench strength to cover for an absent administrator, and by the negative perceptions of marketing described later. As a consequence, the successful launching of even modest redesigns of conventional executive seminars may well require that they be offered at times, in places, in units, and through media which are different than for business people or for government officials. Beyond that, they may require unaccustomed missionary selling by the faculty involved.

Certificate courses, being more ambitious than executive seminars, demand still more consumer-oriented marketing. A key question is what people in the voluntary sector form the target clientele. Clearly, the needs of seasoned executive directors with graduate degrees in social work are different from the needs of homemakers who want to move from part-time involvement as a volunteer to full-time employment as a volunteer co-ordinator. Settling such issues involves positioning.

A further task, as one moves to more elaborate programs, is to establish in advance that the university's designation, whether a diploma, certificate or degree, will have commercial value and professional advantage. Some university programs with encouraging opening enrollments have foundered when early graduates discovered that their training, whatever its merits, was not sufficiently recognized or valued by employers. In effect, derived demand seemed adequate, but primary demand was not.

In several ways, then, the relatively undeveloped state of the market for executive education in the voluntary field requires that marketing educators be more flexible, inventive, aggressive and consumer-oriented than is usually necessary. That calls for a marketing approach.

Marketing MBA Volunteers

Marketing educators might also be instrumental in making available to voluntary organizations one of the business school's key resources: its alumni. It seems fair to characterize business school graduates as energetic, trained in making organizations work, and predisposed to community leadership. They are also accessible through their alumni association. This could be the basis for a skillsbank of MBA's. A convenient marketing channel for these skills might be that network of local voluntary action centres and volunteer bureaus which is already in place in most urban centers.

Again, however, effective interaction between the business school and the voluntary community will require perceptive marketing. If business-trained consultants proved insensitive to the peculiarities of voluntary organizations, then even if their services were free they would be high-priced suppliers. Thus MBA's, if they are to be acceptable and effective in advising voluntary organizations, should have a careful orientation.

In designing that orientation, marketing faculty could bring to bear the small but thoughtful literature which explores how non-profit organizations differ from

others.³ It must be said, however, that they would find nearly no literature that shows, from a marketing perspective, how voluntary organizations differ from other non-profits.

However, not even a research-based orientation will wholly compose the divergent requirements of these "suppliers" and "buyers". MBA's will look for volunteer assignments which challenge their graduate training and corporate experience. Cautious client executive directors may want to steer these "outsiders" to opening assignments which are small, technical, and unthreatening. Thus the effective marketing of volunteer MBA's to voluntary organizations will require a creative brokerage operation.

Analysing the Market For Volunteers

As indicated earlier in connection with executive development programs, there is a role for marketing academics as retailers of our present knowledge about how voluntary sector managers can be more effective marketers. Ultimately, though, this service must be fed by a manufacturing activity which results in new research directed to those non-profit enterprises which are dominantly voluntary. Any of many investigations might recommend themselves, but the point can be illustrated by citing one or two.

A high-priority project might be an analysis of the market for volunteers. The conventional literature in marketing, including much that deals with non-profits, assumes that those through whom the manager works are on the payroll. The major exception is some of the behaviorally-oriented writings on the management of outside partners in marketing channels. This is, of course, a marketing problem. Voluntary organizations confront a similar situation, but often in a more extreme form. Here, management must succeed in winning workers who cannot be bought - at least not in the usual way. Indeed, in an organization where volunteers are instruments for delivering the service, much of the energy of the enterprise may go to cultivating them. As a consequence, there is, in this sector, a pervasive and ongoing concern for how to attract volunteers.

Again, however, it is noteworthy how this concern finds expression, and how it is met. Even though it is essentially a marketing problem, it finds voice in seminars and workshops not normally shared by marketing people, and it is answered by a literature which is largely outside of the mainstream of marketing writings.⁴

For marketing scholars, there could be an added inducement for bridging this part of the gap. In the non-marketing literature there is an immense amount of information on the characteristics, motivations, and

³ Examples are William H. Newman and Harvey H. Wallender, III, "Managing Not-For-Profit Enterprises," Academy of Management Review, January, 1978, pp. 24-31; and Christopher H. Lovelock and Charles B. Weinberg, "Contrasting Public and Private Sector Marketing," 1974 Combined Proceedings of the American Marketing Association, pp. 242-247.

⁴ Two windows on this activity are Voluntary Action Leadership, published by The National Center For Citizen Involvement, and the AVAS Newsletter published by the Association of Voluntary Action Scholars.

behaviour of people who act as volunteers.⁵ The settings range from environmental groups to museums to rape crisis centers. There are also overview articles on this literature. By and large, this work has been done by researchers - sociologists and political scientists, for example - who have not been interested in the marketing implications of their findings. This ground, partly cleared by others, might now yield valuable insights to marketing scholars equipped with consumer behavior concepts, an interest in non-profit organizations, and synthesizing skills.

Similarly, there has become available recently a sizable body of empirical data on Canadians as volunteers.⁶ Some findings have been reported by Statistics Canada, the organization which undertook the study, but much mining of the data awaits interested academics. These kinds of investigations might be a prelude to longitudinal studies of the market for volunteers.

Such enquiries would also be timely and welcome. Throughout the voluntary community there is a consensus that powerful forces - inflation, narcissism, working wives, time poverty, and the women's movement, for example - are reshaping the potential volunteer workforce, but there is disagreement on whether these trends are threatening or propitious, and there is uncertainty as to how voluntary organizations should respond. These are, of course, the kinds of questions on which marketing researchers have special expertise.

Adapting Marketing Theory and Methodology to Voluntary Settings

Additionally, if they are to integrate the realities of voluntary organizations with the main body of marketing constructs, marketing scholars will need to contemplate broader theories and propose revised methodologies.

The progress in applying marketing thought to non-profit organizations has brought with it the more rigorous recognition of enterprises that are small, that deal in services, that are non-corporate, and that operate outside of the conventional market mechanism. Now marketing theorists might consider more explicitly what modifications must be made in marketing thought when the non-profit organization does much of its work not through employees, but through volunteers.

This will be a demanding task. Consider, for example, a process as fundamental to marketing as positioning the enterprise. To begin with, voluntary organizations share with other non-profits the problems that flow from positioning without the guidance of a price mechanism. That mechanism settles, in a relatively value-free way, internal disputes as to which market segments an enterprise should serve, and with what offerings. But in a public agency concerned with drug abuse, how is one to judge whether an anti-smoking campaign should give more importance to children who are not yet addicted or to adults who are closer to cancer? Similarly, by what businesslike means does a church determine its relative emphasis on offering personal salvation to the old versus societal reform to the young? Clearly, positioning questions have a larger ideological content in a non-profit organization than in a commercial enterprise, and settling these questions would tax a paid professional.

⁵ One window on this literature is Citizen Participation and Voluntary Action Abstracts, published by the Association of Voluntary Action Scholars.

⁶ Statistics Canada, "An Overview of Volunteer Workers in Canada," working paper, April, 1981.

However, in a voluntary organization, these already vexing choices must often be shared with decision-makers who are unpaid amateurs. Especially if they are used to raise money or deliver the service, which are vital life processes of an enterprise, volunteers may well see themselves as proprietors who deserve a voice in basic decisions on who will benefit from their efforts. Philosophic differences over positioning are particularly likely between professionals and volunteers. Because of their advanced training, professionals often are drawn to clients who are challenging for them to treat but expensive for the organization to serve, while because of their homemaker and business backgrounds, volunteers often want to target on clientele which are, if less needy, at least more economical to serve.

Thus, for essentially philosophic reasons, a minister may be led by his flock to abort a mission to the gay community, the head of a national theatre may be constrained by his volunteer board to hire an artistic director who is not a foreigner, and the executive director of a Big Brother agency may fail to persuade his membership that their offer should go beyond companionship to fatherless boys to include counselling for runaway girls.

Existing tools for assisting voluntary sector policy-makers to deal with these kinds of issues are far from adequate. While there is some literature on strategic planning for non-profit enterprises, there are nearly no writings on this activity in voluntary organizations per se. Moreover, recent progress in positioning techniques has, in a sense, widened the gap between what is available to marketers in companies and to marketers in voluntary organizations. In recent years, some of the most exciting breakthroughs in marketing have taken the form of new approaches to strategic market planning.⁸ The high level of interest in portfolio analysis, market attractiveness/business position analysis, and the PIMS approach seems justified. However, it is not yet clear that these new tools will be suitable for managers in the non-profit sector. In particular, these techniques build on research in manufacturing companies, require measures of market share, and aim to maximize return on investment, all of these being aberrant in non-profit organizations. This may be the most compelling case, but it is illustrative of a larger need to accommodate corporate marketing approaches to the particular realities of the non-profit and voluntary setting.

Joining in Philosophic Debate

The actions outlined above proceed from the implicit assumption that experiences alter beliefs. Thus it is suggested that, out of pragmatically-chosen interactions, managers in voluntary organizations and scholars in marketing departments may come to share more collegial views. But as marketers know, causation may run in the other direction. Basic attitudes may need altering if academic intercourse is to improve. As a further step in closing the gap, then, the parties may have to compare their premises.

In a narrow way, that process has begun. It is well known that, for some managers in non-profit enterprises, the ethos of business is, to use their favorite

⁷ Max S. Wortman, Jr., "Strategic Management: Not-For-Profit Organizations," in Charles Hofer and Dan Schendel, (eds.) Business Policy and Planning Research; The State-of-the-Art (Boston: Little, Brown Publishers, 1979).

⁸ Derek F. Abell and John S. Hammond, Strategic Market Planning; Problems and Analytic Approaches (Englewood Cliffs, N.J.: Prentice-Hall, Inc., 1979).

euphemism, "inappropriate". For example, those in cultural organizations may see themselves as serving a Muse who is ultimately above merely "making money", and those in health-related organizations may define themselves not as professional manager but as participants in "the helping professions".

The underlying invidiousness of these beliefs should not be lost on schools of business. When some managers of non-profits describe themselves as engaged in "human service", they imply that others are not. Those others include business people.

Naturally, much of this antipathy centers on marketing.⁹ Consequently, some marketing spokesmen have addressed this attitudinal gap.¹⁰ That should continue.

However, when one moves from the general body of non-profits to that subset which are dominantly voluntary, basic viewpoints diverge again. The voluntary sector is underpinned by a rationale which associates citizen participation with some of the finest features and loftiest aspirations of the community. These claims are couched in a rhetoric which is both eloquent and idealistic.¹¹ In this uncertain society, that is a heady rhetoric. Thus managers in the voluntary sector are fuelled by a rationale which is both grand and compelling.

To managers imbued with that culture, the ethos of marketing can seem narrow and unworthy. In particular, the ends of marketing can seem trivial, the relationship between marketers and their customers can seem impersonal and the approach of marketers to their publics can seem exploitive.

It is regrettable, then, that almost all of this ideological dialogue occurs only on the voluntary sector side of the gap, that is in writings, speeches and seminars which do not normally come to the attention of marketing academics. Consequently, while marketing writers may certify among themselves that there is a generic concept of marketing, it has to be observed that, as yet, this enlightenment has not been vetted by managers in the voluntary sector. Indeed, the Journal of Voluntary Action Research does not even review the Journal of Marketing (or any other marketing journal for that matter). The result is that a common ideology in the voluntary field, one which is inimical to enlightened marketing, goes largely unchallenged.

This neglect is more than "academic", because mistaken ideology translates into misguided marketing. For example, the celebration of volunteerism leads on to the exaltation of the volunteer. For managers in the voluntary field, it then seems to follow that customers and volunteers are fundamentally different, that customers act out of acquisitiveness and volunteers act out of altruism.

It will be noted that this distinction, if allowed, can have large import for marketing practice. If that interpretation is accurate, and if one party does act

out of selflessness, then the best that the other party can aspire to is a gratuitous contract. That precludes exchange - when the *raison d'être* of marketing is to facilitate exactly that. Thus the buying model of the volunteer as philanthropist challenges marketing at its philosophic core.

And on other, operational grounds, this is a pernicious view. First, it scotches speculation within voluntary organizations as to what drives might in fact bring a person to serve as a volunteer. That lack of curiosity in turn aborts imaginative proposals for profitable marketing research on the appeals that might be made to attract volunteers. The resulting poverty of insight then unnecessarily constricts the range of offers held out to potential helpers by the voluntary sector. This in turn perpetuates an artificial constraint on the size of the market for citizen involvement. Clearly, the volunteer as altruist is a stultifying concept.

The view of the volunteer as hero has a further unfortunate "post-purchase" effect. When an organization regards volunteers in this way, it can abdicate its right and responsibility to manage them. Consider how. To maintain its drive, any workforce, including a volunteer one, needs such devices as job descriptions and performance appraisals. Similarly, to keep its tone a voluntary board of directors should be systematically rotated. But when, out of misguided marketing appeals, an organization has allowed volunteers to sign on as an act of charity, then asking them to submit to these positive administrative practices can seem ungrateful affrontery.¹² The consequence is a workforce afflicted by unwholesome attitudes, an organization burdened by slack management practices, and ultimately clients limited to second-rate services. Thus when an organization embraces the model of volunteer as altruist, all parties pay high opportunity costs. If, to help reduce such waste, marketing academics must engage voluntary sector managers at the philosophic level, then the debate should be pursued.

Conclusion

Leaders in the voluntary sector deal with many of their problems through "networking". If, through the kinds of actions examined here, marketing scholars can become more integrated into the network, it seems reasonable to expect that the result would be a stronger voluntary sector, more broadly-based business schools, and a better-served public.

¹² see, for example, Pubnam Barber, "Suiting the Situation at Hand," Voluntary Action Leadership, Summer, 1981, p. 40.

⁹ see, for example, Ben M. Enis, Norman Kangun and Michael P. Mokwa, "Public Policy Development; A Marketing Perspective" Marketing News, February 24, 1978, pp.2,4.

¹⁰ see, for example, Philip Kotler, Marketing for Non-profit Organizations (Englewood Cliffs, N.J.: Prentice-Hall, Inc., 1975), Chapter 1.

¹¹ see, for example, Kerry Kenn Allen, "Volunteering in America 1980-81; A Status Report," Voluntary Action Leadership, Winter, 1981, pp. 5-10; and "The Volunteer Leader Interviews," Voluntary Action Leadership, Winter, 1981, pp. 11-15.

THE USE OF NATIONAL CHARITY TELETHONS
AS A MARKETING TOOL

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Abstract

National charity telethons seem to be a successful solution to the fund raising problems of non-profit organizations while satisfying the marketing needs of major corporations. PRIME TIME EXPOSURE on television, tax incentives, public relations image-building at a fair, tax-deductible price have made telethons major events in the promotional plans of many marketers.

Introduction

When the director whispered the cue, "Fade to black," ending the 1981 Muscular Dystrophy Labor Day Telethon, the show had been on the air for twenty consecutive hours. An electronic tote board above the head of Jerry Lewis, comedian and MDA Board Chairman, showed that over thirty million dollars had been pledged to "help Jerry's kids beat MD," and other neuromuscular disorders. The pledges set a new record for telethon contributions, far more than the half dozen other recognized charities and health-related voluntary agencies collect through their own version of the event. Although United Cerebral Palsy Associations aired the first telethon in New York City thirty years ago, it was Lewis who urged the floundering Muscular Dystrophy Association (MDA) to "go National," adding a new dimension for a proven fund raising event. During 1980, more than one hundred million dollars was raised from private and corporate donors, all from the use of telethons. What makes this uniquely American phenomenon so attractive to viewers and major U.S. companies? A look at the cost effectiveness of the event, its impact and the marketing efforts behind it might shed some light.

Philanthropy in America

Without a clearly defined source of suppliers and demanders, philanthropy (from the Greek for "love of mankind") has been considered by some economists (Boulding, 1962; Tullock, 1965; Eels, 1965; and Ireland, 1970) as a "third market," paralleling government and the private sector as a means of allocating scarce resources among wants and needs. Ireland (p. 17) writes that "... there is no such thing as a truly public motive [for philanthropy]. All ... serve their own interests as they see them in a point in time." In an article written in 1958 for the Public Relations Journal, D. Kenneth Rose wrote: "It must be recognized that public relations concepts govern most corporate giving." This view differs sharply from the "Kantian" vision of "good" and "moral" acts which are separate from all personal gain, and the dimensions of philanthropy in America must be examined before the marketing implications can be discussed.

By conservative estimates, over forty billion dollars was donated voluntarily in 1978 (Bakal, 1979). This amounted to roughly one and a half per cent of the Gross National Product and represented \$180 for every man, woman and child in America donated every day of the year. Over ninety per cent of this sum was given by individuals, the balance divided equally between

foundations and corporations. It is the two billion dollars in corporate funds, and some of the motivations for its distribution, which is the focus of this paper.

Before World War I, the majority of philanthropic activities of the American corporation were limited to those which were of direct benefit to its employees (Cutlip, 1965). The economic expansion after the War saw the beginnings of a major conflict between the newly emergent professional managers and the shareholders who felt their influence over company policy diluted. The government's new Internal Revenue Code (1935) added fuel to the fire by amending the relationships between the corporation and recognized charities and the famous Smith vs. Barlow decision (1953) rejected a suit by stockholders who sought to prevent a corporate donation to Princeton University, effectively sweeping aside the "direct benefit" rule. The Tax Reform Acts of 1969 and 1976 went even further, allowing corporations to donate up to five per cent of pre-tax income to charities on the premise that contributions from the private sector would increase.

The Tax Reform Act of 1969

The Tax Reform Act of 1969, Pub. Law. 91-172 (Jan. 1, 1970), has been described as "the most massive revision of the Internal Revenue laws in American history" (Watson, 1973, p. 1). Approximately one third of this piece of legislation is devoted to the charitable area in general, and more than one half of that portion deals specifically with private foundations.

The Tax Reform Act (TRA) was the outgrowth of a series of Congressional investigations, headed by Congressman Wright Patman.

Foundations found themselves in the public spotlight throughout this period, with stories of Central Intelligence Agency funds channelled through foundations, the foundation "fees" which led to the resignation of Supreme Court Justice Abe Fortas and revelations of corporate taxes sheltered from government regulation. Although corporate foundation executives claimed that the foundation was set up merely to maintain continuity of contributions through good and lean times (Watson, p. 5), the wave of public resentment over tax loopholes for special-interest groups and the annual installments of Patman's committee reports (Andrews, 1968) led Congress to consider the Nixon Administration's recommendations for amendments to the Internal Revenue Code.

Among its most important features, TRA imposed a 2% tax on the net investment income of foundations, required them to pay out annually all of their net income or 5% of their assets (whichever was greater), denied donors the ability to borrow money from foundations, receive compensation from them or to have more than 20% of their stock owned by foundations. Unfortunately, if a foundation's payout exceeded its income, it would then have to dip into assets if it wished to continue giving to charities. The severe stock market declines of 1974-1975 saw foundation assets drop sharply, further complicating the philanthropic process.

In a short space of time, Congress had altered the market forces which governed the flow of dollars into the coffers of recognized charities, seriously affecting the health, cultural, educational and civic needs of citizens across the country. Although Congress did not change the tax laws in order to place additional burdens on corporate philanthropy, it did reduce the dollars formerly donated by one source: the foundations. As a result, decision makers within the corporation were faced with an avalanche of requests from non-profit organizations. For many corporations, these inquiries for funds represent a constant pressure for responses as well as for critical corporate decisions.

Within the last half of the 1970s and into the current decade, recognized charities have had to reevaluate their fund raising strategies and develop new and creative approaches if they were to survive into the next decade. A marketing approach to fund raising seemed to fit into the climate of the times as well as the corporation's view of philanthropy as an investment, rather than as a means of exhibiting social responsibility.

In the years since the passage of the Acts, however, less than one per cent of corporate income has been donated each year, and a recent survey by Dorgan (1979) indicated that this proportion will not increase in the foreseeable future. Apparently, as corporate managers began to view their philanthropic activities on a more pragmatic basis, they began considering each contribution on the basis of a "return on investment." In a speech before the National Chambers Foundation (1979), former Treasury Secretary William Simon said, "In my view, every corporation should spend every dollar of every contribution with the same care and attention as it spends on employee pay and on new plant equipment." As a result, many mass marketers have lowered their "Kantian" veil of anonymity and made philanthropic activities part of the marketing process, involving customers, retailers, their own sales forces and employees. In today's climate of reduced Federal and State funds for health, research, welfare and the arts, the survival of a non-profit organization might depend on its ability to become part of the marketing strategy of the American corporation.

Corporate Philanthropy and the Marketing Process

One of the most comprehensive research projects in the field of corporate philanthropy was sponsored by the Commission on Private Philanthropy and Public Needs, the so-called Filer Commission (1977). Gathering Conference Board studies and independent reports by consultants, it produced five volumes of widely diverse data in over 3,000 pages. A 1976 report by Harris and Klepper, included in the report, detailed the two main reasons for corporate giving: social responsibility and self-interest. The two are not mutually exclusive, as one respondent to the survey wrote: "It takes a healthy society for corporations to operate; they should contribute to that health" (p. 1754). Over 60% of the chairmen and presidents agreed, but almost half (49%) added self-interest to their reasons for public service activities (p. 1754).

Marketing, generally defined as the flow of goods and services from producer to consumer at a mutually agreeable price, can be facilitated by manipulating the "Marketing Mix" of price, distribution channel, the character of the product and promotion activities. If a company can move goods or improve its relationship with any of its target audiences, then the marketing

process will have been served. If corporate "image" or the perceptions of it by its audiences can be improved then the company is obliged to use such means to further its objectives. The use of philanthropy as a marketing tool is an accepted practice by some of America's largest corporations and the non-profit organizations which cooperate with industry in its search for the ideal mix of self-interest and social responsibility seem bound to weather the current stormy seasons of uncertainty. Almost a decade has passed since corporate executives were exposed to the telethon as a marketing device. Few have regretted their discovery.

The Telethon

Telethons combine all the elements of a variety show, a revival meeting, an audience participation show, an educational lecture and a race against time ... all conducted in a mood of exhilaration and excitement. The activities on the air, however, pale in comparison to the so-called "pre-Tel" efforts made by the voluntary agencies to enlist the support of corporate sponsors during the year. Under the supervision of a National Campaign Director, a staff of paid employees makes presentations to a select list of potential sponsors. For marketers who donate a minimum amount, usually in the range of \$100,000, full network exposure is promised.

As a result, the MDA Labor Day Telethon featured an enviable list of marketing giants, each of whom used the opportunity to talk with Jerry Lewis about the company, its products and the contribution it had made. During prime viewing time, on a Sunday night in September, a senior company executive was allowed more than three minutes of air time, divided between an introduction, a one-minute company-produced public relations spot and the live contribution. These major marketers included Reynold's Metals (\$451,000), McDonald's (\$1.3 million), General Foods (\$1 million), Anheuser-Busch (\$1.8 million), and 7-Up (\$577,000). In all, contributions from corporations and national associations (e.g., The National Association of Convenience Stores) totalled over \$22 million, out of the \$31 million pledged on the air.

Well over 100 stations carry each Telethon coast to coast, making it a major network show. The reach, by the latest Nielsen ratings, was over 60 million TV homes, representing over 80 per cent of all households in the country tuned in for at least fifteen minutes during the telecast. According to Arbitron, this coverage accounted for a 17-20 share, with 37 per cent of all adults and 39 per cent of all teenagers in the ten major markets surveyed. A special study by Martin Bruskin Associates for United Cerebral Palsy Association showed that one out of four viewers was able to identify the Telethon's major sponsors.

From a marketer's point of view (as well as his controller's), the numbers are impressive. If a minimum contribution of \$100,000 bought only half the TV homes Nielsen claims due to a poor time slot, then the "buy" was made at a little over \$3.00 per thousand, a respectable CPM, without the fringe benefits. At full coverage, with the intangible public relations impact and the tax credits, the \$100,000 was well spent, by most standards. Three minutes on the air at 9:30 PM EDT was occupied by David R. Reynolds, Chairman of Reynolds Metals, talking with Lewis, a sixty-second professionally produced film featuring the aluminum company, its products and the support it gave to MDA, and then another minute while Reynolds handed the check to the Chairman. McDonald's corporation had

seven such exposures during the Telethon, with logotypes, uniformed employees, jokes by Lewis, and promotion footage supplied by the fast-food chain, all for \$1.3 million collected from consumers by McDonald's. The CPM was well under a dollar, without the impact on the public.

Corporate participation on telethons becomes an even more efficient buy when the tax benefits are considered. Unless the Internal Revenue Service rules to the contrary, each exposure on the air, viewed by tens of millions of potential customers, is not advertising, but a tax-free contribution to a recognized charity which had qualified under section 501(c)(3). Sponsors featured on National Telethons are assured of a receptive audience, and hopefully responsive one, surrounded by performers of the highest quality and recognition value, including Tony Bennett, Frank Sinatra, Paul Anka, John Ritter and others. The anticipation of seeing such talent keeps the viewers tuned in hour after hour, and except for the small hours of the morning, the ratings are exceptionally high, with the result that sponsors are signed for 1982 and beyond.

At the local level, the same types of presentations were made by executives and volunteers from the hundreds of affiliates linked to the national organization. Trained in promotion techniques by the experienced staff of the central Association, the representations made to retailers, distributors, roller rinks and fraternal groups mirror the efforts made by the larger groups, with the same results. Most telethons are divided equally between the network show and the locally produced telethons broadcast from the "emanating affiliates." Switching from Las Vegas or New York to the local TV channel gives local contributors the same exposure as a regional ad has in a national magazine such as Time, with the same cost effectiveness.

In an article in Broadcasting (1979), Allin W. Proudfoot, Executive Vice President, Marketing for The Joseph Schlitz Brewing Company, described the "multi-million dollar television advertising campaign" by the nationally distributed brewer, which resulted in a million dollar donation to the 1979 United Cerebral Palsy Association Telethon. He sees "definite marketing benefits from participation and for all those who sell and distribute Schlitz." In 1980 General Foods substituted Jerry Lewis for Robert Young as a "reference person" for Sanka Brand for the time of the MDA campaign (Dougherty, 1980).

Telethons are planned for 1982 and beyond. As voluntary organizations feel the financial strain of the Administration's economic policies, more might change their fund-raising targets from consumers to corporations and their presentations from altruism to cost effectiveness. Telethons are no longer an appeal organized to "get the kids walking again," but major events in the promotional plans of major marketing organizations.

Summary

In 1970, the often-quoted Filer Commission Report, The Report and Recommendations of the Commission on Foundations and Private Philanthropy, noted that while corporate giving is less than one per cent of PTNI, private taxpayers have been estimated to give some 2.5% of their adjusted gross income as charitable deductions. "Enlightened self-interest" was expected to be the source of dollars to qualified beneficiaries, but the current dollar crunch has made broad-scale

corporate philanthropy less appealing. With "CPM," "reach," Nielsen ratings and "coverage" part of the vocabulary of every marketing executive, corporations have been receptive to voluntary organizations which can offer tax deductions coupled with consumer exposure at a fair price. Even the Federal Communications Commission recognized the need of such an exchange when it recently allowed (1981) the "name-only" rule for Public Broadcasting supporters, changing it to include logotypes. Although the revision stipulates that companies and their products may only be identified and not promoted, it did not outline what it construed to be "promotional,"

Telethons are planned for the future. As voluntary organizations feel the financial strain of the current Administration's economic policies, more might change their fund raising targets from consumers to corporations and their presentations from altruism to cost effectiveness. Telethons are no longer appeals to "get the kids walking again," but major events in the promotional plans of many marketers.

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THE SELLING OF EDUCATION

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Abstract

While the call has gone out for the application of marketing strategies in the college choice process, it is not clear that the student can be equated to the typical consumer. On the basis of past and primary research a descriptive theory of the college choice process is developed. Implications and future research areas are defined.

Introduction

College admissions officers, in recent years, have had to develop techniques and strategies in order to compete in a marketplace which has become constrained by demographic and economic forces. For example, 18 year olds in the population, according to Census Bureau estimates, have declined by 145,000 or 3.4 percent in the past two years. Also, proposed reductions in federal student-aid programs may cause a sharp drop in the number of people seeking college admission (Magarrell, 1981).

A somewhat predictable response to this increasingly competitive environment has been the wholesale application of marketing principles to the college recruitment process (Kotler, 1979; Murphy, 1979). Accordingly, when colleges employ marketing experts they are told that in such a competitive situation they must "sharpen their identities vis-a-vis other schools, just as cereal makers strive to convince buyers of the difference among brands." (Pierce, 1981)

Although some worthwhile research has been forthcoming to guide the use of such principles, in general, marketing techniques have been haphazardly applied in order to create a competitive advantage in the recruiting game. The underlying premise of this "short-run fix" has been that the high school senior can be seen as a consumer who enters the marketplace in search of a service in the form of a college education. The concomitant process that the individual goes through is a rational, deductive approach to solving a problem, resulting in the choice of a particular school. Such a view, however, does not take into account the unique aspects of the college choice process. Several factors set the decision apart from the more standard components of consumer behavior:

1. The importance of the decision is extremely great in terms of the perceived consequence (e.g. time, cost, career, etc.) resulting from making the wrong choice.
2. The potential for long-run conflict between the decision-maker, the user, and the influencer (all of whom may be different individuals).
3. The existence of a unique set of attributes which describe the educational service (e.g. geographic location, academic reputation, socialness, etc.).

The purpose of this paper is to offer a theory of the college choice process in the form of a verbal model. The model is intended to serve a descriptive function (Howard and Sheth, 1969) by narrating college choice with a set of related constructs. The result is intended to be a framework which can be used to formulate and guide research efforts designed to increase

our understanding of this unique decision-making process.

Method

In order to aid in the development of a descriptive theory of the college choice process primary data were collected. In general, it was felt that survey research did not allow the flexibility needed while personal interviews were considered too limiting in terms of sample size. The methodology that was used consisted of a series of focus group interviews designed to qualitatively measure subject responses. In brief, the focus group technique is a depth interview in which a group of homogeneous respondents participate. Rather than using a structured question-and-answer methodology, the procedure encourages group interaction with a minimal amount of moderator influence.

In this particular study, a series of eight focus groups using nine to twelve college freshmen were generated. The interviews were conducted at three eastern colleges, two of which were medium-sized public colleges, while the other was a small private school.

Theory Description

As shown in **Figure 1**, the model of the college choice process consists of the following stages:

1. Constructs involved in the development of an image concerning the college lifestyle.
2. An active information gathering phase resulting in an evoked set of possible college choices.
3. A largely cognitive stage devoted to reaffirming evaluative criteria and application of a decision rule (to optimize college choice).
4. Post-choice activities which attempt to minimize cognitive inconsistencies.

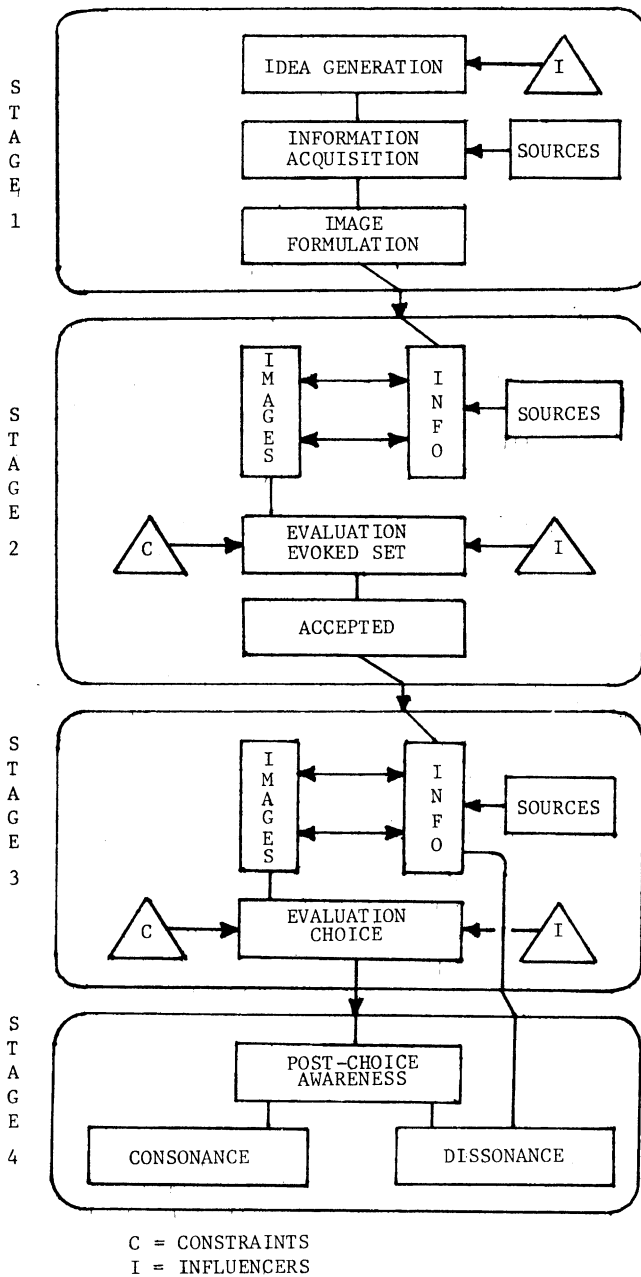
College Image Development (Stage One)

The initial phase of the college choice process is characterized by its passive, generic nature. That is, the learning that takes place is of a verbal association type (Gagne, 1965) with semantic meaning being accumulated in a non-goal directed manner. Experiences are simply collected and categorized on the basis of previously similar experiences. The result of this passive component of the college choice process is a generic image formation which is, therefore, generalizable across specific colleges.

The first construct, Idea Generation, must be distinguished from the more popular notion of "consumer problem recognition". In the college choice process, idea generation has no defined starting point but rather is a gradual recognition of a generalized concept (college). Murphy (1981) has reported that a significant proportion of students (52.8%) considered the idea of attending college prior to entering high school. It should also be noted that the Idea Generation construct is affected by Influencers (**Figure 1**). For instance, Murphy (1981) found that 49.5 percent of the students recognized parents, siblings, or friends as having

initiated the idea of attending college.

FIGURE 1
A COLLEGE CHOICE PROCESS MODEL



Evolving out of these cues, relative to college, is an abstract information acquisition process. The information acquisition process. The information is unstructured and, as has been noted, is acquired in a passive manner. The information that is accumulated is of two basic types: (1) person attributes - knowledge of the characteristics of individuals who attend college, and (2) object attributes - information related to activities which are associated with a college. The source of most of these types of information is of a personal nature; friends and relatives.

The final concept of Image Formulation is a coalescence

of person and object attribute information based upon the passive, generic information gathering process. The result is a generalized notion of what the term "college" means.

Goal Discrimination (Stage Two)

The second stage of the college choice process differs substantially from the introductory phase. The information that is acquired and the images that result are increasingly specific to individual colleges. In addition, the information gathering process is much more active than in the Image Development Stage, and the sources of information are of a nonpersonal nature as well as personal. Finally, the type of learning involved in this stage is of a multiple-discrimination nature (Gagne, 1965). This higher form of learning is based upon the processing of information in such a way as to allow differentiation between stimuli. In this case, the result is a defined ability to discriminate between various stimuli (colleges) on the basis of one or more attributes.

The initial portion of Stage Two is illustrated in the model as an information/image interactive process. Information is used by the student to develop distinct images of different colleges. Accordingly, since the informational input from Stage One is undifferentiated, the need for additional information necessitates an "active" process. The result is on-going information acquisition which allows the students to derive complete and distinct images of various colleges. The uniqueness of the Goal Discrimination Stage can also be observed, relative to Stage One, in that the sources of information are increasingly varied and include not only personal friends and relatives, but college guides, counselors, alumni, etc.

The two subprocesses (Figure 1), the evolution of images (Images/Information) and the evaluation leading to a decision (Evaluation Evoked Set), are analytically distinct (Maguire and Law, 1981). The evaluation task involves comparing the various college images on the basis of selected attributes (Sternberg and Davis, 1978) and selecting a set of colleges to which they will apply. A simplifying decision rule allows the student, in most instances, to establish minimum required performance standards for each evaluative criteria (e.g. academic reputation, size of school, etc.). In addition, as the model indicates, choice-making does not occur in a vacuum but rather is heavily influenced by several factors. Constraints (e.g. finances, S.A.T. scores, grade point average, etc.) will limit the number of schools to which the student could apply, while Influencers (e.g. culture, reference groups, family, etc.) will also effect the choice-making task. The result of this evaluative subprocess is an evoked set (of schools the student would consider attending) which represents a subset of known colleges (awareness set). In the student's mind, then, the schools to which he/she applies characterize a set of alternative solutions to the college choice problem.

Finally, it should be noted that the Evaluation Evoked Set component is, in large part, a syncretic decision. Parents not only influence the decision but take an active part in determining the composition of the set of schools to which the student applies. The evoked set, therefore, represents an acceptable range of schools which are determined by a joint perception of choices across a number of relevant criteria.

Reduced Set Evaluation (Stage Three)

The third stage of the model is quite similar to the previous stage with the major exception that the decision-maker attempts an optimal solution of a reduced

set of alternatives (i.e. those schools to which the student is accepted). While the Goal Discrimination Stage emphasized the creation of an evoked set out of a total awareness set, the Reduced Set Evaluation Stage has the more defined goal of a "single choice" as its ultimate objective.

The Information/Images interaction shifts to more detailed information designed to refine images and the type of learning involved is almost wholly of a complex problem-solving nature (Gagne, 1965). That is, information is acquired on specific attributes which allows the refinement and clarification of unique alternative images. The emphasis on discrimination of acceptable versus unacceptable categories (Stage Two) is replaced by the need for optimality. As such, the Information/Images interaction is a process which allows the individual to acquire information in a form which is conducive to comparisons across stimuli (colleges).

While the Evaluation-Choice component is influenced by the same "constraints" and "influencers" as Stage Two, the actual decision rule that is used to arrive at a solution may be one of the many that are defined in the psychology and consumer behavior literature (Barnes and Seymour, 1978). For example, a disjunctive decision rule may be applied when one attribute is considered to be of extreme importance. In such a case, the student chooses that school which performs the best on a single evaluative criterion (e.g. academic reputation, location, etc.). In a more complex instance a student may employ a compensatory decision rule in which the college that rates the highest on the sum of the student's judgment of the relevant evaluative criteria will be chosen.

Finally, in contrast to the more joint-type decision in the second stage, Murphy (1981) reports 81.8 percent of the students made the final decision. That is, once an evoked set had been identified, the ultimate decision of which college to attend appears to be a unilateral one.

Post-Choice (Stage Four)

The main portion of the Post-Choice Stage is a passive, cognitive component which enables the decision-maker to rationalize his/her foregone alternatives. Although post-choice dissonance does not occur with all types of decisions, it is most likely to occur in several instances which may be present in a college choice process. Specifically, post-choice dissonance is associated with situations in which: (a) alternatives are available, (b) the decision is important either financially or psychologically, (c) the alternatives have desirable features, and (d) the alternative features are qualitatively different (Runyon, 1980).

Although post-choice awareness may easily result in a cognitively consistent state (consonance), in some instances dissonance can be manifested in a continued information search. In terms of the model, this is noted via a feedback loop to the Stage Three information component. In large part, the student is looking for additional information to confirm the wisdom of his/her choice which would result in the identical decision outcome (eventually leading to a state of post-choice consonance). It is also possible, of course, that this additional information may support a foregone alternative . . . resulting in a change of choice behavior.

The intent of this paper has been to offer a theory of the college choice process which can be used as a framework to direct various research efforts. With this in mind, several areas of future inquiry may be suggested:

1. Efforts should be directed toward understanding the type of information and the sources at the various stages of image formation. Is the type of information sought dependent on the stage and/or source? Does information overload occur?
2. To what degree do simplified versions of the decision-making process exist? Under what circumstances do students truncate the extended decision process by reducing active information gathering?
3. The extent and nature of joint decision-making should be examined by stage. How is conflict resolved? What factors affect the degree of joint decision-making?
4. Descriptive studies of the types of decision rules used in the college choice process are needed. Are complex rules used? To what extent do students use simplifying strategies in deriving an evoked set?
5. The application of cognitive consistency theories to Stage Four increase our understanding of post-choice dissonance. What are the different types of methods used to resolve dissonance? What kinds of communication can be used by administrators to increase post-choice consonance?
6. Investigations should be undertaken into situational influences which may, in large part, determine much of the nature and scope of the college choice process.

The most obvious conclusion which can be derived from this paper is that the "college choice" is a unique decision-making process. It necessitates a "custom made" theory and deserves more specific attention. Simply, the wholesale application of marketing techniques is not appropriate . . . colleges and universities should not be sold like cereal! Results of additional research, hopefully, can be applied to practical problems in higher education and may enable the proposed theory to be modified and improved.

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A COMPARISON OF THE COGNITIVE COMPLEXITY OF
PUBLIC AND PRIVATE SECTOR PRODUCTS

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Abstract

This research compared the cognitive complexity of selected public and private sector products. Private sector products were found to have a significantly greater number of concrete and abstract concepts. Also, the proportion of abstract (attribute) private sector product concepts was significantly greater than for public sector products. Implications, possible explanations, and directions for future research are discussed.

Introduction

Public and nonprofit marketing have undergone a series of major conceptual advances since Kotler and Levy (1969) developed an initial interest in redefining marketing's boundaries. Lovelock and Weinberg (1978), Rothschild (1977), and others have recently demonstrated how marketing, as a perspective and technology, can be applied to such areas as the arts, health care, energy conservation, public transportation, higher education, family planning, and many other noncommercial activities.

Government marketing, however, has been an uncultivated component of broadened marketing. Only Mokwa and Permut (1981) have attempted to offer comprehensive guidelines for government marketing theory and practice. Even more regrettable is the virtually nonexistent state of marketing for functional public policy.¹ Little has changed since Ritchie and Labreque (1975) observed that concern for government regulation of trade practices has overshadowed and obscured marketing's potential contribution to public administration.

Critical for the further development of broader marketing, and particularly government marketing, is the identification and explanation of differences between profit sector and nonprofit/public sector marketing management. Lovelock and Weinberg (1978), pp. 416-420) propose that a key difference may be the nature of the products offered in the two sectors. The purpose of this paper is to test that proposition by comparing the cognitive complexity of public and private sector products. Cognitive complexity has been one of the central bases for comparing products in the profit sector. The comparison of the cognitive complexity of products in the profit versus nonprofit area should contribute to an expanded conceptualization of marketing in the two sectors.

Theoretical Background

The description and study of cognitive structure have become important components of marketing theory and practice. Wilkie's and Pessemier's (1973) review and the more recent efforts of Lutz and Bettman (1977), Bettman, Kassarjain, and Lutz (1978), Bettman (1979), Warshaw (1980), and Bagozzi and Burnkrand (1980) are

¹Functional public policy decisions are "those that pertain to the nature and types of products provided by government directly to its citizens as well as the industrialized private sector". (Ritchie & LaBreque, 1975, p. 13).

testimony for the myriad conceptualizations and measurement schemes associated with this most fertile area. Notwithstanding some criticism and misinterpretation of the original Fishbein (1963; 1967) conceptualization (Warshaw, 1980), attributes and related cognitive processes are important elements of both consumer and industrial buyer behavior (see Bettman, Kassarjain & Lutz, 1978; Choffray & Lilien, 1978).

Although marketing researchers most often are interested in product attributes, cognitive structures actually contain a variety of types of concepts. Olson and Muderrisoglu (1979), Abelson (1973; 1976), and Calder (1978) indicate that abstract, attribute-specific dimensions are accompanied by more concrete, visual concepts such as images (Mower, 1977) and scripts (Shank and Abelson, 1977). Typically used individual or group interviews that focus subjects on identifying characteristics (attributes or evaluative criteria) of products may actually be incomplete reflections of memory and cognitive structure. This paper, therefore, focuses on the entire cognitive field associated with public and private sector products.

Although few measurement methods are available, true cognitive complexity includes both concrete and abstract concepts in cognition (see Olson & Muderrisoglu, 1979). For the purposes of this research, a concrete concept is a visual image or sequence of images (scripts), or expressions of probable actions or refers to particular appropriate usage occasions. Abstract concepts are those relating to product attributes or characteristics. Cognitive complexity, therefore, is defined as the number of concepts, both concrete and abstract, that consumers associate with products.²

Method

Olson and Muderrisoglu (1979) have shown that the unrestricted free elicitation method, where respondents are free to say anything and everything that comes to mind when presented with a stimulus probe cue, is a stable and reliable method for identifying the "...full variety of cognitive elements maintained in a memory structure..." (p. 269). The Olson and Muderrisoglu research reported the number of elicited concepts from 30 interviews for three products—toothpaste, ballpoint pens, and blue jeans.

This research replicated the Olson and Muderrisoglu (1979) method using seven public products offered in a Standard Metropolitan Statistical Area. The seven products were: electrical service, parks, garbage and trash collection, police service, bus service, traffic control, and street maintenance. Both sample size and conduct of the interviews conformed closely to the original research. Public product subjects were selected randomly from a list of utility customers, contacted, and screened to insure they were users of the products. Each was paid a \$5.00 cash incentive to participate. Subjects were interviewed individually; each free elicitation session required approximately 30 minutes.

²These operational definitions conform to Olson and Muderrisoglu (1979) and Geistfeld, Sproles, and Brandenhop (1977).

The 28 free elicitation interviews were conducted in the following manner. The subject entered a small conference-type room and was told the study concerned his or her reactions to several common local government products. The researcher then handed the subject a copy of the instructions (see Appendix) and asked him or her to read along. Critical parts of the instructions were underlined. The essence of the instructions was a request for the subject to verbally state any and all thoughts that came to mind when the researcher said the name of a product. Subjects were told that for convenience a taperecorder would be used, but all responses would be confidential and anonymous. Subjects were then asked to state "what comes to mind?" when the researcher said each product name.

Two minor changes were made to the Olson and Muderrisoglu (1979) method as a result of pretesting. First, the cash incentive was increased from \$4.00 to \$5.00 to provide an approximately equivalent incentive given inflation. And second, the word product was changed to service in the instructions (see Appendix) as a result of two pretest subjects expressing concern about the Olson and Muderrisoglu terminology. All other aspects of the free elicitations and content analyses exactly replicated the Olson and Muderrisoglu (1979) research. When subjects' responses were not clearly either attributes, images, or scripts, a second researcher content analyzed the tape recordings. Differences in the content analyses were resolved by a third researcher and, if necessary, a discussion among the three content analysts.

Tests for significant differences in the mean number of concepts elicited (t test) and the proportion of abstract concepts (z test) between this research and the Olson and Muderrisoglu (1979) research were performed to compare cognitive complexity for the two product groups. Findings are presented and discussed below followed by implications, limitations, and suggestions for future research.

Findings

Table 1 presents a summary of the comparison between results of the Olson and Muderrisoglu (1979) research and this research's public product findings. Both the number of concepts elicited and the proportion of abstract (attribute) concepts were significantly different at less than .01. Private sector products were found to be more complex (more concepts associated with them) and to have a higher proportion of attribute related concepts.

Table 1

The Mean Number of Concepts Elicited and the Percentage of Abstract Concepts Elicited for Public and Private Sector Products

Products	Mean Concepts Elicited	Abstract Concepts (Attributes) as a Percentage of Total Concepts Elicited
<u>Private Sector Products</u>		
Toothpaste	7.8	77%
Ballpoint Pens	8.7	67%
Blue Jeans	9.6	71%
Overall Mean	8.7	72%

Table 1 (continued)

Products	Mean Concepts Elicited	Abstract Concepts (Attributes) as a Percentage of Total Concepts Elicited
<u>Public Sector Products</u>		
Electrical Service	3.6	53%
Parks	5.5	49%
Garbage and Trash Collection	3.3	64%
Police Service	5.4	43%
Bus Service	5.5	62%
Traffic Control	4.1	34%
Street Maintenance	3.0	40%
Overall Mean	4.3	49%
Difference Significant		
At	<.01	<.01

Discussion and Implications of Findings

The data in Table 1 are at least preliminary evidence that consumers may perceive and retain information about public and private sector products differently. Several explanations can be offered. First, consumers probably are exposed to more private sector product information from media and personal sources. Because private sector marketers must compete, they must: 1) supply more general information about their products, and 2) provide more attribute specific information in order to point out differential advantages.

Previous research has shown that public administrators, conversely, are not as aware of or sensitive to product attributes (see Stearns, McGrath, & Kerr, 1980; Kerr et al., 1981). Indeed, when public administrators use surveys to monitor their markets, they lament the lack of utility for decision making of such data because of its aggregated nature (see Stipak, 1980; May, 1981). Citizen surveys have few questions that are more refined or specific than the product level, reflecting a lack of awareness or sensitivity to product attributes (see Stearns, McGrath, & Kerr, 1980).

Identification of salient attributes and concrete concepts associated with public products could aid public administration in several ways. First, public product attributes and other cognitive concepts could provide a basis for better understanding of consumers' perceptions of products. This would allow public administrators to determine when products were not being perceived as intended and could explain underutilization of services.

Second, citizen satisfaction has become an important, controversial, and sensitive issue for public administration (see Stipak, 1979, 1980; May, 1981). Valid salient attribute identification can provide a basis for monitoring satisfaction with public products. Longitudinal attribute specific measures would allow administrators to sense change at a level more relevant for quick response.

And third, knowledge of salient attributes is a necessity if identification of important or determinant attributes is desirable (see Olson, Kanwar, & Muderrisoglu, 1979). By a better understanding of the cognitive structure of his consumers, the public administrator can emphasize or alter important or determinant attributes and, therefore, better meet the needs

of his market.

Limitations

This study has several limitations. First, cognitive complexity and structure for products from the two sectors are compared using two different groups of consumers. Some of the potential error introduced by not obtaining elicitation for both public and private sector products from the same individuals was controlled by insuring that all subjects were product users. Ideally, however, the same subjects would have responded to both product groups.

Second, the variety of public products was greater than the Olson and Muderrisoglu private sector products. Marketing scholars have compiled much evidence concerning cognitive complexity, cognitive structure, and attributes of private sector products. A broad range was desirable because little is known about how consumers perceive and retain information about different types of public products.

Third, obviously there is no intent to generalize beyond the products, locales, and level of government used in this study. The comparisons of this research are stepping stones to more definitive, comprehensive research and a greater understanding of each sector.

The fourth limitation is that almost all public products are services rather than goods. Being services may at best moderate and at worst intervene in the comparison of product groups. At this time difficulty arises in generalizing about specific cognitive differences in private sector goods and services. Some differences exist (see Shostack, 1978 for a review); whether goods or services are more cognitively complex, or more concrete or abstract, is uncertain at this time. It is difficult, therefore, to speculate about the intervening or moderating impact.

Suggestions for Further Research

Although this research was limited in several important ways, the findings can provide the basis for more extensive and comprehensive investigations. The most logical extension would be a replication with a broader cross section of products and consumers. In such a study, the same individuals would respond to both public and private sector products using a broad geographic and demographic sample.

Despite smaller absolute size, the range of public product means was larger than that of private sector products. Future research could determine if the fact that some public products have private sector alternatives and some do not explains this broader range of mean concepts elicited. If so, do the public products with private sector alternatives exhibit or require more profit sector marketing strategies and tactics?

Another future research question is: Do public sector products that compete with private sector alternatives have a larger percentage of abstract concepts? Where public sector products have competition, public administrators, wittingly or otherwise, may adopt more private sector marketing devices and, therefore, more salient attributes may result for these products.

And last, research is needed that controls the impact of public products being almost exclusively services. Until more information is available about the differences between private sector goods and services, public products could be compared with private sector services to determine if results are similar to this

research.

Conclusion

A better understanding of how consumers perceive and retain information about and experience with public products is crucial for government marketing. Public products do not have indicators such as profit level and market share as performance measures. Government marketers, therefore, must understand their customers to insure they meet the needs of their markets. This paper is a preliminary step in what the authors hope will be a better understanding of the unquities of public products and government marketing.

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We are interested in your thoughts and feelings about several services offered by the City. Most of the services are ones that you use fairly regularly. Specifically, we are interested in your general thoughts about seven services. I will tell you the name of each service, one at a time. Then, I want you to simply tell me the things that come to your mind about that service. You should concentrate on the name of the service and verbally tell me your thoughts as completely as possible. You will have about a minute-and-a-half to respond to each service. However, the time limit is not strict, so if you feel you have a lot to say, you may take more time. For some services, lots of things might come to mind. You should stop whenever no other thoughts about the service come to mind, even if this happens before the minute-and-a-half is over. But, please tell me all the thoughts you have about each service. In giving your responses, you may have to pause to form your thoughts. Don't let that pause bother you. It is only natural that you might need a few seconds for certain thoughts. But when you do think of something, please state it right away. Please do not censor your comments. We are interested in what you think. If something comes to mind, please say it--even if you might consider it unimportant, ordinary, or even silly. In giving your thoughts, please state each one in a short phrase or a word or two. If you feel that you must use more words to express yourself completely or clearly, please feel free to do so. However, we are not interested in why you think your responses are important. So, please do not give justifications or elaborate descriptions of your thoughts--just a simple statement of each thought is sufficient. You should try to give your thoughts as rapidly as possible. Try not to let me distract you in any way. I am just here to give you the instructions and the service names. You might try either psychologically, or by physically turning in a different direction, or by closing your eyes, to disregard me. I will be recording both our comments during this session on this tape recorder. I am taping the sessions only to be sure I get an accurate record of your responses. However, your name will never be associated with the recording or your specific responses and, when we are finished with the study, the tapes will be erased. Before we start, let me summarize the procedure again. I will first tell you the name of the service. Then you tell me all the things that come to your mind about this service as rapidly and completely as possible. Do you have any questions before we begin? (adapted from Olson & Muderrisoglu, 1979)

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Abstract

Leisure researchers often use objective measures of leisure (time, expenditures or activity participation frequency), although the construct validity of these measures appears questionable. In this study, a scale to measure subjective leisure is developed, and it is compared to the objective measures in terms of construct validity.

Introduction

The \$200 billion leisure industry has long commanded marketers' attention, and the broadened marketing concept (Kotler 1975) encourages research attention for social purposes as well. In a variety of endeavors from recreation counseling to urban planning to forestry, efforts are being focused on improving the leisure experience. This goal becomes even more critical considering leisure's demonstrated contribution to life quality.

The leisure domain is generally recognized as a significant component of life satisfaction across the total American population and particularly among certain segments. Leisure's importance to life quality has been noted frequently in non-empirical research across many disciplines: in psychology (Neulinger 1974), sociology (Dumazedier 1974; Riesman et al. 1950), philosophy (de Grazia 1962), anthropology (Huizinga 1950), communications (Stephenson 1967), and economics (Voss 1967), and most empirical studies of life quality include measures of the leisure domain (Andrews and Withey 1976; Campbell et al. 1976; Cantrell 1965; Canadian Minister of Supply and Services 1977; George 1979; Liu 1976; U.S. Department of Commerce 1977).

More importantly, in two recent subjective studies of life quality, satisfaction in the leisure domain was found to contribute significantly to global well-being. Andrews and Withey (1976) found that satisfaction with "how much fun you are having," a leisure domain item established by earlier perceptual mapping, was the strongest contributor to global satisfaction among twelve selected predictors. In a second subjective study (Campbell et al. 1976), satisfaction with "the ways you spend your spare time," designated as the leisure domain by the authors, was the individual domain which most strongly correlated with an index of global well-being. In multiple regression, the leisure domain was ninth in importance among twelve selected predictors.

Because the leisure experience is so important to overall life quality, valid definitions and measures of leisure are necessary in order to evaluate programs and facilities. Leisure definition and measurement might be roughly dichotomized as objective or subjective (Kaplan 1961). Objective definitions (the more frequently used) conceptualize leisure in terms of observable behavior, defining it as time, expenditures or activity participation (Kelly 1973; Meyersohn 1972). Subjective definitions focus on the psychological leisure experience and define it as a state of mind (Neulinger 1974). For example, leisure might be any activity which is pursued for its own sake or anything done of one's own volition, regardless of temporal or activity context.

The purpose of this study is to devise an activity-general subjective leisure measure and compare it to commonly-used objective leisure measures in terms of construct validity.

Literature Review

Objective Leisure Measures

Leisure has generally been objectively measured in three ways: as time, as expenditures or as activity participation. These are also used as surrogate measures of leisure quality.

Measuring Leisure As Time. Leisure is often equated with leisure time, and a common objective measure is the time diary or time budget. With variation among studies, respondents record their activities during short time intervals over the course of one day, and these data are aggregated. Alternately, subjects might be asked simply to estimate how much time in a day or week they spend engaged in particular activities. In these studies leisure time is generally defined as that time remaining after hours devoted to work and nondiscretionary activities are subtracted from total time. This is based on the tripartite model of time (total time - (work + nondiscretionary time) = leisure time), which has been described by a number of researchers (Brightbill 1963; de Grazia 1962; Hendrix et al. 1979) and is based on a modification of the traditional labor-leisure analysis (Voss 1967). Many early time-diary studies were conducted during the 1930s, when the Depression's "forced leisure" generated interest in the use of free time (Lundberg et al. 1934; National Recreation Association 1934; Sorokin and Berger 1939). Renewed interest in leisure study during the 1960s and 1970s resulted in a number of new studies (Chapin 1974; Robinson 1977; Szalai 1972).

There are two conceptual problems with measuring leisure as free time. First, it is often difficult to segregate work, nondiscretionary and leisure time components (Dumazedier 1974; Murphy 1974). There are many gray areas where the characteristics of each type of activity overlap. For example, the classification of time spent gambling or commuting or caring for children is unclear. A second problem with using leisure time as a surrogate measure of leisure is the question of direction. A "more is better" normative stance may be implied when quite the opposite may be true, as in the case of too much leisure time among the unemployed, youth or the elderly. Inherent in both problems is the fact that leisure has existential elements which extend beyond time constraints. Time diary researchers have frequently suggested that subjective qualities differentiated leisure from other nonwork activities. Chapin (1974) and Szalai (1972) proposed categorizing activities according to their position along an obligatory/discretionary continuum. Robinson (1977) pointed to three criteria to segregate leisure from other nonpaid activities: enjoyment, discretion and spontaneity. Extensive empirical testing of subjective leisure elements was beyond the scope of these large-scale time diary studies, however.

Measuring Leisure As Expenditures. Researchers measuring leisure expenditures generally combine secondary data sources such as aggregate leisure sales

data (U.S. Department of Commerce, Bureau of Economic Analysis 1977), and aggregate leisure consumption data (U.S. Department of Labor, Bureau of Labor Statistics 1978). Several authors have used objective leisure indicators of this type (de Grazia 1962; Fisk 1963; Kaplan 1960). Measuring leisure as expenditures presents two problems similar to those encountered regarding leisure time. First, it is difficult to segregate leisure from nonleisure spending as, for example, in the case of gasoline (Eisenpreis 1971; Fisk 1963). Second, the direction problem reappears. One cannot assume that more leisure spending means higher quality leisure.

Measuring Leisure As Activity Participation. Leisure is often defined as participation in recreational activities. This view of leisure grew out of the "recreation movement" of the 19th and early 20th centuries. The classic theories of play, prominent during this time, suggested that recreation served certain functions such as restoration or release of surplus energy (Ellis 1971). Because recreation was often viewed as a cure for social problems it acquired a certain moralistic flavor. People were encouraged to recreate because it was good for them (Arnold 1980). There are two objective measures of activity participation. The first measure aggregates individual participation rates, association memberships, institutional attendance records or number of leisure facilities as gauges of leisure quality.

Closely related to participation/facility aggregates is the measure of leisure as activity participation frequency. The theoretical basis is identical to that of aggregates: activity participation frequency is used as a surrogate measure of activity enjoyment or leisure quality. However, in contrast to aggregates, participation frequency is used as a criterion variable rather than solely as a leisure indicator. Personal variables such as demographic (Romsa and Girling 1976) or socioeconomic variables (Gerstl 1961) are commonly employed as predictors. In using activity participation frequency as a measure of leisure, construct validity again becomes questionable. Many authors have stated that this behavioral measure assumes intrinsic enjoyment or satisfaction in an activity when situational/extrinsic motivation might better explain participation (Chase and Cheek 1979; Crandall 1979; Meyerson 1972; Murphy et al. 1973). Indeed, researchers have shown that situational variables such as antecedent conditions (Bishop and Witt 1970) or social situation (Field and O'Leary 1973) can be used to explain participation.

Subjective Leisure Measures

The dubious construct validity of the three objective leisure measures suggests a need for more subjective measures of leisure. Although many researchers have called for psychological investigation of leisure experience (Crandall 1979; Murphy et al. 1973), objective measures remain the most widely used. Recently however, the measurement of subjective leisure has been approached empirically. In addition to life quality studies discussed above, research in this area includes motivation studies (London et al. 1977) and studies investigating activity-general leisure properties (Iso-Ahola 1979; Tinsley et al. 1977).

Motivation Studies. This genre of studies assesses leisure in terms of participation or preference. Those based on participation use activity participation frequency as the criterion variable and activity-specific needs/motivations as predictors (McKechnie 1974; Tinsley et al. 1977). Preference-

based motivation studies ask subjects to choose one or two favorite activities and indicate the satisfactions these activities provide (Hawes 1978).

While motivation studies provide a gauge of perceived leisure and consequently alleviate many of the shortcomings of objective measures, there are two problems inherent in their use as leisure quality measures. First, participation-based studies utilize participation frequency as a surrogate measure of leisure quality. This may lack construct validity because it assumes intrinsic enjoyment when situational variables might better explain behavior. Second, both types of motivation studies are activity-specific. The leisure literature has long indicated that there are subjective elements of leisure such as intrinsic satisfaction or perceived freedom, which transcend specific activities and may be present to a greater or lesser degree across all subjective leisure experiences. In developing a working definition and measure of the subjective leisure construct, these activity-general properties should ideally be isolated before the myriad individual activities are differentiated.

Studies of Activity-General Leisure Dimensions. Recent empirical research has begun to tap into those dimensions of leisure which may be present across activities. Two dimensions, intrinsic satisfaction and perceived freedom, have been discussed by a number of researchers.

Most subjective definitions suggest that intrinsic satisfaction is present in leisure. The leisure experience offers pleasure or gratification. Leisure is seen as intrinsically motivated and as an end in itself rather than a utilitarian means to an end. This definition dates from the ancient Greeks, who spoke of *scholé* (leisure) as a contemplative activity pursued for its own sake or to its own end (de Grazia 1962). Dumazedier (1974) described leisure as disinterested (with no utilitarian purpose) and hedonistic. Berlyne (1969) noted an emotional element of pleasure. Many empirical studies on activity-specific leisure satisfactions are theoretically based on the notion that leisure is personally rewarding (London et al. 1977; Tinsley et al. 1977).

Perceived freedom is another dimension of subjective leisure. Leisure is often described as "free," something one perceives as voluntary, without coercion or obligation (Dumazedier 1974; Huizinga 1950; Stephenson 1967). This quality of leisure, like intrinsic satisfaction, is derived from the Aristotelian definition of *scholé*: freedom from the necessity to work (de Grazia 1962). At least two authors have maintained that perceived freedom is the single precondition of subjective leisure (Kaplan 1975; Neulinger 1974). As noted earlier, many time-oriented researchers have recognized this subjective leisure element and proposed an obligatory/discretionary continuum to segregate leisure from other nonwork activities (Chapin 1974; Hendrix et al. 1979; Robinson 1977).

At least three empirical studies have focused on intrinsic satisfaction and perceived freedom as activity-general leisure properties. Neulinger (1974) asked a small sample of respondents to define leisure. While most saw leisure in terms of time, 18% defined it as discretionary (perceived freedom) and 8% defined it as a state of mind (intrinsic satisfaction). Kelly (1978) found that amount of perceived freedom and social/intrinsic motivation were two dimensions of leisure measurement. Iso-Ahola (1979) empirically established that perceived freedom and intrinsic enjoy-

ment contributed significantly to subjects' perceptions of leisure in judging leisure scenarios.

Methodology

A convenience sample of undergraduate business students (n=219) was used in this exploratory study. The format used was a written questionnaire. Respondents were asked to select a leisure activity from one of three lists, assigned randomly. Each of the lists represented a different activity type: active sports, easy living and crafts. These three activity groups were selected because they represented three distinct types of activities according to recent taxonomies (Duncan 1978; McKechnie 1974; Ritchie 1975) and because of their popularity among college students. Each list contained approximately 20 activities from which to choose. These lists are shown in the Exhibit below. Regarding the selected activity, respondents indicated to what degree it "fit their own definition of leisure," using a ten-point scale ranging from "Not Leisure at All" to "Leisure at its Best." This was adopted from an earlier study (Iso-Ahola 1979) and will be abbreviated here as the leisure/not leisure scale.

EXHIBIT
ACTIVITY LISTS

Active Sports

Archery, boating or canoeing, baseball, basketball, bicycling, bowling, football, golf, horseback riding, jogging or running, kite flying, racquetball, sailing, skiing (snow or water), swimming, tennis, volleyball

Easy Living

Dancing, driving, exercising, gardening, going to movies or plays, playing records or tapes, reading

newspapers or magazines, social drinking, sunbathing, talking on phone, visiting friends, watching team sports, watching TV, shopping, writing letters, photography

Crafts

Auto repairing, pool, camping, carpentry, electronics, fishing, horseshoes, hunting, marksmanship, ceramics, cooking and baking, mechanics, sewing, model building, decorating, knitting or crocheting, woodworking, sculpture, playing cards, weightlifting, puzzles

They then responded to a subjective leisure scale consisting of 13 Likert-scale items representing the intrinsic satisfaction and perceived freedom leisure dimensions. These items, shown in Table 1, were written to represent the dimensions, as discussed in the literature. A five-point Likert scale ("Strongly disagree" to "Strongly agree") was used to measure intensity of response on each item. To eliminate response bias due to acquiescence, negative and positive versions of each item were incorporated. As objective leisure measures, respondents provided a measure of time (total hours spent on the activity during the past year), expenditures (total dollars spent during the past year related to the activity) and participation frequency (the number of times they participated in the activity during the past year).

Analysis consisted of three parts: reliability testing of the subjective leisure scale, verification of the underlying theoretical construct and hypothesis testing. Scores (ranging from 1 to 5 where 5 is "Strongly agree") for each of the 13 subjective leisure items were summed to obtain a subjective leisure scale score. To test reliability, the scale was submitted to internal consistency testing, coefficient alpha calculation and split-half testing. In internal

TABLE 1
RESULTS OF RELIABILITY TESTING

Scale Item (Dimension Represented)	Mean*	Standard Deviation	Factor Analysis		Internal Consistency	Cronbach's Alpha	Split-Half Testing
			Factor I	Factor II			
Participation in this activity says a lot about me. (Intrinsic satisfaction)	3.183	1.171	.78	-.11	.50	.848	.79
This activity is a totally satisfying experience for me. (Intrinsic satisfaction)	3.492	1.098	.74	.23	.69		
It makes me feel alive. (Intrinsic satisfaction)	3.679	1.132	.68	.09	.58		
If I were describing myself, I would probably mention my enjoyment of this activity. (Intrinsic satisfaction)	3.407	1.385	.63	.19	.63		
I'm very happy when I participate in this activity. (Intrinsic satisfaction)	4.183	.917	.50	.44	.67		
I feel free of constraints when participating in this activity. (Perceived freedom)	3.278	1.164	.43	.17	.49		
I enjoy this activity for its own sake, not for what it will get me. (Intrinsic satisfaction)	3.708	1.293	.05	.68	.58		
I generally don't feel forced into this activity. (Perceived freedom)	4.217	1.151	.24	.68	.67		
I find this activity enjoyable and pleasurable. (Intrinsic satisfaction)	4.362	.980	.49	.65	.78		
I take part in this activity because I like it. (Intrinsic satisfaction)	4.279	1.075	.34	.65	.71		

Table 1 (continued)

Scale Item (Dimension Represented)	Mean*	Standard Deviation	Factor Analysis		Internal Consistency	Cronbach's Alpha	Split-Half Testing
			Factor I	Factor II			
I rarely feel obligated to do this activity. (Perceived freedom)	3.841	1.277	.12	.59	.57		
Pure enjoyment is the only thing in this activity for me. (Intrinsic satisfaction)	2.838	1.336	-.08	.46	.38		
Other people usually do not have to talk me into doing this activity. (Perceived freedom)	4.192	1.065	.34	.45	.59		
Eigenvalue			4.92	1.98			
% Variance Explained			37.8	15.2			

*Scale ranged from 1 to 5 where 5 is "Strongly agree."

consistency testing, scores on items within a scale are correlated with the total scale score. Coefficient alpha (Cronbach 1970) is a test of the average correlation of items within a scale. In split-half testing, scale items are randomly divided into two groups and scores for the halves are correlated as another measure of internal consistency.

To verify the theoretical structure, principal components analysis of the 13 Likert scale items was conducted. Since the items were written to represent the intrinsic satisfaction and perceived freedom dimensions, these were expected to emerge as factors. Only an orthogonal rotation (varimax) was used because the literature gives no indication that the two dimensions are related.

To compare the construct validity of the subjective leisure scale with that of the three objective leisure measures, the following null hypothesis was tested:

The subjective leisure scale will not significantly increase the amount of variance explained by the three objective leisure measures in predicting personal leisure perceptions.

Stepwise regression analysis was used to test the hypothesis. The leisure/not leisure score was used as the criterion variable. The subjective leisure scale score, and the three objective leisure measures -- time, expenditures and participation frequency -- were used as predictors. If the subjective leisure scale score beta coefficient was significant and if the coefficient of determination (R^2) was significantly increased by adding the subjective leisure scale score to the three objective leisure measures as predictors in the regression equation, the null hypothesis would be rejected.

Findings

Reliability and Theoretical Structure Testing

As shown in Table 1, reliability of the subjective leisure scale items appeared to be established. In internal consistency testing, all but two of the correlations between each item and the total scale score were above .5, a criterion suggested by Nunnally (1967). The alpha coefficient for the scale was .85, well above .5 to .6 which are considered acceptable for basic research of this type (Nunnally 1967). The split-half correlation was .79, again attesting to satisfactory internal consistency.

Results of the factor analysis are indicated in Table 1. It was anticipated that two factors would emerge, representing the two dimensions intrinsic satisfaction and perceived freedom. Two dimensions with eigenvalues greater than one emerged, explaining 53% of item variance. Factor I appeared to represent intrinsic satisfaction, as five of the six items loading .4 or higher on that factor represented that dimension of subjective leisure. The second factor contained both intrinsic satisfaction and perceived freedom items with loadings of .4 or higher. While the underlying theoretical structure was generally supported by this factor analysis, the intrinsic satisfaction and perceived freedom dimensions of subjective leisure do not seem totally unrelated. It is important to note that although the scale contains two dimensions as anticipated, in hypothesis testing it is treated as one subjective leisure scale.

Hypothesis Testing

Stepwise regression results shown in Table 2 strongly reject the null hypothesis. The subjective leisure scale score (operationalized as the total of the 13 subjective leisure items) was the strongest predictor of personal leisure perception (operationalized as the leisure/not leisure score), far outweighing the three objective measures (time, expenditures and participation frequency). The subjective leisure scale score was the first of the four predictors to enter the regression equation, followed by expenditures and participation frequency. Time did not enter the equation, due to its strong correlation with participation frequency. The beta coefficient for the subjective leisure scale score was significant at $p = .00$. The R^2 for the regression equation using only the subjective leisure scale score as predictor was .49. The addition of the expenditures and participation frequency variables to the equation contributed negligibly in explaining additional variation, as R^2 remained at .49.

Discussion

The findings underscore the necessity of developing subjective leisure measures as voiced by a number of researchers (Chase and Cheek 1979; Crandall 1979). The inadequacy of the three objective measures as predictors of perceived leisure is vividly demonstrated in the results of the hypothesis testing. The implications affect both theory development and practical application. A great number of published leisure

TABLE 2
RESULTS OF STEPWISE REGRESSION HYPOTHESIS TESTING

Correlation Matrix	Leisure/ Not Leisure	Participation Frequency	Time	Expenditures	Leisure Score
Leisure/not leisure (Criterion)	1.00	.05	.09	.06	.70
Participation frequency (Predictor)	-	1.00	.72	.18	.07
Time (Predictor)	-	-	1.00	.19	.13
Expenditures (Predictor)	-	-	-	1.00	.03
Subjective leisure score (Predictor)	-	-	-	-	1.00

Regression Summary Table	Beta	Significance of Beta	R ²	R ² Change
Subjective leisure score	.70	.00	.49135	.49135
Expenditures	.05	N.S.	.49346	.00211
Participation frequency	-.01	N.S.	.49360	.00014

studies use objective measures, particularly activity participation frequency, as surrogate leisure measures. Practitioners assessing leisure services and programs also favor objective measures such as participation aggregates or expenditures. The validity of these measures might be improved by adding subjective measures of leisure as well.

It is evident that further exploration of the intrinsic satisfaction and perceived freedom dimensions is warranted. They might be expanded and redefined, and other dimensions might be added. Once these measures have been further developed and validated, antecedents of the psychological leisure experience can be isolated, with implications in both theoretical and applied spheres. In leisure theory development, situational and personal variables have been used to predict leisure activity participation frequency. When a more valid measure of the subjective leisure experience is developed, the effects of these situational and personal variables can be more accurately assessed. The implications for practitioners would be equally profound. When situational variables are related to subjective leisure perceptions, practitioners can better create environments which enhance the leisure experience. Further, if personal variables such as demographics or personality variables can be linked to salience of a particular leisure dimension, more effective segmentation and communication strategies can be adopted.

While this study takes an exploratory step in testing activity-general subjective leisure dimensions, its limitations should be noted. The generalizability of the findings is quite limited because a homogenous student sample is used and because only fifty-four activities from among the myriad available are studied.

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IS MARKETING THE ANSWER TO THE CRISIS IN PERFORMING ARTS? ANOTHER VIEWPOINT AND MODEL

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Abstract

This paper reviews the literature on marketing the performing arts while contrasting the viewpoints of performing artists and marketing management. Various aspects of adapting marketing principles to the arts without sacrificing quality or spontaneity are examined. An explanatory model is introduced as a guide to arts administrators.

The arts are flourishing declares Beverly Sills (1976), famed opera soprano. "There is no crisis in the arts. There is a money crisis--a big difference." Rising costs and stiff competition for America's recreation dollar are forcing arts administrators to adopt marketing techniques, which they have long spurned.

Is it possible to adapt marketing methods to the arts without sacrificing the quality and spontaneity of the creative efforts so crucial to them? If so, is it to the advantage of arts organizations to utilize such techniques? The discussion of "the arts" and "marketing" which follows is intended to answer these questions and demonstrate areas of compatibility for the two, as noted in an explanatory model.

Performing Arts and Marketing Defined

The "performing arts" have been defined by Lacznia (1980) as an intangible service instrumental in the development of our culture, the social value of which cannot be easily translated into financial or economic terms.

"Marketing" has traditionally been viewed in terms of selling, influencing, and persuading; however, Kotler and Levy (1969) suggest that marketing should not be synonymous with the selling function, but should be viewed more broadly as a form of consumer satisfaction engineering, and as the concept of sensitively serving and satisfying human needs. This idea of benevolent marketing has accompanied the view that selling and influencing are secondary to the creation of products to satisfy consumers' needs, and to the building of a program of communications to express the organization's purposes. All of these activities are compatible to performing arts.

Artist's Traditional Perception of Marketing

Artists' attitudes toward the business world have traditionally been negative. The words 'arts management' strike consternation, confusion and sometimes antagonism in the minds of some people when they are first heard, states Georgi (1973). Raymond and Greyser (1978) note that many artists still see marketing as a practice not wholly honorable and somehow too slick for their high calling, while Levy (1980) relates that the ideas customarily associated with the word marketing imply that artists who succeed in marketing their work are corrupt and meretricious. Lacznia (1980) states that, in addition to thinking that marketing is inappropriately applied to the arts, some artists believe that such activity would compromise artistic excellence. These critics contend that marketing lowers the arts to the level of TV soap operas, because it tries to "peg" the arts at the

lowest common denominator of taste in society.

Much of this attitude may stem from the fact that artists are somewhat myopic in their conception of their place in the world. They focus all attention on their art, not on those for whom they are creating that art. Further, they believe that the intrinsic quality and worth of their endeavors will bring people in of their own volition. Greyser (1980) aptly refers to this belief as the zealot syndrome. As Raymond and Greyser (1978) point out, arts administrators and artists must realize that any product or service, however worthy, competes for the public's attention, time and money with many others, and that marketing the arts cannot be limited to advertising and promotion if arts organizations are to attain and maintain the level of professionalism necessary for their survival in today's economy.

The Businessman's View of the Artist

Profit has traditionally been a major objective of businessmen. Only recently have corporations begun to stress greater social responsibility. Since profit-making is definitely a low-level priority to artists, it is not surprising that businessmen often considered arts organizations unworthy of their investment of time (as consultants or staff members), or of money. This negative attitude to the arts by business managers has been instrumental in keeping apart the two fields as has the artists' refusal to accept sound business principles as necessary means for improving the efficiency of arts organizations. If artists have been guilty of viewing businessmen as profiteering bores, then businessmen have been equally guilty of considering professional artists as unrealistic and unproductive.

Changing Attitudes

Fortunately, these negative attitudes are changing. Many corporations do support the arts without regard for an expected return on investment, while artists' attitudes are also being revised, perhaps because, as Greyser (1980) points out, there is a growing concern by arts administrators for the opportunity cost of empty seats at performances, and a growing awareness of arts as entertainment.

Although more arts administrators are turning to marketing as a means of survival, Rucklefs (1979) believes that many cringe at the unprecedented commercialism. But they are finding that more aggressive marketing and tighter management are imperative to make ends meet.

Harvey Lichtenstein, head of the management team at the Brooklyn Academy of Music, is noted by Rucklefs as saying that artists have become much more aware of the relationship between money and their work. The old idea, 'I'm an artist and money isn't a concern of mine,' isn't prevalent any more. The arts, like business, are becoming more consumer-oriented. Artist Jim Hully affirms this notion, and Chamberlain (1975) notes his saying:

"It's about time we climbed down from our lofts and introduced ourselves. One of our main objectives should be to convince people

that, in the final analysis, it is their enjoyment of the art object, and its contribution to the quality of their environment, that constitutes the real value of that object...The more we artists discuss these things in public, the more we stimulate interest in the value of art--and the more willing buyers will be to accept financial liability for their own tastes, and to buy art for enjoyment."

The major concern of artists and art supporters when considering marketing is related to maintaining quality in the arts. What has not been recognized by many, says Dawson (1980), is that marketing's success in the arts, no less than in the commercial sector, is utterly dependent upon creative and product excellence. Searles (1980) agrees, stating that there is no single factor more important to the success or failure of a consumer product than its basic intrinsic quality. Quality is far more important than 'price' or 'promotion'.

As more and more arts administrators employ marketing with good results at the box office without lowering arts' quality, the view of marketing as a slick, devious promotional tool unworthy of the arts is gradually dimming. Simultaneously, as arts organizations become more seriously concerned with upgrading the quality, effectiveness and efficiency of their administrations, businessmen are looking more favorably on them as essential and viable entities in today's society. People in or associated with the arts appear to be gradually abandoning the idea that marketing them is ethically or morally unsound.

Serious efforts to evaluate the arts' current position and options are required. There is a lack of research sophistication in the arts field, states Greyser (1980). Although artists complain about lack of financial support, until recently they have made no attempt to give the business world and government the facts necessary to enable these sectors to help wisely and not blindly throw money into an arts enrichment slush fund.

Adapting Marketing to the Arts

The choice facing manager's non-business organizations is not to market or not market, for no organization can avoid marketing. The choice is whether to do it well or poorly, say Kotler and Levy (1969).

Georgi (1973) notes that, like any other business, theater, dance and music organizations are conceived by human beings and managed by human beings to achieve an objective of worth and need for human beings. In attaining this objective of worth and need--the presentation of the arts product to an audience--arts managers for years have used without question the basic human tools of communication, adaptation, compromise and accommodation. Bartels (1974) notes that the only difference between this idea and the broadened concept of marketing is that in marketing, these processes have been called market research, selling, market segmentation, adaptivity, consumer orientation and promotional strategy.

However, arts administrators have not been doing these things well, perhaps because they have never consciously considered what they were doing. Hirsch and Davis (1980) suggest that to redefine and upgrade their jobs effectively, arts administrators must improve accounting methods, and rethink membership or subscription targets, prices, programs offered, and even the goals of the organization. As a body of theory, practice and technique, marketing has the capacity to speak to many of these issues.

Rucklefs (1979) cites an official at the Brooklyn

Academy of Music, who describes the situation in these terms: We're in the business of selling a perishable product. In supermarkets, the lettuce wilts. In our case the curtain goes up.

Arts administrators must realize that their institutions are similar to business organizations in many respects. Raymond and Greyser (1978) note that both have sets of publics, including their employees, consumers, financial communities and local communities; while Peterson (1980) thinks that both desire to survive as viable entities, and both need to allocate and manage resources effectively. Because of these similarities, it is feasible to apply marketing concepts and techniques employed in business organizations to arts organizations.

Although arts administrators have begun to accept and utilize marketing, Dawson (1980) warns:

Marketing is not a guaranteed and final solution to the financial problems confronting the arts. It does not ensure sold-out houses or capacity attendance...Marketing can help understand more fully the nature of the arts product...It can help more clearly define goals and objectives, and, as a result, provide measurable steps by which to evaluate effectiveness.

Kotler (1980) comments that by revealing the motivations of potential donors and audience members, helping the organization discover its purposes and natural markets, and preparing successful communication programs for attracting widespread and loyal support, marketing can play a vital role in improving the quality of arts administration.

Most arts organizations already practice one aspect of marketing of the arts: audience development strategy. Audience analysis is an important tool in building and effective marketing policy. For example, understanding consumers of arts' "products" enables marketers to determine optimum ticket pricing and distribution policies.

Market analysis is not the only marketing principle that can be profitably applied to the arts. Searles (1980) suggests three others:

- 1) And organization should concentrate on doing one thing well, and effectively tell people what it is that is being done so well. Violation of this principle is frequent in the arts. Many times a theater has closed because it tried to be a children's theater, classical theater and musical comedy theater all in one. Very rarely can such an ambitious endeavor be realized successfully--not only does the artistic staff get confused as to their purpose, but so does the patronizing community.
- 2) You have to spend money to make money. It has long been a practice to cut administrative budgets to the bone when money is tight (and it almost always is) in an artistic institution. Hence, the productions may continue to be lavish, but very few people will know when and where to go to see them because of skimpy advertising and promotion.
- 3) The marketing effort should concentrate on people who already are supporting the activity. Too often, an attempt to

"broaden the audience base" falls flat because the target market of the project consists of those who are not now attending events not because they don't know about them or haven't been sufficiently motivated, but because they merely have no interest in the arts (or at least the particular art being promoted) and never will. Thus, inordinate amounts of dollars have been spent in vain.

Laczniak (1980) presents an approach for developing a marketing strategy for the arts, by defining the product life cycle as applied to arts organizations:

- 1) In the introduction stage, a company or art form is new in a community. Creative and informational marketing is called for, as the community must know what is available.
- 2) During the growth period, the company or art form has met with initial favorable response (good reviews) and encouraging audience attendance (increased ticket sales). At this time, the arts manager should concentrate on promoting the value of his "product" to the community, attempting to establish the idea that this company or art form is indeed essential to the well-being of that community.
- 3) At the maturity stage, the audience levels stabilize for any of various reasons. The artistic director should at this time employ techniques for keeping his organization out of the decline stage.
- 4) Finally, the decline stage is reached if and when the organization has outlived its usefulness. One way that this can happen is if a new organization with better quality and/or better community or financial support forces the old organization out of the market.

Adapting marketing to the arts does not mean sacrificing artistic excellence; indeed the resulting efficiency in operations may enhance quality. Furthermore, if arts management becomes more effective and efficient, the need for outside assistance may actually diminish.

A Model for Marketing the Arts

The model presented in **Figure 1** entitled BASIC ELEMENTS OF MARKETING THE ARTS is intended to represent many of the points previously discussed. At the center of the model, as the focal point of all marketing and artistic endeavors, is the audience as consumers of the performing arts.

Directly impacting on the audience are the traditional four elements of the marketing mix, which for arts marketing consist of:

- a) Choice of performance or program specifics (product);
- b) Pricing policies, i.e. season tickets group rates and discounts (price);
- c) Location of performances/display/exhibits (place);

- d) Communication activities, i.e. advertising, press releases, ticket agencies and booths, personal appearances (promotion).

How these four basic elements of the marketing mix are utilized in relation to audience public research findings (if carried out) and as affected by the uncontrollable environments of the performing arts, equates to the design of the marketing plan.

The uncontrollable (by the arts administrator) environments contained in the model are: the cultural environment (national, regional or local); the social environment; the political environment; the legal environment; the competitive environment; and often the resources and objectives of the artistic company (which are established by the board of advisors).

Any or all of these environmental components may have a profound effect on the arts administrator's decisions while designing the overall marketing plan and the individual component elements thereof.

Once the marketing plan is designed and agreed to by the advisory board, the artist/performers in the company, and by any special committees, a detailed plan of action to implement the marketing plan will be required. In addition, some means for follow-up, control and modification (if necessary) will be needed.

By following this model, the arts administrator will be utilizing basic marketing principles.

Outlook for the Future

Arts administrators have been reluctant to recognize their need to utilize marketing principles. Within performing arts organizations, the perception persists that marketing is a tool of commercial enterprise, and, therefore, is alien to cultural enterprise. Current financial constraints, however, challenge the traditional view that performing arts exist in order that cultural expression may flourish, regardless of the consumer demand for, or appreciation of, the artistic offerings. Unfortunately, artistic prerogatives are frequently cast as being in opposition to audience preference rather than simply being viewed as two parts of the same undertaking.

The adoption by arts organizations of a marketing philosophy and the proposed model as integral parts of the overall management process may be difficult to achieve, given the existing biases and logistic problems. However, it seems logical that the ultimate success of any arts organization's performance can only be enhanced by a continuing sensitivity to the people and groups it seeks to serve. In return those well-served people and groups will support and encourage the organization. Marketing is the answer for performing arts.

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FIGURE 1

Basic Elements of Marketing the Arts

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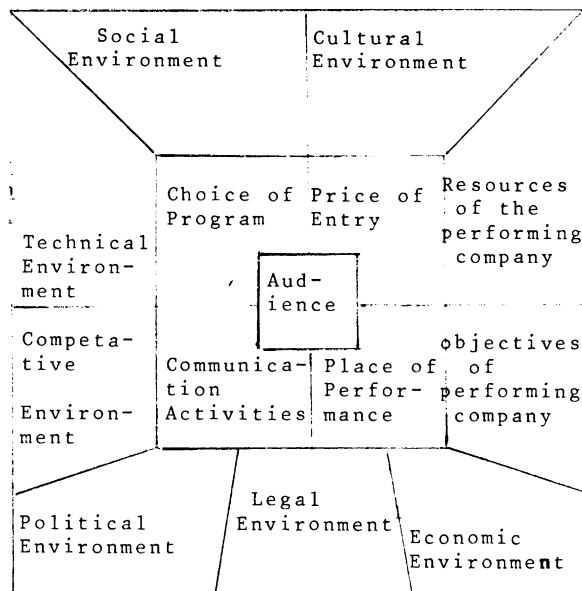
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ANALYSIS OF MARKETING EXPERIMENTS
WITH A CATEGORICAL RESPONSE VARIABLE

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Abstract

The analysis of experimental data with a qualitative response variable is a problem confronted in many marketing research studies. This paper illustrates a methodology based on generalized least squares that properly handles a response variable that is discrete. The methodology is illustrated on several sets of marketing data and software packages that can be used for computations are noted.

Introduction

The analysis of categorical data is receiving increased attention in the marketing literature. In particular, recent articles by Green, Carmone, and Wachspress (1977) and Flath and Leonard (1979) have illustrated the usefulness of logit-type models in analyzing qualitative marketing data. The purpose of this paper is to illustrate a methodology developed by Grizzle, Starmer, and Koch (1969) that can be used to analyze categorical data in which a response variable can be clearly defined. This paper illustrates the methodology using data collected in a marketing research study where the response variable is dichotomous. The extension of the methodology to polytomous response variables is illustrated and software packages that can be used for computations are noted.

A Marketing Research Example

A study was conducted by Walker (1981) to determine the effect of various incentives on the response rate in a survey. Customers of a national family steak house chain were given a questionnaire when they paid their bill and were requested to mail it to a given address upon completion. Six different incentive treatments were employed in the experiment: A coupon for a free beverage upon the next visit to the steak house; 25¢ donation to a charity specified by the steak house; 25¢ cash; 50¢ cash; 50¢ promised upon completion and return of the questionnaire; and no incentive. The first four incentives were attached to the questionnaire and were received by the customer even if the questionnaire was not returned. The data for the experiment are shown in [Table 1\(a\)](#).

TABLE 1
RESULTS OF WALKER INCENTIVE EXPERIMENT

(a) Frequency Count		
Incentive	Number of Non-Responses	Number of Responses
1	61	26
2	57	37
3	59	34
4	44	52
5	72	24
6	77	18

(b) Estimated Parameters

$$\hat{\beta} = \begin{bmatrix} .6601 \\ .0410 \\ -.0538 \\ -.0257 \\ -.2018 \\ .0899 \end{bmatrix}$$

Incentive	Actual Probability of Non-Response	Predicted Probability of Non-Response
1	.7011	.7011
2	.6063	.6063
3	.6344	.6344
4	.4583	.4583
5	.7500	.7500
6	.8105	.8105

One might wish to analyze this data as a single-factor analysis of variance design and perform an overall F-test to test for equal treatment means. The fact that the response variable (did or did not return questionnaire) is binary, however, violates several assumptions of this analysis. The response variable is a Bernoulli random variable rather than a normal random variable as assumed in the analysis of variance model. In addition, since the variance of a Bernoulli random variable is a function of the mean, the variance of the response variable will be a function of the treatment mean and will therefore be heteroskedastic if treatment means are unequal. Finally, the expected value of the binary response variable is defined to be a probability and must therefore be greater than or equal to zero and less than or equal to one. Neter and Wasserman (1974, pp. 320-335) discuss the consequences of these violations and suggest possible corrective measures. The next section of this paper illustrates an alternative methodology that is appropriate when the response variable is qualitative.

The Grizzle-Starmer-Koch Methodology

A methodology developed by Grizzle, Starmer, and Koch (1969), hereafter referred to as GSK, is based on generalized weighted least squares regression and can be used to analyze contingency tables that have a clearly defined response variable and one or more experimental factors. The GSK methodology is appropriate in cases where the question of interest is whether or not the experimental factors affect the categorical response variable.

To illustrate the methodology, the data are represented in terms of the cell frequencies and the expected cell probabilities. This framework is shown in [Table 2](#), where r represents the number of categories for the response variable and s represents the number of treatments.¹ If it is assumed that a random sample of size

¹For a single-factor design, a treatment is defined to be a factor level. For a multi-factor design, a treatment is defined to be a combination of factor levels.

n_{ij} has been selected from population i where $i=1, \dots, s$, then a hypothesis of interest is that of homogeneity among the populations. Expressed in terms of the expected cell probabilities shown in Table 2, the null hypothesis is $H_0: \pi_{1j} = \pi_{2j} = \dots = \pi_{sj}$, for $j=1, \dots, r-1$. That is, the hypothesis of homogeneity states that the probability of response category j is equal for all treatments.

TABLE 2
GENERAL FORMAT FOR DISPLAYING DATA
WITH QUALITATIVE RESPONSE VARIABLE

Cell Frequencies				
Population (Treatment)	Response Category			Total
	1	2 . . . r		
1	n_{11}	n_{12}	n_{1r}	$n_{1\cdot}$
2	n_{21}	n_{22}	n_{2r}	$n_{2\cdot}$
.
.
.
s	n_{s1}	n_{s2}	n_{sr}	$n_{s\cdot}$

Expected Cell Probabilities				
Population (Treatment)	Response Category			Total
	1	2 . . . r		
1	π_{11}	π_{12}	π_{1r}	1
2	π_{21}	π_{22}	π_{2r}	1
.
.
.
s	π_{s1}	π_{s2}	π_{sr}	1

The methodology involves definition of meaningful linear or non-linear functions of the π_{ij} represented as $f_m(\pi)$ for $m=1, 2, \dots, u \leq (r-1)s$. A model of the form

$$F(\pi) = X \beta \quad (1)$$

is now fit by replacing π_{ij} with $p_{ij} = n_{ij}/n_{i\cdot}$ and using a weighted least squares procedure where $[F(\pi)]' = [f_1(\pi), \dots, f_u(\pi)]$ is a $(1 \times u)$ row vector, X is a (uxv) design matrix of rank $v \leq u$, and $\beta' = [\beta_0 \beta_1 \dots \beta_{v-1}]$ is a $(1 \times v)$ row vector of unknown parameters. Tests of hypotheses are formulated in terms of the parameters contained in β by considering the null hypothesis $H_0: C\beta = 0$, where C is a (dxv) matrix of appropriate constants and of rank $d \leq v$. It should be noted that the form of X is the same as in a univariate analysis of variance model whenever a single function $f_m(\pi)$ is constructed for each of the s populations.

For the Walker data shown in Table 1(a), $s=6$ and $r=2$. The hypothesis of homogeneity can be stated as $H_0: \pi_{11} = \pi_{21} = \dots = \pi_{61}$. In words, this hypothesis states the probability of non-response is equal for all six incentive treatments. A meaningful definition for $f_m(\pi)$ that can be used to test this hypothesis is $f_m(\pi) = \pi_{m1}$ for $m=1, \dots, 6$ and $[F(\pi)]' = [\pi_{11} \pi_{21} \pi_{31} \pi_{41} \pi_{51} \pi_{61}]$. Notice that this choice is not the only one that can be used to test for homogeneity and other functions such as $f_m(\pi) = \pi_{m2}$ and $f_m(\pi) = \pi_{m1} - \pi_{m2}$ for $m=1, \dots, 6$ are also appropriate.

Since there is only one response function for each of the six populations, the matrix X is the design matrix used in a single-factor analysis of variance model. If indicator variables are defined in the form

$$X_k = \begin{cases} 1 & \text{if incentive level } k, \\ -1 & \text{if incentive level } 6, \text{ and} \\ 0 & \text{otherwise} \end{cases} \quad (2)$$

for $k=1, \dots, 5$, then

$$X = \begin{bmatrix} 1 & 1 & 0 & 0 & 0 & 0 \\ 1 & 0 & 1 & 0 & 0 & 0 \\ 1 & 0 & 0 & 1 & 0 & 0 \\ 1 & 0 & 0 & 0 & 1 & 0 \\ 1 & 0 & 0 & 0 & 0 & 1 \\ 1 & -1 & -1 & -1 & -1 & -1 \end{bmatrix} \quad (3)$$

with $u=6$ rows and $v=6$ columns and $\beta' = [\beta_0 \beta_1 \beta_2 \beta_3 \beta_4 \beta_5]$. In terms of this model, the six populations are homogeneous if $\beta_1 = \beta_2 = \beta_3 = \beta_4 = \beta_5 = 0$. That is, if $\beta_k = 0$ for $k=1, \dots, 5$, then $\pi_{i1} = \beta_0$ for all $i=1, \dots, 6$.

Thus, if C is defined to be the (5×6) matrix

$$C = \begin{bmatrix} 0 & 1 & 0 & 0 & 0 & 0 \\ 0 & 0 & 1 & 0 & 0 & 0 \\ 0 & 0 & 0 & 1 & 0 & 0 \\ 0 & 0 & 0 & 0 & 1 & 0 \\ 0 & 0 & 0 & 0 & 0 & 1 \end{bmatrix} \quad (4)$$

then $H_0: C\beta = 0$ is the hypothesis of homogeneity. This hypothesis is tested using a test statistic which has an asymptotic chi-square null distribution with d degrees of freedom. The calculated chi-square test statistic for the Walker data is 35.18 with $d=5$ degrees of freedom and the hypothesis of homogeneity is rejected ($p < .0001$). The estimated parameters in β are shown in Table 1(b).

As shown in Table 1(b), when $u=v$ the model represents a perfect fit of the cell frequencies. In many instances, however, $u > v$ and the model must be tested for adequate fit. The GSK methodology provides a test for model fit that is based on a test statistic that has an asymptotic chi-square null distribution with $u-v$ degrees of freedom.

For example, in a two-factor experiment, the design matrix may contain only main effects and it may be desired to test whether this non-interaction model provides adequate fit.

As in a single-factor analysis of variance experiment, the rejection of the null hypothesis of equal treatment means requires examination of pairwise treatment differences. For the single-factor design used in the Walker study, each of the 15 $[(s)(s-1)/2]$ pairwise comparisons is represented in the form $C\beta$ and tested equal to zero. For example, the probability of non-response is equal for incentive one and incentive two (i.e., $\pi_{11} = \pi_{21}$) if $\beta_1 = \beta_2$, or $\beta_1 - \beta_2 = 0$. This hypothesis can be tested by defining C to be the (1×6) vector $[0 \ 1 \ -1 \ 0 \ 0 \ 0]$, and testing $C\beta = 0$ using the chi-square test statistic with $d=1$ degree of freedom. If $\pi_{11} = \pi_{61}$, then $2\beta_1 + \beta_2 + \beta_3 + \beta_4 + \beta_5 = 0$ and C is defined to be the (1×6) vector $[0 \ 2 \ 1 \ 1 \ 1 \ 1]$.

The Bonferroni inequality (see, for example, Neter and Wasserman (1974, p. 147)) can be used to provide an overall level of confidence on the entire set of $(s)(s-1)/2$ pairwise comparisons. For the Walker example, if a family confidence coefficient of .90 is desired, then the hypothesis of equal pairwise probabilities will be rejected for any comparison with a p -value less than $(.10/15) = .0066$. The pairwise comparisons are summarized in Table 3. It is concluded that treatment 4 will yield a higher response rate (lower non-response

rate) than treatments 1, 5, and 6. In addition, treatments 2 and 3 yield a higher response rate than treatment 6.

TABLE 3
PAIRWISE COMPARISONS FOR WALKER INCENTIVE DATA

Comparison	Degrees of Freedom	Chi-Square	P-Value
1 vs 2	1	1.82	.1779
1 vs 3	1	.91	.3405
1 vs 4	1	11.80	.0006*
1 vs 5	1	.55	.4595
1 vs 6	1	2.97	.0847
2 vs 3	1	.16	.6928
2 vs 4	1	4.28	.0386
2 vs 5	1	4.59	.0321
2 vs 6	1	10.03	.0015*
3 vs 4	1	6.10	.0135
3 vs 5	1	3.00	.0830
3 vs 6	1	7.55	.0060*
4 vs 5	1	18.74	.0001*
4 vs 6	1	29.51	.0001*
5 vs 6	1	1.03	.3110

* = Significant at a .10 family confidence level ($p < .0066$).

Incentive	4	2	3	1	5	6
Non-response Rate	.4583	.6064	.6344	.7011	.7500	.8105

Underscore represents treatments that are not significantly different.

The GSK methodology can also be used to fit the weighted least squares logit model described by Green et al. (1977). In order to fit the logit model, $F(\pi)$ is defined to contain the non-linear functions $f_m(\pi) = \ln[\pi_{m1} / \pi_{m2}]$ for $m=1, \dots, 6$. The advantage of the logit function over the linear function used previously is that the predicted cell probabilities are constrained to the range of zero to one. For the Walker data, the chi-square test statistic used to test the incentive factor in the logit model is 30.90 with 5 degrees of freedom.

As mentioned by Flath and Leonard (1979), there are instances where the maximum likelihood logit model is preferred to the weighted least squares model. In general, the weighted least squares model requires many observations per cell. Kleinbaum and Kupper (1978, p. 459) recommend cell sizes of at least 10 and preferably 25 observations or more. For experiments such as the Walker study in which these requirements are met, there should be little practical difference between the two models.

Extensions to More Than One Factor
and More Than Two Response Categories

Experimental designs with more than one factor can be handled in the GSK methodology by suitable modifications of the design matrix. As an example, consider the data reported by Green et al. (1977) shown in Table 4(a). This data consists of three factors, income (I), education (E), and mobility (M), where each factor has two levels. The response variable is dichotomous and represents whether or not a resident adopted a particular telecommunications service. A proposed model might include the three first-order interaction terms (IE, IM, and EM) and the second-order interaction term (IEM).

TABLE 4
RESULTS OF GREEN EXPERIMENT

Treatment	(a) Frequency Count*	
	Number of Adopters	Number of Non-Adopters
I ₁ E ₁ M ₁	153	2007
I ₁ E ₁ M ₂	226	911
I ₁ E ₂ M ₁	61	825
I ₁ E ₂ M ₂	233	858
I ₂ E ₁ M ₁	147	1216
I ₂ E ₁ M ₂	139	408
I ₂ E ₂ M ₁	287	1638
I ₂ E ₂ M ₂	382	1033

I₁ = Income level \leq \$12,500

I₂ = Income level $>$ \$12,500

E₁ = High School Level Education or Below

E₂ = Some College Education or Above

M₁ = Non-Mobile

M₂ = Mobile

*The cell frequencies have been estimated from the percentages reported by Green.

(b) Estimated Parameters and "ANOVA" Table

$$\hat{\beta} = \begin{bmatrix} 1.7253 \\ .2437 \\ .0641 \\ .5330 \\ -.0492 \\ .0872 \\ .0210 \\ -.0513 \end{bmatrix}$$

Source	Degrees of Freedom	Chi-Square	P-Value
I	1	62.77	.0001
E	1	4.35	.0371
M	1	300.16	.0001
IE	1	2.55	.1101
IM	1	8.04	.0046
EM	1	.47	.4944
IEM	1	2.78	.0956

If indicator variables are defined as

$$X_k = \begin{cases} 1 & \text{if first level of factor } k, \text{ and} \\ -1 & \text{if second level of factor } k \end{cases} \quad (5)$$

for $k=1, 2, 3$, then

$$X = \begin{bmatrix} 1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 \\ 1 & 1 & 1 & -1 & 1 & -1 & -1 & -1 \\ 1 & 1 & -1 & 1 & -1 & 1 & -1 & -1 \\ 1 & 1 & -1 & -1 & -1 & -1 & 1 & 1 \\ 1 & -1 & 1 & 1 & -1 & -1 & 1 & -1 \\ 1 & -1 & 1 & -1 & -1 & 1 & -1 & 1 \\ 1 & -1 & -1 & 1 & 1 & -1 & -1 & 1 \\ 1 & -1 & -1 & -1 & 1 & 1 & 1 & -1 \end{bmatrix} \quad (6)$$

is the appropriate design matrix.² The logit function is fit by defining $f_m(\pi) = \ln[\pi_{m1} / \pi_{m2}]$ for $m=1, \dots, 8$.

²This particular coding for the indicator variables is used in the SAS procedure FUNCAT and is also recommended by Neter and Wasserman (1974, p. 633) for a model that contains interaction terms.

The results shown in **Table 4(b)** indicate that the IE, EM and IEM interactions are not significant and can be dropped from the model. If these three terms are deleted, the other four terms (I, E, M, and IM) all have p-values less than .0017 and the goodness of fit test statistic has a value of 6.17 with 3 degrees of freedom ($p = .1039$). It can therefore be assumed that the reduced model provides a good fit. Multiple comparisons may now be conducted as in the single-factor design described previously. Since the IM interaction is significant, one may wish to collapse over E and do pairwise comparisons of the probabilities in the resulting four cells.

To illustrate how the GSK methodology can be extended to the case of a polytomous response variable consider again the Walker data but assume now that $r = 3$. For example, some of the questionnaires returned in the survey were incomplete and of poor quality. The response variable could therefore be defined to have three categories, no response, incomplete response, and complete response. For sake of brevity, assume now that there are only $s = 3$ populations. The three populations are homogeneous if $\pi_{11} = \pi_{21} = \pi_{31}$, and $\pi_{12} = \pi_{22} = \pi_{32}$. Thus, for each of the three populations, define two response functions $f_{m1}(\pi) = \pi_{m1}$ and $f_{m2}(\pi) = \pi_{m2}$ for $m = 1, 2, 3$, and

$$[F(\pi)]' = [\pi_{11} \ \pi_{21} \ \pi_{31} \ \pi_{12} \ \pi_{22} \ \pi_{32}]. \quad (7)$$

When more than one function is constructed for each population, the design matrix must be slightly modified. For the present problem, the appropriate form is

$$X = \begin{bmatrix} 1 & 1 & 0 & 0 & 0 & 0 \\ 1 & 0 & 1 & 0 & 0 & 0 \\ 1 & -1 & -1 & 0 & 0 & 0 \\ 0 & 0 & 0 & 1 & 1 & 0 \\ 0 & 0 & 0 & 1 & 0 & 1 \\ 0 & 0 & 0 & 1 & -1 & -1 \end{bmatrix} \quad (8)$$

with $\beta' = [\beta_{01} \ \beta_{11} \ \beta_{21} \ \beta_{02} \ \beta_{12} \ \beta_{22}]$. In terms of the parameters contained in β , $\beta_{11} = \beta_{21} = \beta_{12} = \beta_{22} = 0$ implies $\pi_{11} = \pi_{21} = \pi_{31} = \beta_{01}$ and $\pi_{12} = \pi_{22} = \pi_{32} = \beta_{02}$ and thus homogeneity of the three populations. This hypothesis is tested by defining

$$C = \begin{bmatrix} 0 & 1 & 0 & 0 & 0 & 0 \\ 0 & 0 & 1 & 0 & 0 & 0 \\ 0 & 0 & 0 & 0 & 1 & 0 \\ 0 & 0 & 0 & 0 & 0 & 1 \end{bmatrix} \quad (9)$$

and computing the chi-square test statistic with $d = 4$ degrees of freedom.

Summary

This paper has illustrated the Grizzle, Starmer, and Koch (1969) methodology for analyzing contingency tables in which a response variable and one or more experimental factors can be logically defined. The procedure is based on weighted least squares and should therefore be useful for researchers with a basic understanding of regression analysis. Programs written to perform the required computations include the FUNCAT procedure of the Statistical Analysis System (SAS, 1979), the program GENCAT described in Landis, Stanish, Freeman, and Koch (1976), and the program BASCAT, described in Sawyer (1979). Sawyer (1981) has also developed the program DIFCAT which performs the GSK methodology without forming $F(\pi)$ in terms of log, linear, or exponential operators.

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ARE LATE SURVEY RESPONDENTS WORTH WAITING FOR?
AN ANALYSIS OF DEMOGRAPHICS

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Introduction

The issue of differences between early and late respondents in mail surveys is an important one. This importance stems from the frequent need for timely results, particularly in applied research, and the various practical economies of expense and effort associated with reduced time lags. Concern over response speed is evidenced by recent studies to determine methods of improving response speed (Cox, Anderson and Fulcher, 1974; Ford, 1967; Hansen, 1980; Houston and Jefferson, 1975; Houston and Nevin, 1977). Results of several such studies are summarized by Houston and Ford (1976).

Responses are almost invariably received in an exponential or S-curve pattern over time with the bulk of responses being returned in the first few days or weeks following the initial mailing. Huxley (1980) presents an overview of published response patterns and he and Hill (1981) have developed straightforward models for predicting response speed. Several published response patterns are presented in Table 1.

TABLE 1
SUMMARY OF PUBLISHED RESPONSE PATTERNS

	Percent of Responses Received	After...	Total Reported Period
Baur (1947)	57	16 days	42 days
Cox (1966) ^a	92	14 days	28 days
Cox, Anderson and Fulcher (1974)	89	8 days	16 days
deJonge, et al (1977)	96	2 weeks	5 weeks
Donald (1960)	60	first mailing	three mailings plus telephone call
Ford (1967)	92	20 days	30 days
Ford and Zeisel (1949)	56	first mailing	three mailings
Houston and Jefferson (1975)	90	3 weeks	4 weeks
Huxley (1980)	95	12 weeks	17 weeks
Newman (1962)	77	first mailing	three mailings
Parasuraman (1981)	51 55	18 days 15 days	46 days 46 days
Robinson and Agasim (1951) ^b	91	14 days	28 days

a = average of six industrial surveys

b = average of nine consumer surveys

Though there is no common set of parameters across existing studies (Table 1), it is clear that substantial time may be saved if analysis of data can proceed before returns would normally be considered complete. For instance, in almost all cases, 75-90 percent of responses were received during the first half of the total reported data gathering period. Analysis of early responses only, of course, is meaningful only if late respondents are not materially different from early respondents. This, in turn, implies (1) that for descriptive research objectives, respondent characteristics must be uncorrelated with time of response and (2) that for associative research objectives, relationships among respondent characteristics must not interact with time of response.

The decision facing the researcher in the scenario at hand, however, is not whether to utilize the early responses or the late responses. Rather, the decision is whether to use early responses only or, at the cost of time delays, to use responses of the total sample eventually realized. Thus, the type of validity relevant here rests on comparison of early respondents with early and late respondents combined. Comparisons between these two groupings, then, are a function of the degrees of difference in their responses and the relative sizes of the two groups. This latter determinant is reflected in the response patterns addressed by Huxley (1980) and Hill (1981).

Despite the obvious potential benefits of "early" cut-off dates and analyses, only a limited number of studies has directly investigated the similarity of early-late-total sample respondents. A virtual lack of significant early-late differences has been reported in studies of commercial populations (Parasuraman, 1981), a household panel (deJonge et al, 1977), subscribers to a male oriented magazine (Newman, 1962), and male subscribers to a general interest magazine (Robinson and Agasim, 1951). The bulk of the characteristics measured in these studies consisted of demographic and ownership variables.

In contrast, surveys of members of a women's association (Donald, 1960), workers who had recently quit their jobs (Ford and Zeisel, 1949), and college alumni (Shuttleworth, 1940) have resulted in numerous significant differences in demographics, involvement in association activities, job-related attitudes, and unemployment status.

Finally, two researchers (Baur, 1947; Stanton, 1939) have reported mixed results.

This paper presents an analysis of respondents' demographic characteristics in a recent large scale survey. Analyses are on a more meaningful basis than seems to have been employed in earlier studies and utilize an appropriate descriptive statistic.

METHODOLOGY

Sample

The survey providing the basis for this research was a project carried out on behalf of a professional association. The central purpose of the project was to gather information to guide the redesign of services-benefits programs offered by the association to its

members. The membership, by virtue of their common profession, tend to have considerably higher education, somewhat higher income, and a larger proportion of males than found in the general population. Members nevertheless are typical of, and, indeed, themselves constitute, a substantial target market. And for purposes of this study, comparisons among early, late, and total respondents are not invalidated.

A total of 36,044 questionnaires was sent to the association's members along with a cover letter over the association president's signature encouraging cooperation. Approximately six weeks after the initial mailing a follow-up letter from the president was sent to all members. Respondents remained anonymous.

The division between early and late responses is not a deterministic point, although in this study the follow-up letter provided a logical dividing line. This dividing line, of course, also corresponds to the point at which the researcher must decide whether or not the expense of a follow-up letter mailing is warranted. Accordingly, responses received after the follow-up letter was sent were classified as late. A total of 14,569 questionnaires, or 40.4 percent, was returned. Of these, 13,292 (or 91.2 percent of all questionnaires returned) were received prior to the follow-up letter and 1,277 (or 8.8 percent) thereafter. A final cutoff for all responses was set at four weeks after the follow-up letter was sent for a total data collection of some ten weeks.

These early-late time period proportions and the corresponding proportions of early and late respondents are quite consistent with those of published response patterns (Table 1).

ANALYSIS

The particular variables analyzed in this paper consist of demographic characteristics of respondents. Demographic data are very routinely collected in survey research, often to serve as a basis for determining representativeness of the sample vis-a-vis known characteristics of the population as well as for testing relationships of interest and for use in strategy formulation. Analysis of demographics also facilitates comparison of results of this study with others that might be undertaken, thereby leading to more broadly based conclusions. Some thirty common demographic characteristics were measured in this research. All questions were multichotomous.

Two types of analysis were performed (Table 2). First, in order to highlight the nature of any significant differences between early and late respondents, a chi-square test of homogeneity (Chou, 1975, pp. 555-8) was carried out for each variable.

The central issue addressed in this study, however, is basically whether the survey researcher should incur the time and money costs of pursuing some total sample, i.e., early and late respondents combined, or whether the early respondents alone provide a more or less equivalent basis for analysis. Thus, a second type of statistic describes the degree of dissimilarity between the response distributions of early respondents versus the total sample for each demographic variable. Because the early respondents in this study comprise about 91 percent of the total sample, the total sample distribution is, of course, largely determined by the early respondents. This is, however, the typical situation faced by survey researchers (Table 1) and the early-total comparison is therefore appropriate.

TABLE 2
COMPARISON OF EARLY, LATE,
AND TOTAL SAMPLE
RESPONDENT CHARACTERISTICS

<u>Characteristic</u>	<u>Answer Categories</u>	<u>Early vs. Late Sig.</u>	<u>Early vs. Total Dissimilarity, %</u>
Personal			
sex	2	.072	.20
age	8	.817	.20
marital status	2	.044	.20
education	8	.174	.25
Household			
years married	8	.639	.40
spousal education	9	.743	.20
spousal employment status	5	.160	.20
spousal employment type	3	.989	0
number of members	7	.017	.30
additional dependents	5	.226	.05
number of children	6	.255	.30
age of oldest child	9	.575	.25
age of youngest child	9	.497	.30
type of residence	5	.349	.20
years at present residence	5	.632	.20
market value of residence	9	.748	.20
monthly rent	8	.311	.60
Employment			
type of position	3	.883	0
years employed	9	.784	.20
anticipated retirement age	8	.317	.15
years of service at retirement	9	.586	.30
second job status	4	.719	.05
self-employed activities	3	.092	.20
Financial			
annual salary	9	.417	.25
other household income	9	.300	.25
total household income	10	.388	.30
total assets	10	.125	.40
total liabilities	9	.835	.30
net worth	10	.376	.25
liabilities exc. mortgage	10	.632	.25

The index of dissimilarity is computed by summing over all answer categories the absolute difference of percentages between the early and total sample distributions and dividing by two (Wolfe, 1979). The

descriptive value of this index is that it can be interpreted as the percentage of early respondents whose response categories would have to be changed in order for the distribution of early respondents' characteristics to be equivalent to the distribution of the total sample.

RESULTS

Early vs. Late

To assess whether early and late respondents are significantly different, a chi-square contingency analysis was carried out for each of the demographic characteristics (Table 2). Of the thirty tests only four are significant at the .10 alpha level where three significant tests would be expected due to sampling error alone. This virtual lack of significant differences beyond the number expected by chance is all the more imposing in light of the very large sample size which serves to increase the chi-square statistic. (Indeed, among the four statistically significant differences, two characteristics, marital status and number of members comprising the household, essentially represent a double-counted variable.) Clearly, there is little evidence that the demographic profile of early respondents is truly different from the profile of late respondents.

Early vs. Total

The issue of the degree of difference between early respondents and sample respondents in total is rendered somewhat academic by the virtual lack of significant differences between early and late respondents. The remarkable correspondence between the response distributions of the early and total groupings in this study, however, reinforces the proposition that early responses alone can be a satisfactory basis for analysis.

The degree of dissimilarity between the profiles of each group on each demographic characteristic is described by the index of dissimilarity explained earlier and presented in Table 2. Indices for twenty-nine of the thirty demographics are .4 or less, meaning that less than one-half of one percent of respondents would have to change response category to make the early-total distributions equivalent.

The seriousness of even these small differences depends on many considerations. It does seem, however, that decisions based on early respondents only in many research situations would not be affected by shifts in responses of less than one-half of one percent of the sample.

CONCLUSION

Common concern over differences between early and late respondents is more appropriately viewed as a comparison of early and total sample respondents. Two factors determine the materiality of differences between these two groups--the degree of difference between early and late respondents and the relative numbers of early and late respondents. Almost invariably the "early" group is much larger than the "late" group and thus dominates the total sample. Though the literature contains mixed results on the degree of difference factor this study suggests that the degree of difference is (1) not significant and (2) not large enough to make the total sample materially different from the early respondents alone.

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MULTIDIMENSIONAL SCALING AND PRODUCT POSITIONING: ARE PHYSICAL
PRODUCT ATTRIBUTES GOOD PREDICTORS OF
THE OVERALL SIMILARITIES DATA

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ABSTRACT

Past research reports have often questioned the usefulness of multidimensional scaling for marketing or positioning decisions and have concluded that this method may at best be used as a diagnostic aid. Two often cited criticisms are that (1) measures based on direct similarity judgments are themselves notoriously poor in psychometric properties, and (2) respondents do not seem to use information on all attributes of the products while comparing pairs of them. This study is designed to address these and related issues. Data was collected and analyzed on perceived similarities of soft drinks as well as on perceptions relating to similarities along specific attributes so that results could be compared. Next, the results are viewed within the context of the criticisms of MDS advanced by past studies. These issues are addressed in this study by analyzing the differences in perception of various cola drinks among consumers. The increasing competition among soft drink manufacturers and the recent entry of a new cola drink (King Cola) emphasizing price alone point to the usefulness of such an analysis for positioning decisions in the soft drink market.

INTRODUCTION

Considerable attention has been centered on multidimensional scaling (MDS) since its first mention in psychological literature (Richardson 1938). Much of this attention in the last twenty years or so has been in the field of Marketing and particularly in the area of product positioning decisions. Several books and articles have appeared in recent years and research results have been reported and reviewed. While this has meant an impressive growth in the literature relating to marketing applications of non-metric MDS, several notes of caution have been voiced (Green 1975, Summers and Mackay 1976). The problem seems to be not so much in the sophistication or efficiency of the algorithms employed as in the cognitive basis of the data collection methods and psychometric properties of the measuring instruments that have been utilized.

In reviewing the literature some of the issues that seem to merit consideration are:

1. There is little evidence to show that subjects make overall direct similarity judgments based on several specific dimensions and, therefore, the validity of such judgments when used as an input to a MDS algorithm is questionable (Summers and Mackay (1976).
2. Even if direct similarity judgments are regularly made by consumers, the stability of these judgments over time and across alternate scenarios has not been proven and the reliability of such measures is therefore uncertain (Green and Carmone 1970).
3. Are similarity judgments for different classes of products essentially the same or is there reason to believe that the cognitive processes governing such judgments are widely different for short-lived (i.e., non-durable) products as opposed to long-

lived products (i.e., durables).

4. What is the appropriate dimensionality of an MDS solution that one should be looking for and is it possible to intuitively arrive at this determination before the data is analyzed? Furthermore, is the typically limited dimensionality that is possible to extract really representative of the respondents' internal cognitive pattern (Summers and Mackay 1976)?
5. By using average similarity scores across respondents as input to the MDS algorithms, are important individual differences being obscured?

The purpose of the present study is to examine the first issue in the above list. This issue has significant implications for the application and interpretation of MDS results in product positioning decisions and, therefore, warrants close scrutiny. To examine this issue, the results obtained from MDS analyses will be compared with those from other multivariate techniques. This design will also be useful in determining whether respondents really use specific attribute dimensions in making overall similarity judgments.

METHODOLOGY

The basic objective of this study was one of determining whether consumers employ typical attribute dimensions in making similarity judgments. Because of this, the study can be directed toward any group of consumers. The sample for this study was thus selected from junior and senior level undergraduate students at a medium-sized Midwestern university. Students may not be typical in their consumption pattern of soft drinks, but our objective is not one of determining the way in which soft drinks are perceived, but rather whether students use typical attributes (e.g., sweetness, carbonation, etc.) in comparing various cola drinks. A sample of 100 students participated in the study. However, the final number of responses was reduced to 88 due to incomplete questionnaires.

Five soft drinks (Coke, King Cola, Pepsi, RC, and 7-Up) were selected as stimuli for the study. Seven-up was included as a stimulus only as a control measure. A control stimulus of this type can be helpful in comparison of results across attribute dimensions.

A questionnaire was designed in two parts. In part one, similarity and preference data was collected. Respondents were asked to provide overall direct similarity judgments for pairs of soft drinks on a nine-point scale (1 = very similar, 9 = very dissimilar). After the overall similarities for ten pairwise comparisons were collected, the respondents were asked to provide their preference rankings for the five soft drinks (1 = most preferred, 5 = least preferred). At the end of these rankings, the respondents were asked to describe the kinds of characteristics that they had considered in responding to the above questions by answering open-ended questions.

After all respondents had completed part one, they were

asked to respond to part two of the questionnaire. In this part of data collection, the subjects were asked to provide pairwise similarity judgments among the five soft drinks while addressing themselves to five specific dimensions one at a time. The dimensions chosen were carbonation, price, sweetness, attractiveness of container and use as a mix. These dimensions were selected based on an evaluation of product category and interviews with several subjects not included in the study.

The procedure for analyzing the data included the following steps. First, in order to examine the underlying objective of this study, a nonmetric MDS program (TORSCA) was used to analyze the overall similarity judgments. Second, similarity judgments for the five stimuli along specific attributes (price, sweetness, carbonation, etc.) were also analyzed using the same program. Technically, since the respondents were asked to compare the stimuli along specific dimensions, one would expect that a one dimensional configuration of stimuli would correspond in some way with one, two, or perhaps a three dimensional configuration of the overall judgment.

In the third part of data analysis, preference rankings for the stimuli were cross-tabulated with the overall similarity judgments. This step would indicate whether there is any similarity between the distributions of preferences and perceived similarities between pairs of stimuli.

Fourth, ten regression analyses were conducted to examine the relationships between perceived overall similarity measures for each pair of stimuli (dependent variable) and perceived similarity of the same stimuli along five dimensions (independent variables). In other words:

$$S_i = a + b_1 s_{i1} + b_2 s_{i2} + b_3 s_{i3} + b_4 s_{i4} + b_5 s_{i5} + e$$

where: S = overall similarity measure
s = similarity measure along individual attributes
i = any pair of stimuli ($1 \leq i \leq 10$)
a = constant
b = regression coefficients
e = error

If the overall similarity judgments were based on several attributes, the above model should have a high predictive power and a large portion of variation in data should be explained. Finally, Johnson's cluster analysis program was used to examine whether meaningful clusters can be generated from similar data on the five dimensions.

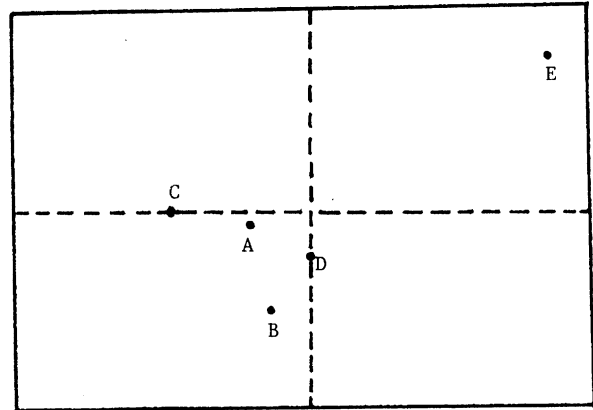
RESULTS

In the first part of the analysis, several configurations using various dimensions and based on overall similarities data were generated. Because of the number of stimuli that was used in this study, the two-dimensional solution produced a very low stress value (1.4 percent) and, therefore, was used for analysis.

The two-dimensional map appears in **Figure 1**. Only one major pattern could be uncovered in this configuration, the four cola drinks were clustered together, whereas the non-cola soft drink was clearly perceived as being different. This pattern confirms the fact that the respondents tend to use product-class characteristics (e.g., cola vs. non-cola) to a large extent when making similarity judgments. No other interpretation of the two-dimensional configuration seemed to be possible

even after the axes were rotated to different positions.

FIGURE I
OVERALL SIMILARITIES



A = Coke
B = King Cola
C = Pepsi
D = RC-Cola
E = 7-Up

In the second part of the analysis, one- and two-dimensional maps were generated based on similarities data on five attributes. The results of the one- and two-dimensional configurations were very similar when the stimuli in the two-dimensional configurations were projected on one dimension. The second dimensions in the five maps were difficult to interpret. This is understandable because the subjects were asked to compare the stimuli based on a specific attribute. However, two-dimensional maps were examined to make certain that only the specific attributes that the respondents were given was considered in making the similarity judgments. Therefore, the one dimensional maps were used for further analysis. **Figure II** includes one map for each attribute. The stress values for these configurations were less than two percent. In one case, "use as a mix," the stress value was actually zero. Very distinct differences in the perception of similarities was noted across various dimensions. For the dimension of price, King Cola was seen as being quite dissimilar to the other four soft drinks, thus suggesting that the intent of the promotional message had been correctly received by the subjects.

Chi-square analyses failed to reveal any significant relationships between preference and similarities data. However, qualitative analysis of tables revealed that respondents preferred 7-Up, Coke, and Pepsi more than either RC or King Cola.

In the fourth part of the analysis, similarities data along the five dimensions were regressed against overall similarities for each pairwise comparison. The results of the ten regression functions appear in **Table 1**. For each function, only those independent variables that show a significant beta coefficient ($p \leq .05$) are included in this table. The percentage of variance explained (adjusted R^2) ranged from 6 to 33 percent. These are relatively low percentages of variance, given that the attributes were determined via extensive interviews. Yet, some interesting results are provided by this analysis. First, no more than two dimensions showed a significant relationship with the overall

FIGURE II
SIMILARITIES ALONG SPECIFIC ATTRIBUTES

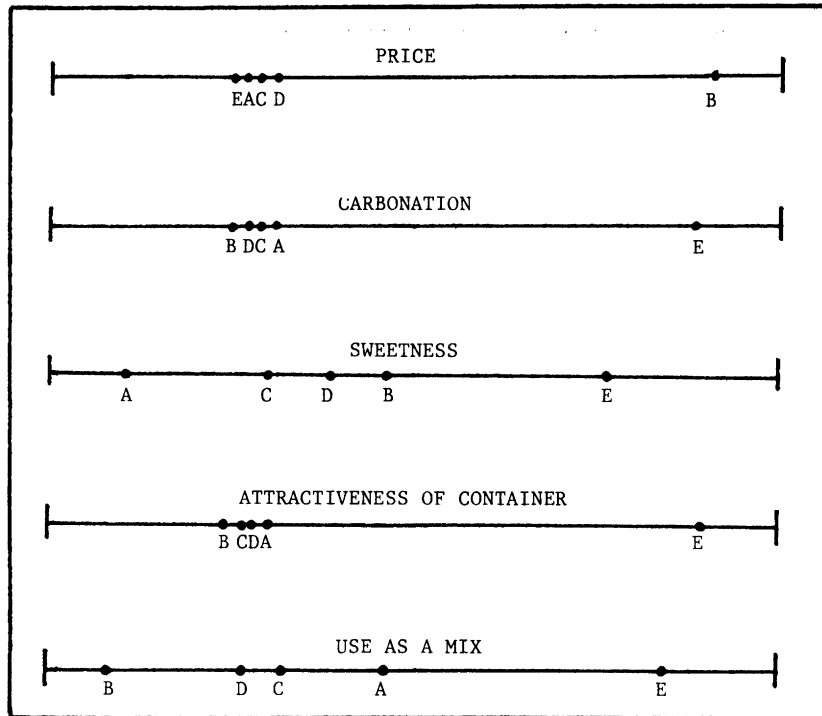


TABLE I
REGRESSION ANALYSES OF SIMILARITIES DATA

Dependent Variable	Independent Variable(s)	Multiple R	Adjusted R ²	Overall Significance
1. Coke-King Cola	Carbonation, Price	.58	.31	p < .01
2. Coke-Pepsi	Price, Container Attractiveness	.55	.29	p < .01
3. Coke-RC	Use as Mix	.34	.11	p < .01
4. Coke-7-UP	Container Attractiveness	.36	.12	p < .01
5. King Cola-Pepsi	Sweetness	.45	.20	p < .01
6. King Cola-RC	Carbonation	.41	.16	p < .01
7. King Cola-7-Up	Carbonation, Use as Mix	.52	.26	p < .01
8. Pepsi-RC	Carbonation, Sweetness	.59	.33	p < .01
9. Pepsi-7-Up	Carbonation, Container Attractiveness	.42	.16	p < .01
10. RC-7-UP	Price	.26	.06	p < .01

similarity measures. In half of the functions (3, 4, 5, 6, and 10) only one dimension was a statistically significant predictor of the overall similarity. Second, a case-by-case analysis indicates that the overall judgments are not explained by the "appropriate" dimensions. For example, in the case of King Cola, price was a significant predictor only in one out of four pairwise comparisons. Finally, no specific pattern is evident in comparing various functions. This point is particularly important since the regression functions are based on individual measures as opposed to "average" measures which were used in MDS analyses.

In the final part of the analysis, cluster analysis was used to see what pattern might exist in similarity along the five dimensions. Neither the connectedness or the diameter methods showed any specific patterns of response for various attributes.

LIMITATIONS

The results of this study are affected by several limitations. First, the sample of respondents was a restricted one in that it was mainly drawn from college students. This population is most likely to buy soft drinks from different types of distribution channels (e.g., vending machines or convenience stores) and consequently price variations may be absent.

Second, certain brands (e.g., King Cola in this case) may have been inaccessible to them. Again, it should be pointed out that this limitation does not affect the basic objective of this study, i.e., an examination of consistency of responses between overall measures and specific attributes. However, because of the nature of the sample, no managerial or strategic implications based on one MDS solution are present for this product category.

Third, only five stimuli were employed and this restricted the dimensionality of the solution that could be extracted by the MDS program. The number of dimensions recommended is not more than 1/3 the number of objects and our study has violated even this stipulation (Lehmann 1979).

Finally, respondents had to make a total of sixty pairwise comparisons and it is possible that fatigue might have influenced their responses. Also, inclusion of two distinct product classes (cola and non-cola) as stimuli may well have caused the product class dimension to dominate the overall similarity judgments of the respondents.

SUMMARY AND CONCLUSIONS

It appears that the overall similarity judgments go beyond the kinds of similarity judgments elicited when the respondent is specifically cued to individual attributes. This was also demonstrated by the fact that many of the respondents used a multidimensional construct like taste in the open-ended response when asked to mention the characteristics they had used while making similarity judgments. A further implication appears to be that for a product class such as soft drinks respondents are less likely to use specific attribute dimensions than they might for a product class like automobiles.

A second implication of the results is that when two product classes (cola vs. non-cola) are included in the set of stimulus objects, the distinction may subsume some of the individual attribute dimensions that are common to both product classes.

The fact that the respondents perceived King Cola as

being quite dissimilar on the dimension of price and yet did not rank it high in terms of preference seems to indicate two points. First, price was probably considered an unimportant attribute. This point is supported by regression analyses: in three out of four overall similarity measures for King Cola, price was not a statistically significant predictor. Second, other factors like availability may have prevented them from ranking it higher in preference. This finding does, however, confirm the success of the promotional program used by King Cola and could possibly also be related to the product life cycle effects on MDS discussed by Green and Carmone (1970). In their 1970 study, they point out that in the early stages of the life cycle of a brand, many respondents who may be aware of it and have absorbed the promotional message may not have had a chance to try the product or develop the loyalty necessary to make similarity judgments the same way as they do for established brands.

This study has attempted to focus on some of the relevant issues relating to the application of multidimensional scaling techniques for product positioning decisions. Results of the study discussed in the paper point to the importance of certain concerns expressed by previous researchers in the field. It would appear from findings of this and other studies that MDS is still a long way from being an accurate tool for policy decisions regarding product positioning. Extensive research on the psychometric properties of similarities data and the differences in such data across product classes needs to be performed for a more clear evaluation and application of the technique.

SUGGESTIONS FOR FUTURE RESEARCH

It has been reported in (Lehmann 1979, Zajonc 1980) that similarity scaling yields a space dominated by "cola-ness" dimensions whereas preference scaling generates a space dominated by popularity of the drinks (Cooper 1973). While this phenomenon has occurred in this study as well, it is useful to note that cueing the respondents to specific attributes did result in the cola/non-cola distinction being suppressed (Figure II). Also, similarity judgments predict preferences only when the similarity judgments are themselves highly evaluative (Zajonc 1980). This points to the need for approaching joint space mapping as a means of determining product positioning alternatives with great caution. Also, the nature of the product class may itself affect the relative evaluative nature of similarity judgments since it is quite conceivable that consumers are much more evaluative in their similarity judgments of automobiles than they are for soft drinks.

Another area worthy of research is that of the validity and reliability of similarity judgments as suggested by Summers and Mackay (1976). In this study, no repeat measures were obtained and so no determination of the test-retest reliabilities of similarity judgments could be made. It is, however, imperative that this psychometric property be studied if the results of multidimensional scaling are ever to guide product policy decisions. In relation to validity also, it would be useful to undertake extensive research to validate MDS maps on the lines of the work done by Sharma and James (1979). These authors suggest the comparison of MDS results such as the one in this study with results from other groups of respondents who are first asked to specify the two dimensions they consider most important and then asked to plot the five stimuli objects on these two dimensions.

A further area that merits consideration in use of MDS for product positioning decisions is the relationship of the stage in a product's life cycle to the position

of a brand in an attribute (performance) space of given dimensionality. Since different brands are likely to be in different stages of their life cycle an MDS study of existing brands should take this factor into account.

Finally, the question of affect versus cognition raised earlier should be carefully researched. Promotional messages may be successful in bringing about cognitive changes which may even manifest themselves in similarity judgments but this may be insufficient reason to believe that a change in affect of preferences will result. In our study the Price attractiveness of King Cola is clearly perceived by the respondents but this has not, at least yet, led to a change in affect (preference).

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A TEST OF INDUCEMENTS FOR STIMULATING CONSUMER PARTICIPATION IN LABORATORY EXPERIMENTS

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Abstract

An experiment was undertaken to evaluate the cost of obtaining and the representativeness of consumer subjects for a laboratory experiment. Results indicate that a representative subject group can be obtained through the use of particular inducements at a cost lower than that for purchasing subjects from a research firm.

Introduction

Subjects for laboratory experiments can be legitimately obtained from several sources. In many cases, a convenience sample is appropriate. If exploratory research is being conducted, then a sample of students or other easily obtained subject groups can provide the insights or ideas that embody the purpose of exploratory research. When the research purpose is somewhat more specific, then judgment samples can be used. The application and appropriateness of nonprobability samples, however, is narrowly defined and must be employed judiciously.

In general, the relevance and representativeness of the sample are the key variables in the sampling procedure. A reasonable statement of the factors can be found in an editorial comment highlighting their importance. (Ferber, 1977) When nonprobability samples are not appropriate, the task of obtaining an adequate subject pool can be difficult. Especially in cases where the research effort dictates that a diverse and representative consumer subject group is needed, the task of obtaining subjects leaves the researcher with few options.

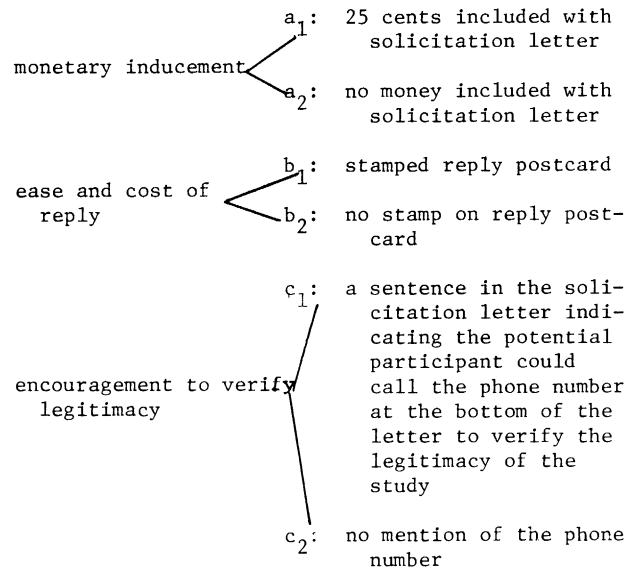
The problems associated with obtaining consumer subjects for laboratory studies are understandable. Participation in a laboratory study is unique for most consumers and is likely to require considerable time and effort on their part. Offering consumers some incentive for participation to compensate them for their time and effort would logically constitute a basis for stimulating participation.

The study reported here offers some evidence to suggest that certain incentives (both monetary and non-monetary) and assurances to would-be participants can aid in the acquisition of a relevant and representative group of consumers as participants for a laboratory study. The techniques used to obtain a consumer subject pool plus insights gained during the solicitation process suggest the possibility of obtaining a relevant and low cost subject group through solicitation.

Method

The solicitation of a sample of consumers to participate in a research study was undertaken in an effort to obtain participants for a study to test consumer responses to a variety of advertising messages. The study required a subject pool of approximately 160 adults. The solicitation procedure itself was experimental and three inducements were manipulated to identify their effects on stimulating participation in the experiment.

The inducements manipulated were:¹



A one page letter of solicitation including one "level" of each of the independent variables was mailed to a random sample (generated from the telephone directory) of 680 residents of a large midwestern city. The letter stated simply that the recipients were being asked to participate in an advertising study at the local university. The letter indicated that participation would require coming to the university and spending about one hour to take part in the study. The letter also indicated that after returning the enclosed reply postcard (Figure A) indicating their interest in participating, they would be contacted by telephone to schedule a time and date to attend. All recipients of the solicitation letter were promised two dollars in compensation if they participated in the study.

Since the advertising study was to be conducted on four separate evenings, people returning the postcard and indicating a willingness to participate were assigned to experimental groups and informed as to the time and place that their group would meet. (Every attempt was made to randomly assign participants to experimental groups but preferences for certain evenings had to be accommodated in some instances to obtain participation).

Results

Effect of Inducements

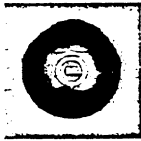
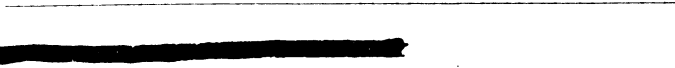
Figure B displays the experimental design and ultimate participation rates resulting from the use of each

¹While these factors were manipulated, one factor that has evidenced an increased mail survey response rate (university sponsorship of the study, Brunner and Carrol 1969) was held constant across experimental groups. This technique was employed to provide some assurance that an adequate number of respondents would be obtained for the advertising study.

combination of inducements. Overall, the average response rate across all experimental conditions was 8.3%. However, as was expected, there was a large difference in response rate depending upon the exact set of inducements used to solicit the subjects ranging from a high of 16.2% to a low of 3.6%.

To judge the effect each of the inducements had, analysis of variance was performed on the response rates realized. **Table 1** reports these ANOVA results.

FIGURE A



MARKETING DEPARTMENT
 1775 S. COLLEGE ROAD, BOX 2002

Dear [redacted]

- Yes, I (we) will participate in your Advertising Study. Below is my name, address, and phone number so we can set up a date and time.
- No, I (we) will not participate in your Advertising Study.

Name _____

Address _____

Phone _____

The ease and cost of reply and encouraging the potential participants to verify the legitimacy of the study had a significant ($p < .05$) effect on the degree of participation.² Further, the interaction of these two inducements also had a significant ($p < .10$) effect.

Figure C displays the nature of the interaction effect.

²It should be noted that while half the letters of solicitation ($n=320$) urged verification of the study, very few phone calls were actually received. It would appear, therefore, the factor would not produce undue time investment by the researcher or his/her staff if implemented.

TABLE 1

ANOVA Results of the Effect of Various Inducement on Participation^a

	Source	SS	DF	MS	F
(25¢ inducement)	A	2.0	1	2.0	.2
(Stamped reply postcard)	B	57.24	1	57.24	5.90**
(Mention of phone number)	C	70.80	1	70.80	7.29**
	AB	.04	1	.04	.004
	AC	.12	1	.12	.012
	BC	42.32	1	42.32	4.36*
	ABC	9.7	1	9.7	

** $p < .05$
 * $p < .10$

^aSince response rates served as input data to the ANOVA procedure, the resultant cell size was $n=1$. Under these conditions the highest order interaction is used as an estimate of experimental error rather than the within cell error term (see Kirk, 1968, p.227).

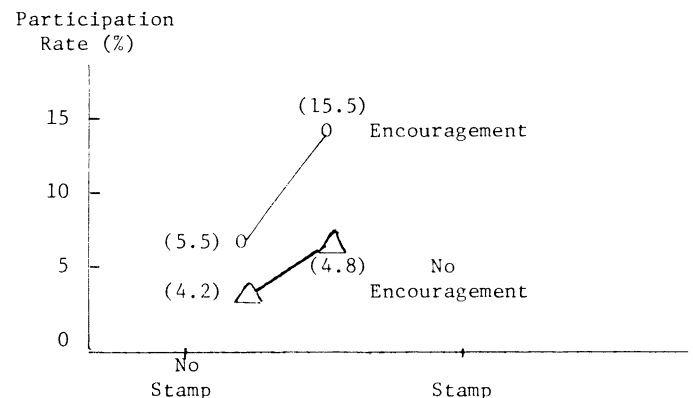
FIGURE B

Experimental Design and Response Rates

Experimental factors	Ease and Cost of Reply				
	Stamped Card		Unstamped Card		
	b_1	b_1	b_2	b_2	
Encouraging/not encouraging verification	c_1	c_2	c_1	c_2	
25¢/no money inducement	a_1	14.8%	6.2%	7.5%	3.7%
	a_2	16.2%	3.7%	3.6%	4.7%

FIGURE C

Interaction Effect of East and Cost of Reply and Encouragement to Verify on Participation Rate



Cost

The identification of inducements that can significantly increase participation in laboratory experiments is informative, but of further relevance is the cost of obtaining these subjects through solicitation and representativeness of the consumer group. With regard to cost per subject obtained, **Table 2** provides information. Depending upon the inducements employed, the results

TABLE 2

Number of Subjects Obtained and Cost
per Subject for Each Experimental Condition

Group	Solicitation letters delivered ^a	Subjects obtained	Lab payment	supplies ^b	Total cost	Cost per subject
1. a ₁ b ₁ c ₁	81	12 (14.8%)	\$24.00	\$47.95	\$71.95	\$ 5.99
2. a ₁ b ₁ c ₂	80	5 (6.2%)	10.00	47.70	57.10	11.54
3. a ₁ b ₂ c ₁	79	6 (7.5%)	12.00	40.55	52.55	8.75
4. a ₁ b ₂ c ₂	80	3 (3.7%)	6.00	40.80	46.50	15.50
5. a ₂ b ₁ c ₁	80	13 (16.2%)	26.00	27.45	51.45	3.95
6. a ₂ b ₁ c ₂	79	5 (3.7%)	10.00	27.45	37.50	7.50
7. a ₂ b ₂ c ₁	83	6 (3.6%)	12.00	19.80	31.80	5.30
8. a ₂ b ₂ c ₂	84	4 (4.7%)	8.00	19.80	7.80	6.95
Total/average	646	54 (8.3%)	\$108.00	\$271.50	\$379.25	\$ 7.02

^aOriginal mailing was 85 per group.

^bCalculated on the basis of costs for envelopes, postcards, postage, reproduction costs, and the 25c inducement where applicable.

indicate that subjects were obtained for as little as \$3.95 per subject (including \$2.00/subject payment for participation) for Group 5 (no 25c inducement, stamped reply postcard, and encouraging the participant to verify the study) to a high cost of \$15.50 per subject for Group 4 (25c inducement, no stamp on the reply postcard, and no encouragement to verify). Several of the experimental conditions generated subjects at a cost much lower than the \$9.50/subject required to purchase subjects from a commercial marketing research firm. In fact, when a cost comparison of purchasing the entire subject sample is made using the Group 5 solicitation technique, the resultant cost savings is \$888.00³. On this basis, it can be argued that a laboratory sample can be obtained through solicitation and it can be obtained at a much lower cost than purchasing subjects through a commercial research firm.

Representativeness

Further grounds upon which to judge a solicitation procedure is the representativeness of the sample obtained. The solicited sample was compared on demographic factors to (1) subjects for the same study purchased from a marketing research firm, (2) a sample of mail questionnaire respondents who were surveyed with the same data collection instrument, (3) and Census Bureau information describing the population from which the sample was solicited. Table 3 displays the comparison between the solicited laboratory subjects and the other groups.

The comparisons from Table 3 warrant some discussion. It can be seen that on the age and income factors the solicited laboratory sample and the other groups show minor differences. Education is the characteristic upon which the solicited sample appears to be most biased. Compared to all the other groups the random

³The difference in cost is calculated as follows:
160 subjects at \$9.50/subject = \$1520.00
160 subjects at \$3.95/subject = \$ 732.00
difference in cost = \$ 888.00

lab sample is much more highly educated with 53% of the sample having a college degree. It should be noted that all the samples are biased relative to census information.⁴

The solicited laboratory sample matches census information exactly for the sex variable for which both the purchased lab sample and the mail survey sample are divergent. The purchased lab sample may have been biased due to the fact that the research firm solicited the subjects for the study from convenience groups (a factor to be discussed later). Many of the convenience groups used were womens' organizations. The bias in the mail survey sample was likely due to the fact that the telephone directory was used to generate the sampling mailing list.⁵ Since family phones are generally listed in the male member's name this would appear to explain the dominance of male respondents.

The marital status variable shows general bias. The solicited lab sample comes reasonably close to matching census information as does the purchased lab sample. The mail survey group is the least representative in this case.

Finally the solicitation procedure produced an unrepresentative number of white subjects. While 10.5% of the parent population was black, only 4.1% of the solicited lab sample was black. The purchased subjects sample is even more dramatically biased in this regard, with 100% of the sample received being white.

⁴The census information may, however, be biased downward on the education statistic since census data is provided for adults 25 years old and over, (thus leaving out college graduates 20-24).

⁵An interesting consideration here is that this is the same procedure that was used to generate a mailing list for solicitation. However, as Tables 3 and 4 demonstrate, bias in evidence in the mail survey did not occur in the demographics of the solicited subjects.

TABLE 3

Comparison of Randomly Solicited Laboratory Subjects and Other Groups

	Random Laboratory n=54 Sample	Purchased Laboratory n=118 Sample	Mail Survey n=98 Sample	Census
Age	40.2	43.6	41.6 yrs	40-44 yrs ^a
Income	\$12,501-15,000	\$12,501-15,000	\$12,501-15,000	\$14,760 ^b
Education				
grade school graduate or less	0.0%	.9%	0.0%	19.09% ^c
some high school	4.1	3.7	4.1	20.22
high school graduate	20.4	22.2	18.4	35.53
some college	22.4	50.0	26.5	11.17
college graduate	30.6	17.6	20.4	7.54
some post graduate	12.2	4.6	14.3	6.42
graduate degree	10.2	.9	16.3	
Sex				
Male	46.9%	21.3%	75.5%	46.9% ^a
Female	53.1	78.7	24.5	53.1
Marital Status				
Married	69.4%	55.6%	75.3%	61.8% ^d
Single	30.6%	44.4%	24.7%	38.2%
Race				
Black	4.1%	0.0%	8.0%	10.5% ^e
Oriental	0.0%	0.0%	1.0%	.15%
White	95.5%	100.0%	93.9%	86.3%

^aUS Census, (1970) Table 24.

^bUS Census, (1970) Table 206, 1969 income figure of 10,439 - extrapolated to a 1976 estimate using an income change figure of 41.4% for the years 1969-1976 obtained from U.S. Department of Commerce, Bureau of Economic Analysis (1973, 1977).

^cUS Census, (1970) Table 83, adults, 25 years and older.

^dUS Census, (1970) Table 26, for population 14 years and over.

^eUS Census, (1970) Table 23, figures do not add to 100% since other ethnic groups were represented in the census but not in the sample groups.

TABLE 4

Chi Square Goodness of Fit Analysis Between Sample Groups and Census Data^a

	Solicited Laboratory Sample	Purchased (Convenient) Laboratory Sample	Mail Survey Sample	Degrees of Freedom
Age ^c	$X^2=3.81$	$X^2=9.58^*$	$X^2=2.54$	4
Education ^d	$X^2=104.71^{**}$	$X^2=188.74^{**}$	$X^2=167.84^{**}$	3
Sex	$X^2=0.00$	$X^2=32.63^{**}$	$X^2=32.02^{**}$	1
Marital Status	$X^2=1.27$	$X^2=1.75$	$X^2=8.50^{**}$	1
Race	$X^2=1.68$	$X^2=N/A^b$	$X^2=.7$	5

**p < .005
*p < .05

^aThe categories of income could not be statistically analyzed due to a lack of comparability between the Census class (\$1000.00 increments) and the data collection instrument used for the study (\$1500.00 increments).

^bChi square analysis could not be performed in this instance because the categories for this group did not meet minimum cell size requirements (n=5).

^cThe age categories used in the X^2 procedure for all groups were 20-29 years old, 30-39 years old, 40-49 years old, 50-59 years old, and 60 years old and over.

^dThe education categories used to establish comparability between the groups and Census data were high school graduates and less, some college, college graduates and some post-graduate work.

In addition to mean scores and percentages as a basis for judging the representativeness of the solicited laboratory sample, Chi square analysis between the various sample groups and the Census data was undertaken. Table 4 reports the results of this analysis. Only the education variable for the random laboratory sample is significantly different ($p < .01$) from Census information. Both the purchased laboratory group (in essence a convenience sample) and the mail survey group exhibited significant differences from the Census data on several demographic variables.⁶

A final consideration is the relevance of the sample obtained through the solicitation process. The product portrayed in the advertisements used in the experiment

⁶A few comments regarding the representativeness of the purchased subject pool is necessary at this point. First, despite efforts at specification of demographics by the researcher, the purchased group was extremely unrepresentative on three demographic variables (Sex, marital status, and race). Second, it became obvious during the advertising study that the research firm from which the subjects were purchased, had merely obtained subjects from various voluntary organizations thereby generating a "purchased" convenience sample.

was a frequently purchased, personal care product. The product is used by both males and females and is a low cost item. The product category and the nature of the experiment dictated that the sample should be a cross-section of consumers. That is, consumers from all age categories, both male and female, married and single constituted a relevant group to study. The solicitation procedure did, in fact, result in a sample whereby a relevant group was obtained.

U.S. Department of Commerce, Bureau of Economic Analysis, Survey of Current Business, (1973), Volume 53, Number 8, page 39.

U.S. Department of Commerce, Bureau of Economic Analysis, Survey of Current Business, (1977), Volume 56, Number 8, page 17.

Discussion

At this point, several overall observations can be made regarding the attempt to solicit participants for a laboratory study. Perhaps the first question to be addressed is, can consumers actually be motivated to participate in a laboratory study? The current study would seem to indicate that the use of inducements to stimulate participation is possible.

Since these subjects can be obtained through solicitation, the cost of doing so must be carefully considered. Results presented here suggest that the total of all clerical, mailing, and payment costs for subjects obtained through a solicitation procedure will be considerably less than the cost of obtaining subjects from a commercial research firm. With the variation of inducements in this experiment, only two of the treatment conditions resulted in cost/subject exceeding the \$9.50 charge per subject of the commercial research firm.

Finally, and of overriding importance, is the relevance and representativeness of the subjects obtained through solicitation. Intuitively it would seem that consumers who were willing to inconvenience themselves to participate in a laboratory experiment would be unique. A comparison of the subjects obtained through solicitation match Census Bureau data quite closely for the age, income, and sex demographics. Education and race were not represented accurately by the sample. However, it is worth pointing out that the solicited laboratory sample obtained was relevant for the mass consumed, frequently purchased product that was the subject of the advertising study.

While this study does not suggest an ideal or anything resembling a "how-to" approach to soliciting a consumer sample for laboratory experiments, it does provide empirical evidence to suggest that a low cost, representative subject sample can be obtained for laboratory purposes using solicitation. Hopefully, other researchers contemplating the use of the laboratory setting will make attempts at solicitation to further reduce our dependence on convenience samples for use in the laboratory.

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THE EFFECTS OF DIRECT AND INDIRECT SEMANTIC CUES ON CONSUMER PRICE PERCEPTIONS:
SOME PRELIMINARY EVIDENCE

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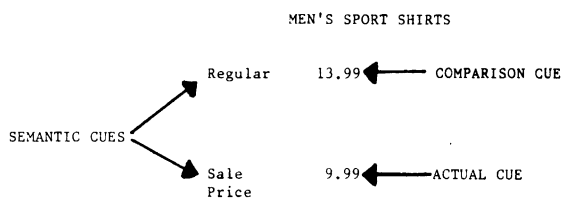
Abstract

The manner in which price information is utilized by consumers is not well understood. This paper presents a descriptive model of the consumer price perception process with special attention paid to various types of semantic cues. Effects of these cues on price-related responses were hypothesized for two different types of products. Experimental results indicated different price-related response patterns for each product.

Price Perception Process

Recent work by Jacoby and Olson (1977) and Berkowitz and Walton (1980) suggest that consumer price perceptions may be modelled in stimulus, organismic, and response variable terms. Stimulus variables include the actual offered price and other relevant input variables. The relevance of various input variables depends upon the situation in which the offered price is exposed to the consumer. If the offered price is presented within an advertisement or catalogue, other relevant input variables would include comparison cues and semantic cues (Berkowitz and Walton, 1980). A comparison cue is provided when an explicit comparison price is paired with the actual price in the advertisement. Semantic cues are words or phrases paired with either or both of these cues. The semantic cues give additional meaning to the actual and/or comparison cues. Figure 1 gives examples of each type of cue.

FIGURE 1
EXAMPLE OF AN ADVERTISEMENT WITH ACTUAL, COMPARISON, AND SEMANTIC CUES



If exposure occurs within a retail store environment, comparison and semantic cues may be augmented by a variety of other input variables. These other variables may include verbal comments from store personnel, location within the store (e.g., displays), and special events (e.g., inventory closeouts).

Organismic variables include the consumer's acquisition, encoding, storage, and retrieval of price information (Jacoby and Olson, 1977). The encoding process is especially important to an individual's price perception. At this stage, the consumer synthesizes, interprets, and evaluates the various stimulus cues. Price researchers have assumed that this evaluation takes place on a number of price-related, cognitive dimensions. Cognitive dimensions investigated in the literature include perceived worth, value for the money, perceived savings, and price acceptability. The literature sources for these dimensions and the bipolar adjectives

used to operationalize them are shown in Figure 2.

FIGURE 2
PRICE-RELATED COGNITIVE DIMENSIONS

DIMENSION	SOURCE	OPERATIONALIZATION
1. PERCEIVED WORTH	SZYBILLO AND JACOBY, 1974	BAD BUY FOR THE MONEY/ EXCELLENT BUY FOR THE MONEY
2. PRICE ACCEPTABILITY	GABOR AND CRANGER, 1969	EXTREMELY UNFAIR PRICE/ EXTREMELY FAIR PRICE
3. VALUE FOR THE MONEY	BARNES, 1974	NOT A GOOD VALUE FOR THE MONEY/ EXTREMELY GOOD VALUE FOR THE MONEY
4. PERCEIVED SAVINGS	BERKOWITZ AND WALTON, 1980	NO SAVINGS AT ALL/ EXTREMELY LARGE SAVINGS

Response variables encompass a variety of overt consumer behaviors. Before these responses occur, it is probable that these price-related variables are retrieved and synthesized with other relevant nonprice cognitions. This research effort ignores these consequent responses and focuses on the relationship between particular semantic cues and price-related cognitive variables.

Semantic Cues and Price Perception

The impact of semantic cues has been investigated by (a) comparing situations in which semantic cues were either present or absent and (2) comparing the relative effects of different types of semantic cues. Three experimental studies compared treatments in which subjects were either presented or not presented with semantic cues (Nystrom, Tamsons, and Thams, 1974; Blair and Landon, 1980; Della Bitta, Monroe, and McGinnis, 1981). In each study, a greater perception of savings was observed when semantic cues were presented.

Other studies have compared different types of semantic cues (Barnes, 1974; Keiser and Krum, 1976; Berkowitz and Walton, 1980). These studies consistently demonstrated consumer response differences to different types of semantic cues.

Unfortunately, this body of research data is not sufficient to allow generalizations beyond the products and specific cues investigated. Clearly, more baseline data of this type are required. Further, these studies have focused their efforts on semantic cues that are paired directly with comparison or actual cues. The cues shown in Figure 1 are a good example. Other types of semantic cues may be only indirectly related to the comparison or actual cues. Widely used retail examples are: (1) time limits for the duration of the sale, (2) quantity limitations, (3) merchandise availability limited to particular stores, (4) required purchase of other items, (5) merchandise return restrictions, and (6) service restrictions. These types of cues may limit the consumer's freedom of action in response to the price cues. As such, reactance theory would predict consumer response differences when these indirect cues were present or absent (Clee and Wicklund, 1980).

Research Hypotheses

The purpose of this study was to provide additional baseline data in regard to the effects of direct semantic cues and to assess the impact of indirect semantic cues on consumer price-related responses.

Specific hypotheses tested were:

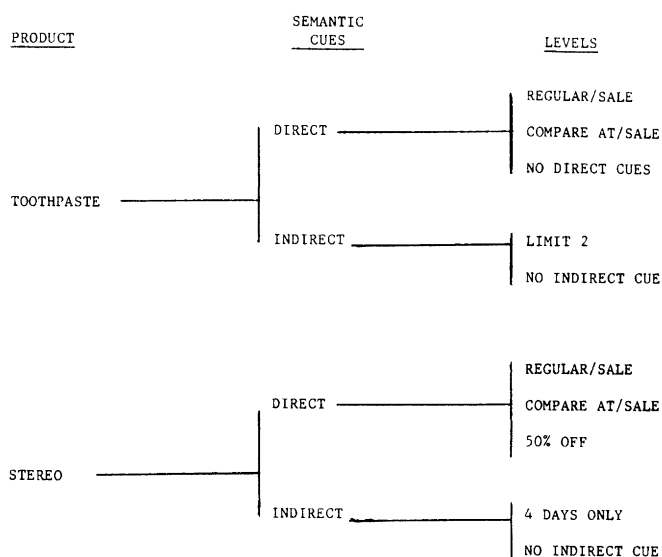
- H1: Direct semantic cues used in retail price advertisements will differentially affect consumers' price-related responses.
- H2: The presence or absence of indirect semantic cues used in retail price advertisements will differentially affect consumers' price-related responses.
- H3: The interaction of direct and indirect semantic cues used in retail price advertisements will differentially affect consumers' price-related responses.

Methodology

Subjects were 199 undergraduate students enrolled in an introductory marketing course at a large midwestern university. An analysis of advertisements from the university newspaper resulted in the preliminary selection of ten advertisements for convenience or shopping products. Advertisements for familiar brands of toothpaste (convenience product) and stereo equipment (shopping product) were finally chosen for the study.

The independent variables consisted of direct and indirect semantic cues. The levels of each of these variables differed depending upon the product. These levels for each product are shown in [Figure 3](#).

FIGURE 3
LEVELS OF THE INDEPENDENT VARIABLES



A 2 x 3 factorial design of these independent variables resulted in 6 treatment conditions for each product. Advertisements were constructed to represent each condition. Subjects were assigned randomly to one of these treatment conditions. They were informed on a cover page of instructions that they would be evaluating two advertisements taken from the student newspaper. The first advertisement presented to every subject was for a motorized bicycle. This advertisement contained an actual price cue, but no semantic or comparison cues. Subjects were instructed to read the advertisement and then evaluate it on the response scales on the following

page. This advertisement was included to familiarize everyone with the nature of the task and the response scales. The second advertisement was the test advertisement. As before, subjects read the advertisement and evaluated it on the same set of response scales. One hundred subjects received a stereo advertisement, while ninety-nine received a toothpaste advertisement.

The response scales included the four variables shown in [Figure 2](#). Further, subjects were asked to indicate the exact monetary amount that they thought they would save if they bought the product at the stated price. These five variables constituted the dependent variables in the study. Univariate two-way analysis of variance was used to test the research hypotheses.

Results

[Tables 1](#) through [4](#) summarize the analyses of variance and the dependent variable means for the two product advertisements. In regard to the direct cues (i.e., words), significant main effects were observed for both advertisements. For the toothpaste advertisement, perceived savings and actual savings differed significantly across the treatments. Specifically, the "regular/sale" cue was perceived as the largest savings, while the "no words" cue was perceived as the smallest savings. The "compare at/sale" cue was evaluated in-between these extremes.

The actual savings results were consistent with these perceived savings responses, but much more extreme. In this regard, note in [Table 3](#) the small actual savings attributed to the "no words" condition as compared to the other conditions.

For the stereo advertisement, only value for the money differed across treatments. For this advertisement, the "compare at/sale" condition was perceived as the best value for the money, followed by "regular/sale" and "50% off". The magnitude of these differences is shown in [Table 4](#). While these direct cue results are not consistent for both advertisements, some price-related response differences are apparent. Therefore, Hypothesis 1 is partially supported.

Regarding the indirect semantic cues, the presence of the "4 days only" time limit in the stereo advertisement significantly increased the perception of actual savings. As shown in [Table 4](#), the magnitude of the savings difference was substantial. The presence or absence of the quantity limit in the toothpaste advertisement had no effect on subject price perceptions. Hypothesis 2, therefore, only received weak support.

Finally, no significant interaction effects between the direct and indirect semantic cues were observed. Given these findings, Hypothesis 3 must be rejected.

Discussion

Given the subject sample and the limited range of products used in the study, these results should not be considered conclusive. However, these results do support the potential importance of direct and indirect semantic cues in the perception of retail price advertising.

In this regard, the results of the study are similar to previous studies that have investigated the effects of these cues. Specific points of similarity include the following. First, the presence of semantic cues has a more positive effect on consumer price perceptions than when no cues are present. Second, different response

TABLE 1
A SUMMARY OF TOOTHPASTE ANALYSES OF VARIANCE

ANOVA EFFECTS	BY FOR THE MONEY	FAIR PRICE	PERCEIVED SAVINGS	VALUE FOR MONEY	ACTUAL SAVINGS
WORDS	2.00	.30	7.43**	1.50	35.15**
QUANTITY LIMIT	.38	.26	1.49	1.22	.02
WORDS X QUANTITY LIMIT	.60	.77	.82	.59	.69

Note: Table entries represent the F-value for the indicated effect.
** p < .01

TABLE 2
A SUMMARY OF STEREO ANALYSES OF VARIANCE

ANOVA EFFECTS	BY FOR THE MONEY	FAIR PRICE	PERCEIVED SAVINGS	VALUE FOR MONEY	ACTUAL SAVINGS
WORDS	1.49	1.49	.43	3.67*	1.08
TIME LIMIT	.01	.59	.08	.58	9.64**
WORDS X TIME LIMIT	.81	.61	.24	1.03	1.30

Note: Table entries represent the F-value for the indicated effect.
* .05 ≤ p ≤ .01
** p > .01

TABLE 3
DEPENDENT VARIABLE MEANS FOR
THE TOOTHPASTE ADVERTISEMENT

TREATMENT LEVELS	BUY FOR THE MONEY	FAIR PRICE	PERCEIVED SAVINGS	VALUE FOR MONEY	ACTUAL ¹ SAVINGS
WORDS					
REGULAR/SALE	5.54	5.57	5.51	5.49	.72
COMPARE AT/SALE	5.12	5.51	4.74	5.03	.67
NO WORDS	5.00	5.52	4.23	5.16	.28
QUANTITY LIMIT					
LIMIT 2	5.30	5.52	5.00	5.36	.56
NO LIMIT	5.16	5.42	4.70	5.10	.58

¹ Actual savings means are in cents. Means for the remaining dependent variables should be interpreted in terms of a seven-point semantic differential scale.

TABLE 4
DEPENDENT VARIABLE MEANS
FOR THE STEREO ADVERTISEMENT

TREATMENT LEVELS	BUY FOR THE MONEY	FAIR PRICE	PERCEIVED SAVINGS	VALUE FOR MONEY	ACTUAL ¹ SAVINGS
WORDS					
REGULAR/SALE	5.23	5.32	4.80	5.17	72.89
COMPARE AT/SALE	5.54	5.50	5.10	5.40	78.64
50% OFF	5.11	5.09	4.94	4.72	83.74
TIME LIMIT					
4 DAYS ONLY	5.28	5.37	4.89	4.98	90.69
NO LIMIT	5.28	5.23	4.98	5.16	69.15

¹Actual savings means are in dollars and cents. Means for the remaining dependent variables should be interpreted in terms of a seven-point semantic differential scale.

patterns were observed for the two products. While this suggests that responses to price advertising may be product dependent, the nature of this relationship is unknown. Finally, significant differences were noted on some price-related dimensions (value for the money and savings), but not others (price acceptability and buy for the money). It may be that retail price evaluations can be adequately described on a parsimonious set of response dimensions. If so, value for the money and perceived and actual savings would be good candidates.

In addition to supporting previous efforts, this study went beyond existing work to identify and assess the effects of indirect semantic cues. The results indicated that for certain products these effects may be substantial.

A growing body of literature supports the contention that various types of semantic cues may influence consumer price perceptions in significant ways. Clearly, more research in this area is both warranted and needed.

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EFFECTS OF OUTSIDE DIRECTORS ON CORPORATE REGULATORY COMPLIANCE DECISIONS

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Abstract

This is a descriptive study to determine what impact outside directors have on a firm's regulatory compliance decisions and on its awareness of social responsibility. Three hypotheses are examined, and the results indicate that none of the three are established. The principal finding is that regulatory compliance decisions rarely come before boards of directors and that when they do, outside directors exert little influence.

Introduction and Statement of the Problem

Demands for reforming the corporate governance structure and process have come from all points on the ideological spectrum. Specific proposals range from many representatives of designated interest groups on corporate boards to mandating public reporting of business functions which involve social responsibility.

The fundamental source of demands for changing corporate governance is dissatisfaction with the power relationships among the board of directors, managers, stockholders, state governments as chartering authorities, and constituents of corporations. The central function of the corporate governance system is to provide legitimacy for the exercise of corporate power to people in positions of corporate authority. Additionally, management has a legal fiduciary responsibility to shareholders and a responsibility to address the interests of society.

Complainants maintain that the governance system is accountable neither to shareholders, nor society. They assert that society's interests are not being met adequately and that the way in which businesses are governed allows abuses that should be more rigorously controlled by government (Vogel, 1978). Ralph Nader and co-authors in Taming the Giant Corporation (1976a) aver that large corporations have harmful market and nonmarket impacts, that the government of large corporations resembles an autocracy more than a democracy, that boards do not do the job they are supposed to do in running corporations that there is too much secrecy in decision-making, that the system permits payoffs and crimes, that companies violate the rights of employees, that officers are not accountable for their individual actions, that corporations exercise disproportionate political influence, and that corporate ability to control the market leads to unfair marketing practices destructive to the consumer interest. These criticisms have been the basis for urging the change in the governance structure and processes of corporations.

Most observers, even friendly ones, worry that corporate boards are too dominated by management (Jacoby, 1973). It is thought that management (especially when the board chairman is also the chief executive officer) and a number of inside directors largely determine company policies and procedures. This tendency of chief executive

officers and other inside directors to dominate corporate boards has led to the view that boards of directors should be restructured.

Specific suggestions have ranged from reformulating corporate boards to include large numbers of representatives of designated interest groups to mandating public reporting of various business activities vested with social responsibility.

Ralph Nader has developed the most ambitious and far-reaching proposals to restructure the American corporation (Weidenbaum, 1979). He proposes the assumption by the federal government of the chartering power now held by the states, broadening disclosure requirements of the Securities and Exchange Commission to cover the entire impact of a corporation on society, and requiring all corporations beyond a certain size to have at least one-fourth of their directors chosen in national elections.

Somewhat more modest proposals have come from Harold Williams, former chairman of the Securities and Exchange Commission and former Dean of the Graduate School of Management at the University of California at Los Angeles (Williams, 1978). He contends that the ideal board of directors would have only one corporate officer, the chief executive. All others would be chosen from outside the company. Williams' definition of outside directors includes bankers, lawyers, or anyone else having business dealings with the company, but, unlike Nader, Williams would not give directorships to representatives of special interest groups because it would make the board a political body.

A third set of suggestions was presented by a group of business, academic, and professional leaders convened by the American Assembly in April, 1978. The Assembly focused on the corporate board as having the major role in interpreting society's expectations and standards for management. It urged that the majority of corporate board members should come from outside the company management and be unconstrained by relationships which limit the members' independence. (American Assembly, 1978).

The three ideas for restructuring American corporations share the implied notion that corporations should be accountable to the public and that a heightened awareness of social responsibility will result from the recomposition of corporate boards to include outside directors who will reflect society's concerns.

Purpose and Scope

Curiosity about the impact which outside directors have on corporate awareness of social responsibility, or, whether the thrust of the proposals being made to change corporate governance would have their intended effect led this author to examine the hypothesis that the presence of outside directors on corporate boards of directors would intensify

awareness of social responsibility, and that this would be reflected in the role that outside directors would play in regulatory compliance decisions.

In a previous paper written by the author (Baron and Baron, 1980), it was established that perceptions of the business and marketing environment were an important element in regulatory compliance decisions. Since the board of directors is an important factor in the business environment, it was assumed that, were the hypotheses underlying the restructuring proposals to be true, that truth would be established, in part, by examining the role of outside directors in compliance decisions as viewed from the perspective of management.

Further, the research also sought to determine whether the impact of outside directors would vary by company size, industry type, and the nature of the regulatory environment. Outside directors were classified as: corporate outside, non-corporate outside, and other. The impact of each of the three types of directors was examined.

The study was limited to unregulated companies. It was assumed that regulated companies do not have alternatives to weigh when faced with regulations, because they must comply as a condition of maintaining government good will. Additionally, the study was concerned only with publicly owned corporations. Accordingly, the findings in the study relate only to companies listed on the New York Stock Exchange.

Methodology

The Sample

The population from which the sample was drawn was the 500 largest companies in the United States ranked by asset size in Fortune. After excluding regulated companies, the population was stratified by quintile. Then, a probability sample of 20 companies was taken within each stratum, making a total sample size of 100 companies. This was sufficient to provide an acceptable sampling error and insure an inclusion of companies from all industry types. The sample was drawn systematically by starting with the first company in each quintile and selecting every fifth company. Attention was given to maintaining an equivalent number of companies in each industry category as defined by three digit Standard Industrial Classification codes. The sample was a stratified probability sample.

Questionnaire Design

The questionnaire consisted of eleven questions, and was pretested by telephone. The administration of the questionnaire was by mail. To determine whether managers perceived regulatory compliance as synonymous with social responsibility, the questionnaire asked separate questions about the effect of outside directors on regulatory compliance decisions, as well as the impact of outside directors on awareness of social responsibility. All questions except one were structured, direct questions. Because this study involved compliance with both statutory and administrative regulations, an unstructured question was used to obtain an expression of the differences in the compliance decision process between the two types (statutory and administrative).

The literature indicates that companies vary in terms of the frequency with which regulatory compliance decisions come before the Board of Directors, and therefore, a question was asked to determine such frequency. Further, companies were asked to indicate which regulatory agencies affect them and also the number of outside directors on their Boards.

To determine the relative importance of outside directors as compared with other factors established as important in the literature (Baron and Baron, 1980), companies were instructed to indicate on a semantic differential scale the importance of several factors in their compliance decisions. These were: availability of technology, cost of using technology, other perceived costs of compliance, benefits of compliance, consequences of non-compliance, presence of outside directors on the board, nature of the business environment, and other (market structure).

Analysis

Because quantitative measures of regulatory compliance and social responsibility have not yet been developed, regression analysis could not be performed. Obviously this would be desirable, but will have to await better definition of regulatory compliance and social responsibility and the development of quantitative measures. Accordingly, the analysis in this study was limited to cross-tabulation and inference.

The analysis examined these hypotheses:

- H₁: That the presence of outside directors on corporate Boards have significant impact on regulatory compliance decisions.
- H₂: That corporations view regulatory compliance as synonymous with social responsibility.
- H₃: That the impact of outside directors varies with number, type and nature of the regulatory decisions confronted by the corporation.

Further, to determine whether outside directors are perceived to have an influence on heightening awareness of social responsibility, but not on regulatory compliance, a separate question was asked relating to that issue.

The data were tabulated and analyzed by the Statistical Package for the Social Sciences computer program.

Discussion of Results

Of the 100 companies surveyed in this study, none were regulated corporations. Again, the assumption was that only unregulated companies would have alternatives to regulatory compliance and would have varied perceptions of the relationship between regulatory compliance and social responsibility.

Responses were received from 65 companies, which represented all five asset quintiles and all industry classifications. Accordingly, it is probably reasonable to assume that the nonrespondents' attitudes would vary similarly. Further, because of the sensitive nature of the information requested and the fact that regulatory compliance decision processes are considered to be confidential, the

response rate was judged to be very good.

Perhaps the most surprising result was that regulatory compliance decisions seldom come before Boards of Directors. In answer to the question: "How frequently do regulatory compliance decisions come before your company's Board?", only 17 percent of the respondents indicated frequently, and none, always. To the contrary, 66 percent said rarely, and 17 percent, never. The inference drawn was that the companies studied view compliance decisions as operating decisions, not strategic ones. This is further indicated by remarks from several companies that they comply as a matter of course.

Yet 56 percent of the respondents replied that when regulatory compliance decisions do come before the board, outside directors play an active role in the decision process with 22 percent indicating a passive role, and another 22 percent indicating that they don't know. Despite the rather large percentage indicating that outside directors play an active role in the decision process, 81 percent of the companies responded that the presence of outside directors on the Board has no effect on the probability of compliance. Only 15 percent indicated that it increased the probability. What this indicates is not clear, but it may mean that outside directors behave no differently from other directors in considering compliance alternatives. This would certainly show that simply requiring corporations to include outside directors on the board is not certain to increase a corporation's willingness to comply with regulations. Further, as will be explained later, the high degree of indifference does not vary by type, or by number of outside directors.

Corporate managements do not see regulatory compliance as a proxy for social responsibility. Among the companies studied, 49 percent believe that the presence of outside directors on the Board heightens sensitivity to social responsibility. Thirty-four percent think it does not, and 17 percent do not know. Apparently, companies see social responsibility as something different from regulatory compliance, but do not have social responsibility defined. Several companies said as much. Others indicated that it is good to have outside directors on the Board, but do not think compliance decisions are within the board's competence. Whether this means that managements perceive social responsibility as something which improves their public image is a matter that needs to be further explored.

When asked whether the compliance decision process is the same for both statutory and administrative regulations, 79 percent of the respondents said yes, 22 percent, no. This indicates that outside directors do not have any more impact on either type of regulatory decision.

Sixty-eight percent of the companies in the study indicated that outside directors have an active role in the company's operations. Only 22 percent said a passive role, and 10 percent don't know. If regulatory compliance decisions are operating decisions, then the operations in question are other than regulatory compliance decisions.

It was thought that the impact of outside directors might vary depending upon the regulatory agencies with which companies have most of their contacts. To establish whether this is true, companies were asked to indicate those agencies with which they

had 30 percent or more of their contacts. The results are:

Table I

<u>Regulatory Agency</u>	<u>Percent of Respondents</u>
Federal Trade Commission	51
Food and Drug Administration	24
Securities and Exchange Commission	44
Anti-trust Division of Justice Department	32
Consumer Product Safety Commission	42
Occupational Safety and Health Admin.	34

It is apparent that no one agency dominates. And cross tabulations showed no significant differences in outside directors' impact by type of agency.

To determine whether the significance of outside directors might vary by number of directors, companies were asked to indicate the percentage of the board made up of outside directors and whether the firm thought that outside director impact increased as their number increased. Eighty-three percent of the respondents indicated that outside directors made up 50 percent or more of their boards, and 12 percent indicated 40 to 49 percent of outside directors on their boards. Only five percent of the respondents had less than 40 percent outside directors on their boards.

A combined majority of the respondents indicated that outside director influence either did not increase as the number of outside directors increased or did not know whether it did. Thirty-one percent said the influence did not increase, and 24 percent said don't know. However, 45 percent responded that influence did increase with number. Because 95 percent of the companies studied have 40 percent or more outside directors on their boards and because 81 percent said that the presence of outside directors on the board does not increase the probability of compliance, it is inferred that impact and number are not related matters. Obviously, this remains a matter to be tested. But, again, it points up the difficulty involved in a lack of good quantitative measures for regulatory compliance and social responsibility. Further, as indicated in the following, the presence of outside directors on a board is the least important factor in the regulatory compliance decision.

To determine the perception of importance of outside directors relative to other factors considered by companies in making regulatory compliance decisions, companies were asked to indicate the relative importance of a number of factors. A semantic differential scale was used to establish the importance profile. The results are:

Table II

<u>Factor</u>	<u>Degree of Importance</u>			
	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>
Availability of technology	25.0%	14.3%	25.0%	35.7%
Cost of using technology	26.3%	14.0%	24.6%	35.1%
Other perceived costs of compliance	13.6%	32.2%	32.2%	22.0%
Benefits of compliance	17.2%	15.5%	25.9%	58.6%

Factor	Degree of Importance			
	1	2	3	4
Consequence of non-compliance	17.0%	12.3%	15.8%	64.9%
Presence of outside directors on the board	70.7%	10.3%	13.8%	5.2%
Nature of the business environment	36.2%	27.6%	20.7%	15.5%

Note: 1 = unimportant; 2 = slightly important;
3 = moderately important; 4 = very important

More than 80 percent of the respondents apparently consider the presence of outside directors on the board to be relatively unimportant in the regulatory compliance decision. Clearly, benefits of compliance and consequences of non-compliance as well as (to a lesser degree) availability of technology, cost of using technology, and other perceived costs of compliance appear to be overwhelmingly important. Cross tabulations by asset size and industry category reinforced these findings. Further, this finding clearly reinforces the results indicating that the presence of outside directors on the board makes no difference to the probability of compliance. It further supports the inference that compliance decisions are viewed as operational matters, not strategic and would explain why regulatory compliance decisions rarely come before boards of directors.

Conclusions

The study shows that none of the three hypotheses examined were proved. The presence of outside directors on boards of directors does not appear to have significant effect on regulatory compliance decisions either because these decisions rarely come before the boards, or because outside directors do not behave differently relative to these matters than other directors do. The author infers from this that simply restructuring boards of directors will not have the desired results.

Further, it seems that managements of the companies studied do not view regulatory compliance and social responsibility synonymously. It appears that social responsibility is perceived as distinct from regulatory compliance, but the distinctions are not clear.

Finally, the impact of outside directors does not vary with their number and type, nor, it would appear, with the nature of the regulatory decision to be made.

Further work needs to be done to develop a lucid definition of social responsibility, as well as quantitative measures of both regulatory compliance and social responsibility. Then regression analyses can be performed to establish the precise nature of the relationships involved.

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THE ENTROPIC CONSEQUENCES OF
MARKETING ACTIONS: A SYSTEMS VIEW

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Abstract

The concept of entropy -- which refers to the continual transition of systems from order to chaos -- is useful for understanding the social and ecological consequences of marketing actions. This paper develops a framework in which marketing actions can be interpreted as decreasing the entropy of certain subsystems at the cost of pervasive and global increase in entropy with potentially deleterious consequences for society and ecology.

The Emerging Entropy¹ Paradigm

Introduction

To its critics, marketing has been an activity that creates and inflates demand for trivially differentiated products, fosters built-in obsolescence, promotes individually or environmentally hazardous products, and so forth (e.g., Packard 1957). To its champions, contemporary marketing is the vehicle of prosperity and progress (e.g., Drucker 1958). Critics and champions alike however, would probably agree that marketing actions have impacts that transcend the immediate sphere of buying and selling (Levy and Zaltman 1975).

This paper explores the broader impacts of marketing using the notion of entropy -- a concept developed in thermodynamics but robust enough to deal with social systems.

The Laws of Thermodynamics

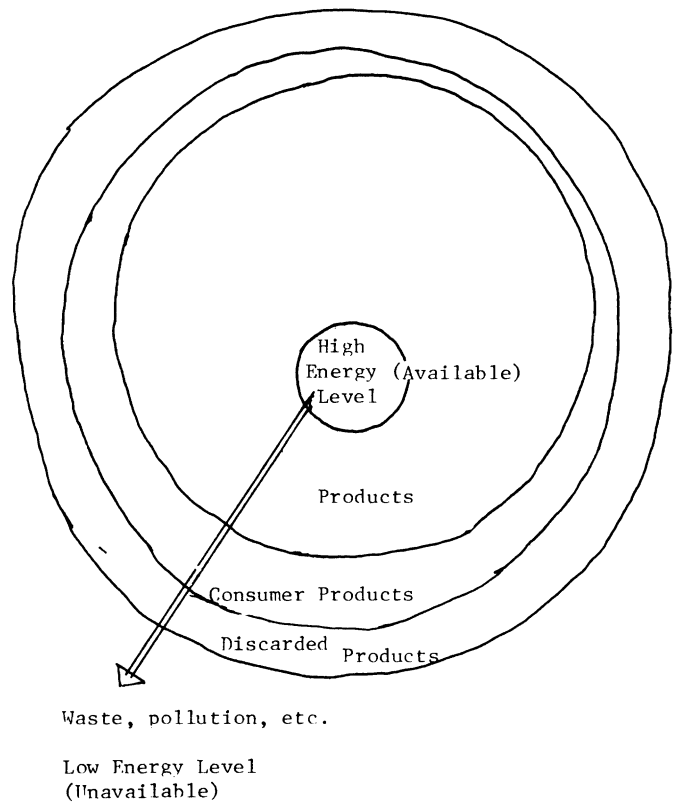
Thermodynamics is the branch of physics dealing with the conservation and transformation of energy. The first two laws of thermodynamics are quite simple: (1) "The total energy content of the universe is constant", and (2) "the total entropy is continually increasing" (Asimov 1970, p. 9). The first law merely reaffirms the fact of conservation of energy: it is impossible to create or destroy energy in an ultimate sense. This means that for activities that require energy -- such as production, marketing, and consumption of goods and services -- energy must be imported from outside. The second law of thermodynamics, dealing with the transformation of energy from one state to another, has great significance for all energy consuming activities such as marketing. The second law states that energy transformation is governed by the principle of ever-increasing entropy. Entropy is a measure of the amount of energy which cannot be converted into work, i.e. unavailable energy. The second law reflects the constant conversion of energy from the "available" or "free" energy states to "unavailable" or "bound" energy states. For example, the available energy in a gallon of gasoline gets converted into the work done by the engine (e.g., miles driven), plus the heat generated, plus the energy in the exhaust products. The energy still exists -- in the

form of ambient low-level heat and unburnt hydrocarbons -- but it is unusable. Entropy can also be viewed as the process whereby energy goes from a higher energy state to a lower one.

The Ecological Paradigm

Social scientists are gradually realizing the significance of the entropy law to examine and understand social phenomena. Viewed as a general social process, entropy represents a transition from higher to lower energy levels, from order to disorder, from structure to chaos, from value to waste (Rifkin 1981). **Figure 1**

FIGURE 1
Degradation of Available Energy
in the Process of Consumption



illustrates the general process of degradation embodied in the entropy law. This paper takes a generic view of entropy -- as a world view or a paradigm -- and uses it as a vehicle to explore the nature and consequences of marketing actions.

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As a phenomenon, "entropy" was first identified and labelled in 1850 by a German physicist, Rudolph J. E. Clausius, to describe dissipation of energy. The greater the dissipation of energy, the higher the corresponding entropy.

Marketing Actions as Negentropic Processes

What is Negative Entropy?

Globally, the entropy of the world system is constantly and irrevocably increasing, i.e., energy is becoming more and more unusable. However, in particular subsystems -- circumscribed in time and space -- entropy can decline such that a high energy state can be achieved. The subsystem can exhibit such a negative entropy process, or "negentropic" process, because of importation of energy from other subsystems or the environment. Thus a cold room can be brought to an agreeable temperature (a negentropic process) by the use of an oil furnace. Clearly, the act of heating would be impossible without import of energy from the furnace. Furthermore, for the total system (room plus environment), entropy has increased although in the subsystem (viz., the room during the act of heating), entropy decreased. By burning oil in the furnace, unusable combustion gases are released and the complex hydrocarbons represented by the oil have been reduced to a lower energy, a less complex level.

Marketing and Negative Entropy

Marketing actions seem to have an effect analogous to the warming of the room. Within the conventionally defined boundaries of a marketing system, there is often observed an increase in the energy level, order, and structure. It should be noted, however, that this increasing orderliness (a negentropic process) is brought about by the import of energy during the acts of production, distribution, and consumption. For example, the conversion of hydrocarbons to plastic products increases the energy state of hydrocarbons when it is transformed into plastic by imported energy. The plastic also has a more orderly state and is a more complex structure than the oil used to make it. **Figures 2(a)** and **(b)** contrast the conventional view of the marketing system, based on the conventional economic model, with the ecologically realistic view that has emerged in the so-called steady-state economics (Daly 1977, Georgescu-Roegen 1977). The inflows of energy

shown in **Figure 2(b)** obviously have entropic consequences for the system as a whole. These entropic effects are discussed later in the paper. In the paragraphs to follow, the specific forms of negentropic processes in marketing systems are examined. It is argued that marketing actions are negentropic in that they add structure and organization to various subsystems: the productive system, the competitive arena, buyer behavior, and society in general. Nonetheless, an increase in entropy occurs globally as a result of marketing actions.

Marketing Organizes the Productive System

Perhaps the greatest significance of the marketing concept is that marketing has emerged as the strategically central and organizing principle of many business and non business firms (Kotler 1981). In a marketing-oriented firm such as Proctor and Gamble, IBM, or General Electric, marketing concepts and actions organize not only the marketing function but the entire strategy and structure of the business. The firms remain viable and profitable from the successful application of marketing strategy. Since other business functions (e.g., manufacturing, finance, accounting) are negentropic as well, marketing becomes the governing principle for most negentropic processes in a highly market-oriented firm.

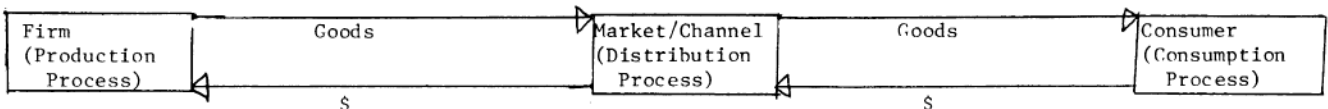
This logic can be extended to the economy as a whole. In a highly marketing-oriented economy, such as the United States, marketing concepts influence resource allocation patterns (and the associated negentropic, structuring activities) in all sectors of the economy. Hence, the application of marketing concepts is responsible for the entropic consequences within the marketing system, and also serves as a major determinant for entropic consequences in the economy as a whole. This heightens the social responsibility of marketing.

Marketing Organizes the Competitive Arena

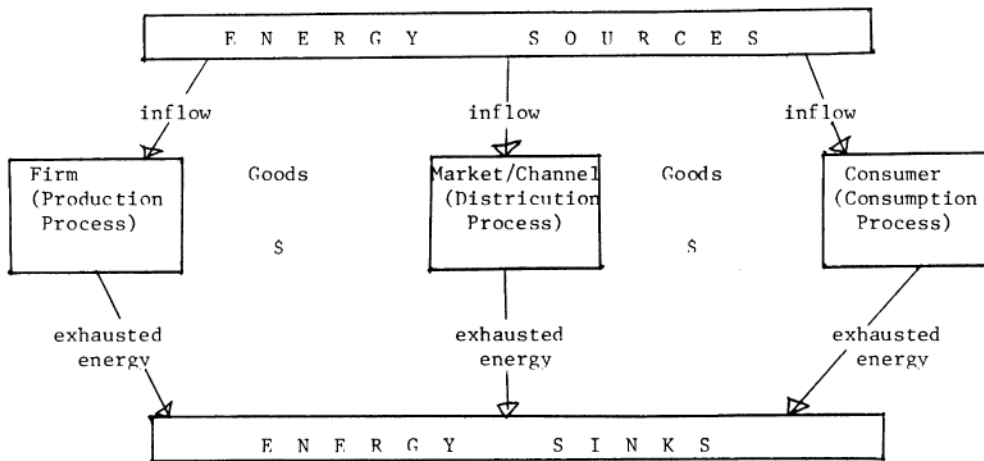
For all its free-enterprise rhetoric, marketing is essentially a destroyer of chaotic, atomistic, and unorganized competition. Marketing techniques permit the

FIGURE 2
Two Views of the Marketing Process

(a) Conventional View



(b) Ecologically Realistic View



leading firms in an industry to restructure the chaotic competitive arena into an ordered, rivalrous, oligopolistic one (Porter 1979). Strategies to acquire and maintain high market shares become very important in these competitive arenas (e.g., PIMS, Experience Curve Strategies). Elaborate, non-price forms of market behaviors become necessary and firms structure and organize their marketing departments to fight strategically elaborate battles in the oligopolistic competitive arena. Non-price competition may be in the form of frequent styling and model changes, minor product improvements, and packaging changes. The mass media, industry, retailing and other marketplace institutions become organized according to the imperatives of oligopolistic rivalry rather than according to consumer or ecological rationality.

Marketing Organizes Consumer Behavior

In the field of consumption, marketing has been a tremendously powerful organizing force. In place of random, need-dominated consumption, marketing fosters a structured, brand-preference dominated consumption. Thus, thirst (a physiological need) gets translated into the desire for a Coke. The socialization of consumers into brand-buying is clearly related to the structuring of the competitive arena. In an oligopolistic market structure, brand identification and brand projection are possible; in an atomistic market structure, this discretionary influence is not possible. In some sense, the consumption behavior of the most deprived ghetto child of today is more structured than the consumption behavior of an affluent medieval aristocrat. The ghetto child has been socialized by the institutions of the mass consumption society to learn brand characteristics and exhibit brand choice sophistication which the medieval aristocrat would find baffling. On a societal scale, marketing has supplanted highly structured choice sets in place of feel-as-you-go buying practices. As a result, the buying arena is a well structured system possessing complex cues and symbols to guide consumption.

Marketing Organizes Society

The overall effect of structuring the productive activities, the competitive arena, and the sphere of consumption is that marketing begins to shape and define social structures and processes. The increasing penetration of the "marketing mode" of thinking in all spheres of life -- politics, education, health care, transportation, entertainment, religion, etc. -- indicates that marketing is emerging as an important, if not one of the governing principles of society. The steady "marketization" of the world is evident in the attempts by professionals (lawyers, doctors, accountants) to use marketing techniques, the use of marketing techniques in political campaigns, the penetration of marketing methods in the socialist economies, and so on. This translates into the way society views individuals. The roles of individuals are transformed into roles congruent with the marketing system. Individuals become buyers, users, clients, constituents, voters, etc. -- targets of marketing or marketing-like efforts by different social institutions. Instrumental behaviors (e.g., how patients "respond" to treatment, how constituents vote, how parishioners "relate" to the church) become the primary focus of all areas of life just as the purchase behavior is the primary focus in the commercial world. Consequently, marketing touches a vast number of dimensions in daily life.

Energy Inflows

Since marketing actions have the effect of organizing, structuring, and ordering many aspects of business and society, such actions are negentropic in nature. Since the overall entropy of the world increases constantly, marketing actions must use up, or cause the using up of, considerable amounts of energy (see Figure 2b). This means marketing actions must have entropic consequences in the surrounding subsystems and for the environment as a whole. In the terminology of Figure 2b, marketing actions must draw energy from various sources and create and contribute to a multitude of energy sinks. These energy sinks are the depositories for all spent or exhausted energies. As a result of marketing actions, what forms of energy are used and what energy sources are used up? The entropic consequences of marketing can be discussed at three levels: the using up of physical, social and psychic energies.

Physical Energy

The using up of physical energy in marketing or marketing-determined activities is an obvious phenomenon. The process of production uses up energy, as do the processes of transportation, distribution, communication and consumption. This is illustrated rather well in the following quote from Rifkin (1981, pp. 133-4).

"Take for example, your morning English muffin. . . [T]he very process of modern petrochemical agriculture used to grow the wheat is extremely energy inefficient. But once grown and harvested, the folly is compounded manyfold thanks to our national mania for processed food. Here are just some of the energy steps that go into making your English muffin. (1) The wheat is taken by a fossil-fuel-driven truck made of nonrenewable resources to (2) a large, centralized bakery housing numerous machines that very inefficiently refine, enrich, bake and package English muffins. At the bakery, the wheat is (3) refined and often (4) bleached. These processes make for nice white bread, but rob the wheat of vital nutrients, so (5) the flour is then enriched with niacin, iron, thiamine, and riboflavin. Next, to insure that the English muffins will be able to withstand long truck journeys to stores where they will be kept on shelves for many days, or even weeks, preservative (6) calcium propionate is added, along with (7) dough conditioners such as calcium phosphate, ammonium sulfate, fungal enzyme, potassium bromate, and potassium iodate. Then the bread is (8) baked and placed in (9) a cardboard box which has been (10) printed in several colors to catch your eye on the shelf.

The box and muffins are placed within (11) a plastic bag (made of petrochemicals), which is then sealed with (12) a plastic tie (made of more petrochemicals). The packages of English muffins are then loaded into (13) a truck which hauls them to the (14) air-conditioned, fluorescent-lit, Muzak-filled grocery store. Finally, you (15) drive two tons of metal to the store and back and then (16) pop the muffins in the toaster. Eventually, you will throw away the cardboard and plastic packaging, which will then have to be disposed of as (17) solid waste. All of this for just 130 calories per serving of muffin.

Not only have tens of thousands of energy calories gone into the entire process, but medical evidence suggest [sic] that both the additives and the lack of fiber in refined breads may pose a serious hazard to your health. In the end, the energy that was added to the muffins at each step of the process was insignificant compared with the energy that was dissipated at each step of the process."

Social Energy

In a very direct sense, marketing activities "use up" the social energy of the sales force and the marketing functionaries. This is evidenced in the way sales and marketing people are "spent" after an intensive campaign.

To the extent marketing controls or influences manufacturing, it is responsible for the depletion of social energies of workers in the act of production. More importantly, however, marketing has a strong influence on the social processes that replenish the energies spent by the worker. In the short run, workers replenish or recharge by consuming food, recreation, medical care, etc. The energy intensity of most of these activities has been shown to be at profligately wasteful levels (see, for example, Callenbach 1975, Illich 1977, Schumacher 1973). In the long run, the worker adjusts and re-tunes his abilities through the consumption of education and culture. In their current forms of organization, these "products" are also marketed in counterproductive and counter-ecological ways.

Other examples of a depletion of social energies are plentiful. When consumers generate loud and offensive levels of noise, others may be disturbed by this infringement on peace and tranquility. Many times these noises may be generated by consumer products such as stereo systems, automobiles, chain saws, and so forth. When consumers indiscriminately discard waste in the form of non-returnable bottles or spent durables, the onus falls on society to clean up. Scarce resources and human energies must, therefore, be allocated by society to restore the integrity of the environment. Consequently, the products made available by marketing create the potential for great social costs and a concomitant drain on available human energy.

In sum, marketing activities use up social energies in direct and indirect ways. The issue is not whether marketing activities cause the expenditure of social energies but how productively such energies are used. Evidence suggests that in highly marketing-oriented societies, social services (health care, education, etc.) end up being highly capital-, resource-, and energy-intensive and not very effective in the bargain (Schumacher 1973).

Psychic Energy

Marketing executives and operatives obviously spend considerable psychic energy in devising and implementing marketing strategies. Far greater in scope and significance, however, is the psychic energy that people spend in the sphere of consumption. The acquisition and processing of information are strenuous activities, especially in a buying environment characterized by information overload (Jacoby, Speller, and Cohn 1974). The shopping effort, apart from requiring great amounts of physical energy, is a mentally exhausting activity (Scitovsky 1976). The processes of using and disposing products require further expenditure of mental energy. Consider, for example, the seemingly simple act of preparing a frozen dinner. A tremendous amount of mental programming is required in planning and executing the

sequence of steps from the freezer to the dining table. Furthermore, this sequence of steps cannot be easily learned and internalized because each brand and product variant has its unique combination of thawing time, temperature setting, heating time, heating configuration (e.g., covered, on center rack), intermediate steps (turn over once or twice, broil for 10 seconds at the end), serving suggestions, disposal instructions, and so on.

Conspicuous consumption of products is another psychic energy dimension. Instead of consumption dictated by physiological needs, consumers may feel coerced to buy products and specific brands which enhance self esteem and status. These consumers must expend energy to conform to the expectations of their reference groups. Such conformity may be taxing on the individual. Certainly, the "keeping up with the Joneses" mentality requires that the individual be alert to these conforming expectations and have the resources with which to meet the demands of their social groups. A life of simplicity is virtually impossible for them. Instead, they surrender to a more complex and rigid social system that dictates their consumption patterns and life style. As a consequence, part of their psychic energy is consumed in the process.

While marketing causes the expenditure of large amounts of psychic energy in the process of consumption, the social structure of highly marketized economies is such that people have to turn to the marketplace once again to replenish the lost psychic energy. Television, mass culture, and drugs ranging from headache remedies to psychotropic pills try to hold the collective sanity of the society at some acceptable level.

Summary and Conclusions

This paper has presented a view of marketing activities as being negentropic (ordering, structuring) processes in a limited domain while causing entropic (disorienting, randomizing) consequences in the society as a whole. Consistent with the laws of thermodynamics, the overall effect is an increase in entropy, disorder, chaos. This increase in entropy and the specific forms of entropic effects, however, can be influenced by human actions. Marketing actions are generally planned without any concern for the entropic consequences and probably aggravate the entropic effects in various spheres of society. The emerging ecological paradigm in social sciences considers the entropic process as central and offers hope for reorienting society in an ecologically rational way. The framework presented in this paper may be useful in a rational restructuring of marketing institutions.

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MATERIALS RECYCLING IS A MARKETING PROBLEM

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Abstract

This article examines the special case of materials recycling and places it in the context of the traditional marketing process as well as the broader concept of resource recovery. Several currently operating materials recycling systems are examined for their marketing implications.

Introduction

In 1975, post-consumer solid waste generation was estimated at 128 million tons which translates into 3.2 pounds per person per day in the continental United States. Of this quantity, 77.5 million tons, or approximately 60%, represented non-food product waste which can be directly attributed to the macro-marketing system's continuous outpouring of manufactured products and disposable packaging. In contrast, only 6% of the total post-consumer solid waste generated in 1975 was recovered and recycled (EPA, 1977).

This low materials recycle rate is paralleled by few mentions of recycling and resource recovery in the marketing literature. In short, marketing scholars and practitioners have, by tradition, tended to ignore the post-transaction aspects of marketing as they relate to product disposition. However, current conditions in the marketplace, including the skyrocketing costs of energy and societal concern for the quality of life, are beginning to force a reassessment of traditional thinking about product disposition problems from the typical out-of-sight out-of-mind point-of-view to one which recognizes recycling and resource recovery as a marketing opportunity (Fuller, 1978).

The purpose of this article is to present the recycling of material resources as an overall marketing process which must rest on the firm foundation of the market transaction. This is accomplished through a discussion of the relationship of materials recycling to the broader concept of resource recovery, the examination of several general forms of materials recycling systems, and through the development of several case studies which demonstrate creative private sector marketing solutions to the recycling problem.

Relationship to Resource Recovery

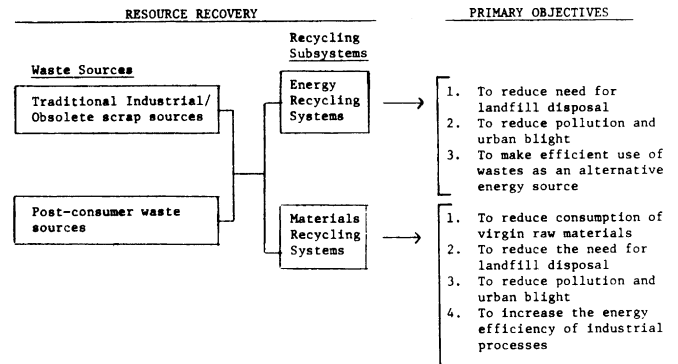
Materials recycling is an element of the broader concept of resource recovery. The objectives of resource recovery are: 1) to reduce the consumption of virgin raw materials, 2) to reduce the need for terminal disposal capacity, 3) to reduce pollution and litter, 4) to make more efficient use of available wastes as energy resources, and 5) to increase the energy efficiency of industrial processes. Resource recovery represents an alternative to the terminal disposal of the solid wastes which are an inevitable by-product of an industrialized, high-level economy.

Resource recovery objectives and the two major subsystems employed to divert solid wastes from traditional "burn and bury" terminal landfill disposal and attain these objectives are shown in **Figure 1**. Energy recycling subsystems are developed which utilize solid

wastes as fuel in some type of energy generating process. For example, solid wastes can be compressed into pelletized form and then used as a supplement fuel in a coal-fired boiler to produce electrical energy. Materials recycling subsystems, which are the focus of this article, are employed to directly reclaim desired physical materials from solid waste sources for reuse as generic raw materials in the future production of goods. In application, both energy and materials recycling systems dramatically reduce the volume of solid wastes requiring terminal disposal, thus reducing the need for landfill capacity and lessening the potential for environmental pollution and litter.

FIGURE 1

THE BROADER CONCEPT OF RESOURCE RECOVERY AND RELATIONSHIP OF SUBSYSTEMS TO OBJECTIVES



The generic materials distinction above is used to carefully separate materials recycling from other forms or recycling activity which reuse products "as is." Examples include automobile components and returnable bottles. In theory, these items are not destined to enter the solid waste stream but are to remain separate to be reused after refurbishment in the same primary product application. Materials recycling, as a subsystem of resource recovery, is based on the assumption that the physical materials recovered from waste sources will be reused but only after conversion to generic materials status.

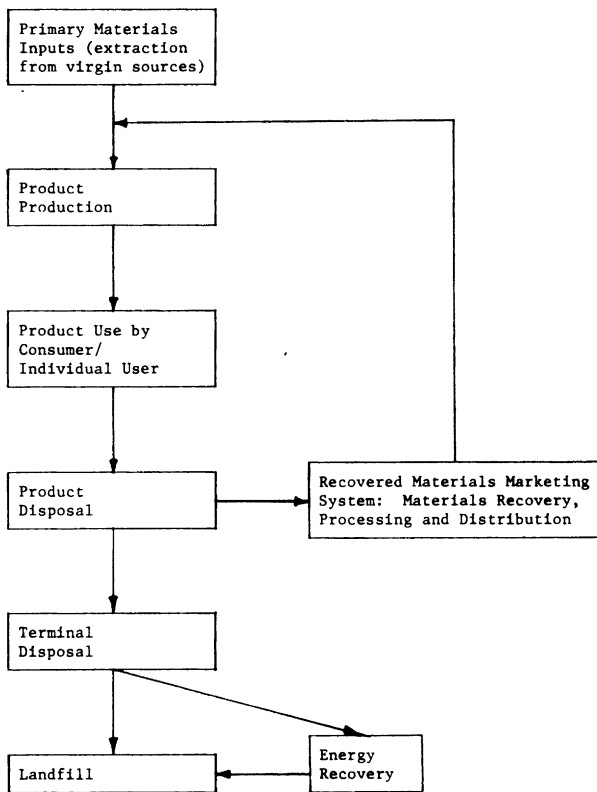
Although there is a tendency to exclusively associate materials recycling with the physical materials conservation objective, materials recycling has a particularly important impact on the energy conservation objective of resource recovery (see **Figure 1**). A classic example of this is given in the case of recycled aluminum containers where the direct energy savings from the use of recycled materials as inputs in the manufacturing of new aluminum have been estimated at 95% (Walker, 1973). The principle is simple: every product is the result of the application of energy related processes to purify and upgrade raw material inputs. Once upgraded, these raw material inputs represent an energy bank which can be capitalized on during the next recycle. In the case of recycled materials, the energy savings is literally compounded with each additional recycle which, in effect, avoids the virgin raw materials start-up energy cost.

The Materials Recycling Process

A macro view of the materials recycling process is necessary in order to fully understand the micro processes and functions that eventually must be carried out by marketing systems. A concise overview is offered by Schary as follows:

This policy (applications of materials recycling for the purpose of reducing the amount of primary raw material input to technical processes) implies a conceptual view of a society in which material uses are selected according to their market values and the stringency of technical requirements for materials usage. Inputs of new materials would be applied at the highest level with the highest requirements for input purity and uniformity. As far as technically possible, materials would be recycled at this level, descending to lower levels only as their quality begins to deteriorate. The specific history of a given input would then be described as a succession of use and recovery accompanied by a gradual descent to lower levels of application, ultimately to be consumed as energy or to be buried as landfill (Schary, 1977).

FIGURE 2
THE GENERALIZED MATERIALS USE AND RECYCLING CONCEPT FOR A CONSUMER GOOD



The theoretical materials use and recycling concept described by Schary above is generalized in marketing terms in Figure 2. In essence, a product--in this case, scrap/waste materials which have been recovered from a solid waste source and processed to specification--must be matched with a market--in this case, a manufacturer which uses the product as either a direct substitute for virgin materials or in a lower level of materials application. The "gap" between production and consumption must be bridged through the development of an appropriate recovered materials marketing system.

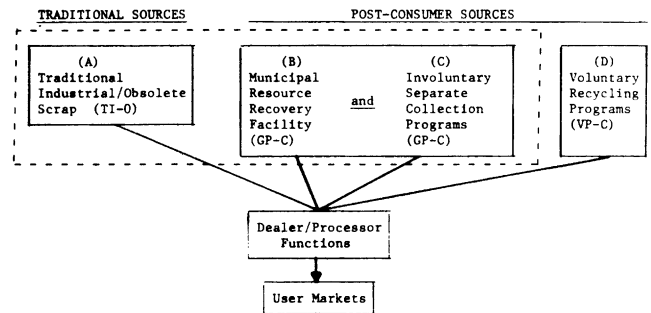
In short, the firms involved in this process must develop and implement a traditional marketing mix in order to complete this exchange process in an efficient manner.

One major area in which marketing system emphasis differs for recyclables in comparison to traditional finished goods is in the importance of being able to efficiently carry out activities which result in the accumulation of economic quantities of scrap/waste materials for further processing and marketing within the system. The character of these pre-processing accumulation activities is a function of the type of scrap/waste source and has a significant impact on the design of marketing systems for recyclables.

Present Materials Recycling Systems

The impact of waste source type can be seen in the channels of distribution that have evolved to solve the materials recycling problem (see Figure 3). In this regard, present materials recycling systems can be categorized into three basic types based on source as follows: 1) traditional industrial and obsolete scrap recycling systems (TI-0), 2) government sponsored, post-consumer recycling systems (GP-C), and 3) voluntary post-consumer recycling programs (VP-C). The character and implications of each is discussed below.

FIGURE 3
GENERALIZED WASTE SOURCES FOR CHANNELS OF DISTRIBUTION



Traditional Industrial/Obsolete Scrap Source System (TI-0)

The bulk of present materials recycling systems focus almost exclusively on traditional industrial/obsolete scrap sources (TI-0 systems) shown as alternative A in Figure 3. Typical industrial sources include manufacturing plants but can be generalized to include retail and other commercial establishments such as department stores. This type of waste, also known as prompt industrial scrap, tends to be of known composition (say, aluminum stampings of a specific alloy or corrugated boxes) and is generated in large quantities on a consistent basis over time.

Traditional obsolete scrap is slightly different since this form represents worn out or used equipment or other products which must now be reduced (physically processed) to generic materials status prior to sale of user markets. Even in this case, traditional dealer/processors have tended to remain within bounds of the industrial markets by seeking out business which represents large scale transactions (a fleet of cars, a large quantity of equipment, etc.) so as to establish volume operations necessary to develop economies of scale in processing operations.

The focus of the industrial/obsolete scrap source systems presently in operation is, therefore, distinctly on large scale transactions. However, there is an additional qualitative dimension that contributes to an understanding of the motivation behind these traditional transactions which is well stated by Cutler as follows:

There is also a less obvious reason why industrial scrap must move. The various metalworking industries which generate scrap are not in business for the purpose of selling scrap -- scrap is a by-product of their manufacturing process. These firms recognize that their scrap has value, but they also recognize that they must continuously move it out of their plants or they will soon jeopardize production of their prime product (Cutler, 1976).

The point is that traditional industrial/obsolete waste generators have historically been motivated to do business simply because accumulated scrap/waste materials represent a threat to business continuity. More recently, however, the need to constantly deal with scrap/waste outputs has been heightened by the passage of legislation which mandates and limits disposal alternatives for the purpose of controlling pollution. In response, many companies are attempting to turn the mandates of restrictive legislation into marketing and profit opportunities. For example, the Minnesota Mining and Manufacturing Company has developed a wide-ranging program under the slogan "Pollution Prevention Pays," including a major component focusing on the recovery of materials for reuse, the result of which has been a cost savings of \$2,400,000 a year (Rovston, 1980).

In response to the above source-related conditions, dealer processor organizations (also called intermediate processors) have evolved which functionally specialize in: 1) the accumulation of materials from large-scale sources, 2) the physical processing of these materials to meet end-user specifications, 3) the performance of outbound physical distribution activities, and 4) the performance of selling activities including advertising, personal selling, and brokerage functions aimed at industrial customers. In many cases, the need for extensive processing of materials requires the purchase and operation of heavy equipment (shredders, balers, block breakers, sweat furnaces, guillotine shears, etc.) which represent a significant capital investment. A recent study in Florida has documented the number, character, and functional activities of traditional dealer/processors in major metropolitan areas (Fuller, 1977).

Government Sponsored Post-Consumer Systems (GP-C)

In general, post-consumer sources differ from TI-0 sources in terms of both the number of waste generation points as well as the quantities and condition of materials potentially available at individual points of generation. The basic waste generator is the household unit which, through the process of consumption, has the capability of producing a staggering variety of mixed solid wastes at millions of locations. Within each household's potential waste output, generic materials categories (i.e., aluminum, paper, glass, etc.) are in very small quantity lot sizes. By tradition, and since public health is a factor, most household wastes are accumulated into a broader municipal solid waste system for ultimate disposition by a governmental authority.

The present interest in resource recovery in the public sector revolves around the need to alter the present system of landfilling the majority of post-consumer

solid wastes (NCRR, 1974). While it is true that post-consumer solid waste is one form of obsolete scrap, the materials recycling problem faced is quite different than that of the TI-0 systems previously described. The problem, in a nutshell, is how to efficiently accumulate economic quantities of generic materials from millions of sources for eventual forward shipment in marketing systems. Figure 3 shows a number of institutional arrangements (B, C, and D) associated with post-consumer waste sources.

For the purpose of this discussion, government sponsored resource recovery facilities (alternative B) and separate collection programs (alternative C) are defined as involuntary in nature in the sense that the consumer decision to participate or not to participate is not an issue. The use of municipal resource recovery facilities, which process solid wastes "as is," requires no consumer commitment in terms of participation. Consumers merely consume and "toss" as before. Municipal separate collection programs (curb-side separate collection of newspapers, metal containers, glass, etc. via ordinance) leaves the consumer no option but to participate or else operate outside the law. In both cases, the government sponsor solves the accumulation problem with little input from consumers once a commitment to an approach is made.

In the government sponsored system outlined above, the dealer/processor relies on the government program or facility to accomplish the initial gross sort of materials, and the role of the dealer/processor remains that of continuing the accumulation and upgrading processes and also marketing the recovered materials. This usually involves the development of some sort of long-term contractual arrangement with the government entity so as to ensure the availability of materials in quantity to the dealer/processor and to ensure a minimum flow of revenue dollars to the government entity over time (NCRR, 1978). Thus, willingness to do business in the government sector is a major factor in these channel systems. However, as indicated by the dashed line box in Figure 3, the potential character of sources B and C tends to be "large scale" and is very similar to the TI-0 source systems including the need to "move" scrap/waste materials once a commitment to develop a resource recovery facility and/or separate collection program has been made by local government.

In reality, however, there are few municipal resource recovery and separate collection systems in operation at this time. Many of the 25 municipal resource recovery systems that are in operation are on an experimental basis (NCRR, 1980), while municipal separate collection programs are in operation in only 169 communities in the United States at this time (Miller, 1980).

Voluntary Post-Consumer Systems (VP-C)

A very distinct challenge in the recycling of post-consumer wastes is exemplified by the voluntary recycling programs shown as alternative D in Figure 3. In contrast to source systems A, B, and C, which ultimately involve large scale industrial/government waste sources, the voluntary recycling approach focuses on the individual consumer and/or groups (both profit and not-for-profit) as sources in the materials recovery process. This focus radically changes the character of the accumulation process. In source systems A, B, and C, large scale initial accumulation was, in a sense, built into the transaction prior to dealer/processor involvement. Precisely the opposite condition holds in voluntary post-consumer systems. Post-consumer wastes are widely dispersed and in small quantities and, historically, the consumer is not

motivated to participate in the process. As noted by Zikmund, the "consumer does not consider himself a producer of waste materials" and consequently "is not concerned with planning a marketing strategy for his product-waste materials" (Zikmund, 1971). In short, consumers must be motivated to undertake a basic change in consumption behavior and this motivation must be established through the development of aggressive marketing programs designed to stimulate initial participation and to maintain participation rates over time.

The difference in focus described above has caused many traditional dealer/processors to remain specialized in large scale source transactions where they have a clearly defined economic advantage and expertise in terms of accumulation and processing activities. Consequently, this set of circumstances has opened up marketing opportunities for non-traditional, voluntary recycling approaches, the marketing rationale of which will be described in the next section.

Emergence of Non-Traditional Recyclers In Voluntary Systems

A review of several non-traditional, voluntary recycling programs that have evolved to serve small scale sources (consumers, non-profit groups, etc.) will serve to point out the necessity for marketing analysis as the basis for program development. It will also serve to reemphasize why many traditional recyclers have opted not to seek out small scale sources of supply.

From the previous discussion, it will be recalled that the traditional dealer/processor has become specialized around serving the large scale industrial account and in many instances is highly specialized in terms of expensive and sophisticated processing equipment. However, the small scale sources (consumers, consumer groups, etc.) which are the focus of voluntary recycling systems exhibit different characteristics and, therefore, require radically different functional capabilities in order to efficiently accumulate and process waste materials.

In general, voluntary recycling systems must react to the following source related factors: 1) the need to maximize redemption convenience for customers and consumer groups, 2) the need to offer stable and known incentives to participate in the form of prices, 3) the need to educate potential sources and communicate information relative to redemption price, product acceptance standards, and time/place of redemption, and 4) the need to develop effective but limited physical materials processing facilities. In comparison to large scale sources, the above represent significant differences in terms of degree. Because of this, many traditional recyclers have opted to remain specialized in areas where they have a known economic advantage.

Reynolds Recycling Program

The Reynolds Recycling Program demonstrates the application of marketing analysis to the problem of dealing with small scale sources. In this case, the primary waste product sought is the all-aluminum beverage container, a form of consumer product packaging that has been the concern of environmentalists for a number of years. As an element of post-consumer wastes, aluminum containers exhibit the classical consumer source characteristic of being widely scattered in small quantities. This translates into a real world "accumulation" problem as follows: in order to economically transport quantities of containers to the smelter, carload lots (60,000 pounds) are required.

Since a pound equals approximately 24 containers, 1,440,000 containers must be accumulated for each shipment.

The Reynolds Program, as operated in Florida, maximizes redemption convenience through the utilization of four strategically located recycling processing plants in which aluminum containers are shredded and readied for shipment to company smelters. These sites are supported by four permanent collection sites which perform flattening and magnetic separation quality control functions prior to shipment to the recycling processing plants. Both processing plants and collection sites are further supported by mobile operations in which trailers are located at designated locations on a schedule basis. A stable price policy of 30 cents per pound has created a known incentive among potential sources (Metcalf, 1981). An active public relations and advertising program rounds out the marketing strategy which resulted in the collection of 16,754,387 pounds of container aluminum in Florida in 1980 (Early, 1981).

The unique character of aluminum containers (non-ferrous, soft metal) results in the necessity for limited processing and quality control using light-weight machinery. The major product processing steps consist of magnetic separation of undesirable steel and bi-metal containers and the reduction of volume through shredding and flattening, tasks that are easily accomplished with a minimum of capital investment. This factor, combined with the strong internal market generated by the company, has led to the development of a fully integrated channel system to tap this major source of supply. It must also be pointed out that one major effect of this effort has been to offset the negative publicity associated with the all-aluminum container that has been created by environmental groups. In this regard, the company now publicizes the fact that recycle rates have reached 60 percent of total cans produced by Reynolds in a particular market area (Early, 1981).

Safeway Stores Golden Goat Program

An alternative strategy for recycling aluminum containers is represented by the Golden Goat Program recently introduced by Safeway Stores in Denver, Colorado. In this case, redemption is accomplished through the use of a reverse vending machine, located at the retail store site, which accepts recyclable all-aluminum containers, performs a basic quality control check (for steel containers, other foreign matter), and then immediately pays the consumer. Redemption convenience is enhanced by offering the service on a 24-hour basis (Kiernan, 1981).

By offering this service, the retailer is able to capitalize on a prevalent consumer behavior pattern (weekly food shopping) and high potential for in-store promotion impact. In addition, the incentive price of 24 cents per pound is promoted as a means of reducing customer's inflation-riddled grocery bill. It also must be pointed out that in an environmentally sensitive marketplace such as Denver, aggressive recycling activity by a retailer represents a significant form of product differentiation and positive public relations impact. This motivation is evidenced by recent promotional activities which stress the services impact in terms of environmental consequences and energy savings as well as the direct food cost savings (application of redemption amount to grocery bill) to consumers. Although the program is in the initial stage of development, consumer acceptance is evidenced by the collection of over 1,000,000 containers during the first week of program operation (Kiernan, 1981).

The preceding examples demonstrate the functional differences required to create and maintain sufficient volume of materials in voluntary recycling systems based on post-consumer waste sources. In both cases, the development of an appropriate marketing system, based on source characteristics, was achieved through the development of a non-traditional approach which effectively edged out traditional organizations already in the field.

Conclusions

This article has demonstrated the application of marketing concepts to the problem of materials recycling. This has been done by first introducing the concept of resource recovery of which materials recycling is a part. Second, the process of materials recycling has been reconceptualized in marketing terms with the recognition that recycling really involves market transactions.

Basic differences in current materials recycling marketing systems have been analyzed by noting that characteristics of scrap/waste materials sources significantly influence marketing strategy alternatives. Most importantly, the sources described in this article as "post-consumer" present obstacles that require major marketing innovations in order to solve the initial materials accumulation problem. Because of the required differences in operating formats, new institutions and marketing systems have emerged while traditional entrants in the recycling industry have tended to remain in their specialized role of serving large-scale industrial waste sources.

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SOCIAL RESPONSIBILITY: THE NEW CONSCIOUSNESS IN RETAILING

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Abstract

This paper presents research findings which indicate that retailers have changed their opinions in a significantly positive way toward their role as socially responsible partners in the business community. This report compares results of the current study with the 1975 Dornoff and Tankersley study.

Introduction

The issue of corporate social responsibility has continued to receive widespread attention in the literature, in the classrooms, and in government and judicial circles (Murphy, 1978; Druck, 1978; Sethi, 1978). This trend has been accompanied by widely publicized actions, government-initiated and otherwise, involving product recalls, civil suits, and the like, all revolving around the central issue of social responsibility (Carter, 1978; Bork, 1978; Wilson, 1978). The rise of consumer groups, coupled with the overall level of popular and judicial support, has produced a flurry of self-policing behavior within the business community that no amount of previous exhortation could have achieved (Henderson, 1978; Finlay, 1978; Engledow, 1978; Churchill, et al., 1978; Bradshaw, 1978; D'Amore, 1978).

Previous Research

A 1975 study addressing the social responsibility of retailers was reported in the Journal of Retailing by Dornoff and Tankersley (Dornoff & Tankersley, 1975). The results were not encouraging for those interested in seeing businessmen act in a more socially responsible way. The disappointing results were in spite of the fact that social responsibility had been a "live" issue in the literature for a decade (Gelb and Brien, 1971; Lavidge, 1970).

A more recent study of industrial buyers and an assessment of the "winds of change" in the corporate climate suggested a visible alteration in the way businessmen were coming to view their social responsibilities (Gravereau, et al., 1978; Wilson, 1978). In light of these hopeful signs, the authors decided to replicate the 1975 study by Dornoff and Tankersley and, therefore, focus on retailers' judgments of their social responsibility roles.

In their study, Dornoff and Tankersley examined the responses of retail managers to fourteen, purchase-conflict situations. Three types of retail establishments were used in the original study: Discount Houses, Specialty Stores, and Department Stores. Their study revealed that, on the whole, retailers were very often more concerned with increasing profits than they were with their role as a socially responsible institution. Apparently most retailers were not interested in protecting their consumer franchise by guarding against actions that would cause consumer dissatisfaction. In most situations, the retailers' dual objectives of consumer satisfaction and profitability were not regarded as harmonious.

Research Methodology

Purpose and Scope

The primary purpose of this research was to ascertain what changes, if any, have occurred in the opinions of retail managers, using the same purchase-conflict situations of the 1975 study. In light of the intensive focus on social responsibility in business during the intervening years and the incidence of product recalls, etc., the authors expected to see a marked change in opinion. The study was conducted in the same geographical region with the same types of retail outlets.

Questionnaire Design

To insure comparability of results no attempt was made to alter or update the original questionnaire. The basic purpose of the study was to determine whether changes had occurred in retailers' response to the same purchase-conflict situations as originally presented.

Sample

The sample was randomly selected from a listing of area retailers which contained more than 90% of the establishments in the region. The authors matched the types of sample outlets with the original study by excluding all other types not included in the 1975 study. Of 100 outlets contacted, 91 agreed to participate in the survey. This 91% level of cooperation was a significant improvement over the 69% participation rate experienced in the 1975 study. It was the first sign that things had changed. The sample was comprised of 56 Specialty stores, 24 Department stores, and 11 Discount houses. The questionnaires were hand-delivered to either the store manager or the assistant store manager.

Data Analysis

An analysis was performed to discern whether statistically significant changes had occurred in the composition of responses to the purchase-conflict situations. Consequently, the Chi-Square Goodness-of-Fit test was appropriate. Using the original study profiles of response for each situation as benchmarks, a Chi-Square statistic was computed for each situation and for each category of outlet. Exhibit 1 provides a summary set of statements for each "situation" that retailers responded to in both the 1975 study and the up-dated study reported here. These responses were made on a five-point-Likert-type scale.

Presentation of the Findings

Table 1 reveals the results of both studies and the statistically significant differences for each situation. The changes are in the direction expected and all but situations 10 and 13 are statistically significant at a $p < .01$ level. As examples of the results, situations 5 and 6 involving disclosure of information previously revealed a posture that "what the consumer does not know will not hurt him." Situation 5 focused

Exhibit 1

Summary Statements of Situations
Presented to Retailers*

- Situation 1: An overeager salesman who is anxious for a sale exaggerates the value of a product and withholds important product information. The storeowner knows of his behavior, but does nothing to stop the practice.
- Situation 2: Trying unsuccessfully for several months to sell a coat marked originally \$89.95, the retailer places a tag on the coat at \$129.95 as the original price and puts a sale price of \$63.95 on the coat.
- Situation 3: A person purchased a car which he subsequently took back to the dealer for repairs on the transmission. After several minor adjustments over a thirteen-month period, the dealer completely overhauled the transmission at full price for parts and labor. The warranty had expired at twelve months.
- Situation 4: A woman who purchased a dress from a local retailer wore the dress one time, washed it according to the manufacturer's instructions attached to the garment, but found that the colors had faded and run, causing streaks. The retailer refused to refund her money since the dress had been worn and washed.
- Situation 5: A retailer ran an ad in the paper announcing a sale on a well-known brand of men's slacks. A large response reduced the merchandise available to only 1/4 by the second day. The retailer continued to run the ad the rest of the week.
- Situation 6: A retailer offers a well-known brand of china dinnerware at a substantially reduced sale price. Customers are told that they can purchase any "odd" pieces that are in stock. However, the ad does not indicate that these patterns have been discontinued. The retailer will reveal this information only if the customer directly asks.
- Situation 7: A retail grocer who operates within a "ghetto" raises product prices on the day that welfare checks are delivered to the area.
- Situation 8: A retailer knows that a product he sells is displayed by manufacturers in such a way that it encourages consumers to over use (waste) it. The retailer continues to use a manufacturer-supplied display which the retailer knows encourages wasteful misuse.
- Situation 9: A local retailer's credit policy is to allow consumers 25 days to pay their accounts in full without an interest charge if the customers purchase products before the 10th of the month. One customer ordered not-in-stock furniture on credit on May 9. The

customer received the furniture on June 7 and promptly sent full payment to the retailer. The retailer sent the customer a bill which included interest because it had not been paid by June 5.

- Situation 10: A customer brings to the store a coffee pot which he says was a wedding gift, but that he already has a good coffee pot and would like a refund. The store carries the pot, but the man has no sales slip since it was a gift. The customer should be given the full refund in cash.
- Situation 11: A customer purchases a bicycle at \$59.95 which a week later is put on sale at \$49.00. The store should give the customer a refund for the difference.
- Situation 12: A customer who purchased a foundation garment, returns the garment a year later with no sales slip. With the change in styles, the garment had been reduced to half price and the customer asks for a full cash refund. The retailer should not give the customer a full refund, but a refund on current selling price.
- Situation 13: A customer reports to the retailer that a refrigerator she bought two weeks earlier had spoiled her food because it was not cooling properly. The retailer should fix the refrigerator at no cost.
- Situation 14: A customer reports to the retailer that a refrigerator she bought two weeks earlier had spoiled her food because it was not cooling properly. The retailer should reimburse the customer for the spoiled food.

*Summarized from Donald J. Dornoff and Clint B. Tankersley, "Do Retailers Practice Social Responsibility?" Journal of Retailing, Vol. 51, No. 4, 1975-1976, pp. 34-37.

on repeated advertising of sale merchandise even though most of the merchandise was sold and no longer available. In 1975, over 75% agreed that the ad should run. Today, less than 18% agreed with this action. Situation 6, which involved informing the customer that an item was being discontinued, produced 80% agreement that such information should be disclosed only if requested by the customer. Today, only 35.6% were willing to agree with that approach.

In the original study, the seeming conflict between profit and customer satisfaction was highlighted by the responses to situations 13 and 14. Situation 13 involved an action not affecting retailer profits since it is usually covered by a manufacturer's warranty. The majority of retailers agreed (88%) with the socially responsible action taken, and there was no change in the recent survey where 92% of the retailers also agreed with the action. However, in situation 14, there was no warranty coverage and 54% of the original study retailers disagreed with the unprofitable action taken. In the recent study, only 30% of the retailers were willing to disagree with the action taken.

The 1975 study revealed differences between the three types of retailers in their responses to the situations. The Discount Houses evidenced the least

Table 1
Retailers' Perceptions of Purchase
Conflict Situations
(Percentages)

Sit- ua- tion	Strongly Agree		No Opinion				Strongly Disagree			
	D&T **	CS ***	D&T **	CS ***	D&T **	CS ***	D&T **	CS ***		
1*	9.0	0.0	23.0	3.3	26.0	2.2	34.0	65.9	8.0	28.6
2*	12.0	1.1	40.0	15.4	20.0	12.1	14.0	25.3	14.0	46.2
3*	26.0	2.2	34.0	3.3	14.0	4.4	20.0	24.2	6.0	65.9
4*	8.0	2.2	46.0	4.4	13.0	8.8	20.0	34.1	13.0	49.5
5*	34.0	0.0	43.0	17.8	10.0	13.3	9.0	47.8	14.0	21.1
6*	31.0	5.6	49.0	30.0	6.0	15.6	11.0	38.9	3.0	10.0
7*	23.0	0.0	34.0	3.3	20.0	5.6	14.0	17.8	9.0	73.3
8*	17.0	1.1	40.0	8.9	17.0	23.3	17.0	48.9	9.0	17.8
9*	26.0	0.0	60.0	6.6	6.0	7.7	8.0	33.0	0.0	52.7
10	15.0	14.3	29.0	17.6	11.0	9.9	34.0	35.2	11.0	23.1
11*	9.0	17.8	11.0	26.7	9.0	2.2	31.0	32.2	40.0	21.1
12*	26.0	17.0	26.0	40.9	6.0	8.0	26.0	12.5	16.0	21.6
13	51.0	50.5	37.0	41.8	9.0	2.2	3.0	4.4	0.0	1.1
14*	17.0	16.7	20.0	32.2	9.0	21.1	45.0	25.6	9.0	4.4

*Differences statistically significant at $p < .01$.

**Dornoff & Tankersley Study

***Current Study

concern for social responsibility of the three. However, in this study, there were no statistically significant differences in responses among the different categories of retailers, except for situation 14, the profitability problem. The Discount Houses were still the most willing to disagree with the unprofitable action (36.4%) and the least willing to agree with it. More than 45% of them preferred to remain neutral on the issue.

Conclusions

The encouraging results of this study reflect the emergence of a new consciousness among retailers of their social responsibilities. The uniformity of consensus is an optimistic sign for the business community at large and society in general. The new consciousness has been long in coming, but perhaps it will be better implemented for all that it has revealed during its painful birth about the feasible, as well as, the proper role of social responsibility in business enterprises.

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Redesigned label and instruction panels were developed to convey in a simple and straightforward manner the performance capabilities and inherent dangers of the product, now called Caustic Acid. The modified set contained at least seven known violations of Michigan packaging and labeling regulations (primarily related to company identification, use instructions, and antidotes). The redesigned label and panels are presented in [Figure 2](#).

FIGURE 2

DIRECTIONS READ CAREFULLY

WARNING READ CAREFULLY

CAUSTIC ACID

SEALS

SCALDS

SEARS

POISON

DANGER

BLINDS

KILLS

DO NOT KEEP OR STORE THIS PRODUCT ANYWHERE IN YOUR HOME UNDER ABSOLUTELY NO CIRCUMSTANCES.

"CAUSTIC ACID" IS TOO DANGEROUS TO BE KEPT EVEN IN YOUR BASEMENT OR GARAGE.

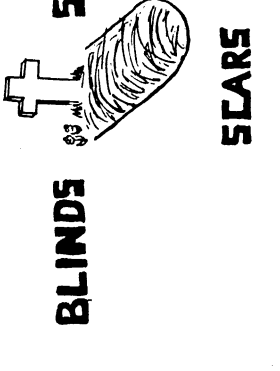
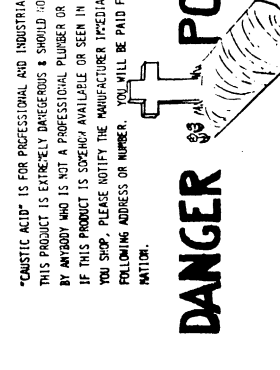
ANYBODY USING "CAUSTIC ACID" MUST WEAR SAFETY GLASSES, RUBBER GLOVES AND SPECIAL UNIFORMS. IF "CAUSTIC ACID" TOUCHES YOUR SKIN OR IS SWALLOWED, IT CAN DO BODILY HARM. THERE IS NO LOOK-ALIKE OR CURE FOR THE TYPE OF DAMAGE THAT "CAUSTIC ACID" CAN DO.

"CAUSTIC ACID" IS STRONG ENOUGH TO EAT INTO ALUMINUM.

"CAUSTIC ACID" ATTACKS ANYTHING LIVING AND KILLS HUMAN TISSUE ON THE SLIGHTEST CONTACT.

IF "CAUSTIC ACID" COMES INTO CONTACT WITH YOUR EYE, IT CAN MAKE YOU GO BLIND FOREVER.

"CAUSTIC ACID" IS FOR PROFESSIONAL AND INDUSTRIAL USE ONLY. THIS PRODUCT IS EXTREMELY DANGEROUS & SHOULD NOT BE USED BY ANYBODY WHO IS NOT A PROFESSIONAL PLUMBER OR CONTRACTOR. IF THIS PRODUCT IS SOMEHOW AVAILABLE OR SEEN IN A STORE WHERE YOU SHOP, PLEASE NOTIFY THE MANUFACTURER IMMEDIATELY AT THE FOLLOWING ADDRESS OR NUMBER. YOU WILL BE PAID FOR THIS INFORMATION.

The two sets of labels are clearly different in terms of layout. The original set contains the product name, Blastout, surrounded by a cloud-like form. The letters SOS are combined to form the outline of a puppet or doll. Finally, the slogan about Inhibitite is encircled in a balloon and placed near the warning sign, the skull and crossbones. The combination of the cloud, the puppet, and the slogan could detract from the impact of the warning statements.

The Caustic Acid label and panels contain no sales- or image-enhancing drawings or slogans. The wording is intentionally blunt and was determined by (second author), a professional linguist and expert on Black dialect, to be relevant for the sample subjects (see [Table 1](#)).

Sample and Procedure

Respondents were selected from a central city neighborhood in Detroit, Michigan. This geographic area is quite homogeneous with respect to race (95% Black), income level, education level, and type of occupation. This area was chosen because Blastout was available in retail hardware stores within the neighborhood to anyone who wanted to buy it (despite the "industrial use only" statement). Neighborhood characteristics are summarized in [Table 1](#).

TABLE 1

SELECTED CHARACTERISTICS OF RESPONDENT SAMPLE FRAME

Characteristic	Description
Race	95% Black
Age	37% ≤ 17 years 53% 18 - 61 years 10% ≥ 62 years
Income	mean, median < \$10,000/year
Education	mean, median < high school
Occupation	primarily unskilled & semi-skilled

A total of 100 persons were contacted at their homes (random selection of city block and number and location of dwelling units per block) to participate in the study. One group of 50 subjects was shown the Blastout label and information panels and asked to complete a series of bipolar statements (see [Table 2](#)). The second group was shown the Caustic Acid label and panels and requested to complete the questionnaire. The two groups were found not to be significantly different with respect to any of the characteristics in [Table 1](#). Respondents were not shown both products because it was determined during pretesting of the instrument that persons with these background characteristics ([Table 1](#)) would not tolerate a survey of such length. This procedure also eliminated the possibility of order bias.

Two pairs of trained interviewers, one Black male and one Black female per pair, conducted the interviews. Each pair contacted 50 persons, 25 chosen to examine Blastout and 25 to examine Caustic Acid. Interviewers first answered four sample questions about the city of Detroit to become familiar with question format and response categories. Then the interviewers handed the label and panels to each respondent and asked him/her to look over and read them. Then interviewers passed out the questionnaire. Interviewers were allowed to read questions or materials if respondents were unable to read (three respondents required this assistance), but they were not permitted to interpret questions or to offer opinions.

TABLE 2
QUESTIONNAIRE AND SIGNIFICANT RESULTS

Anchoring Statement	Response Categories					Anchoring Statement
	(Caustic Acid Responses)					
	1	2	3	4	5	
	(Blastout Responses)					
1. From reading the label, I think this product is safe for me to use	1	7	3	14	25	From reading the label, I think this product is dangerous for me to use
	8	9	2	9	22	
	(no difference)					
2. The words "for professional and industrial use only" mean that only plumbers and contractors should use the product	25	14	1	5	4	The words "for professional and industrial use only" mean that any adult could use the product
	15	13	1	10	11	
	(no difference)					
3. The words "for professional and industrial use only" mean that the product is okay for me to use	2	3	1	18	26	The words "for professional and industrial use only" mean that the product is too dangerous for me to use
	13	17	4	9	7	
	D = .56 (p < .001)					
4. The label, directions, and warnings are hard to understand	7	7	3	14	19	The label, directions, and warnings are easy to understand
	12	21	4	5	8	
	D = .40 (p < .001)					
5. I would feel okay using this product	6	9	2	10	23	I would not feel okay using this product
	12	22	0	8	8	
	D = .38 (p < .005)					
6. This product is safer to have around the home than other products like it	3	3	20	7	17	This product is more dangerous to have around the home than other products like it
	8	11	2	7	22	
	D = .26 (p < .10)					
7. The label, directions, and warning are good	27	16	3	2	2	The label, directions, and warning are poor
	16	11	7	5	11	
	D = .32 (p < .025)					
8. A little of this product could be kept safely in a glass jar in the home	5	6	3	14	21	A little of this product could not be kept safely in a glass jar in the home
	13	15	2	5	15	
	D = .34 (p < .01)					
9. The label, directions, and warnings about this product give me a lot of information about it	17	14	5	5	9	The label, directions, and warnings about this product give me very little information about it
	12	8	1	9	19	
	D = .29 (p < .05)					
10. Considering what I've read about this product, I would be scared to buy it	26	11	5	3	5	Considering what I've read about this product, I would not be scared to buy it
	24	8	3	6	8	
	(no difference)					
11. It would take a lot of this product to be dangerous	4	3	3	13	27	It would take only a little of this product to be dangerous
	9	8	1	17	15	
	(no difference)					
12. The directions, label, and warnings are not clear in telling what could happen to me if I don't use this product in the right way	18	12	1	8	11	The directions, label, and warnings are clear in telling what could happen to me if I don't use this product in the right way
	11	9	1	8	21	
	(no difference)					
13. If some of this product touched my hand, it would be irritated and break out a little bit	2	2	3	14	29	If some of this product touched my hand, it would scald and scar it real bad
	13	13	5	6	13	
	D = .48 (p < .001)					
14. This product is easy to use	3	8	4	9	26	This product is not easy to use
	8	8	2	8	24	
	(no difference)					
15. I would not be surprised to find this product for sale in stores around where I live	12	12	3	9	12	I would be surprised to find this product for sale in stores around where I live
	15	15	1	6	13	
	(no difference)					
16. If some of this product touched my skin, I would wash it off with water and put vaseline on it	15	15	1	7	12	If some of this product touched my skin, I would not know what to do because I would be in a lot of trouble
	12	19	6	5	7	
	(no difference)					
17. This product is easy to store	2	3	5	13	27	This product is not easy to store
	9	7	5	6	23	
	(no difference)					

D = maximum difference in proportions for compared distributions

Questionnaire

The 17 sets of statements in Table 2 were designed to elicit respondents' opinions regarding the degree of danger in using the products, the meaning of a specific warning statement, and the overall quality of the label and panels. Respondents were asked to circle the numbered position (1, 2, 3, 4, or 5) that corresponded with their feelings about each pair of statements. The topical statements were selected from a pretest list of approximately 25 statements and were worded by (second author) to be meaningful to sample subjects. The questions were pretested on a group of 20 persons from the same neighborhood as the final sample.

Findings

The Kolmogorov-Smirnov two-sample test was utilized to determine for each pair of statements if the distribu-

tions of responses were similar for Blastout and Caustic Acid respondents. The statements for which significant differences between groups were detected are so denoted in Table 2.

The most striking result is that the Caustic Acid label and panels always conveyed an image of safety less than or equal to that of Blastout. For the five statements (3, 5, 6, 8, 13) relating to perceived product dangers for which a difference between groups was found, Blastout was rated as safer (or less dangerous) than Caustic Acid. Evidently the Blastout warnings were less effective in pointing out the inherent product dangers. Perhaps the Blastout label with its more pleasant design and puppet-like figure partially offset the impact of warning statements on the label and elsewhere.

For the three statements (4, 7, 9) dealing with information content and quality for which the two groups differed significantly, Caustic Acid was rated superior to Blastout. Perhaps the simplicity of the Caustic Acid label and panels resulted in respondents being able to understand better the messages contained therein. The more complicated Blastout panels with their technical jargon were apparently too detailed for this set of respondents.

Finally, the statement (3) containing the warning "for professional and industrial use only" was viewed much more seriously by Caustic Acid respondents. In the context of the simple and blunt Caustic Acid label and panels, this warning statement was interpreted as indicating the presence of a dangerous product. But viewed on the Blastout label and panels, this warning seemingly would not prevent most respondents from using the product.

Conclusion

These data suggest a potentially dangerous situation: a statutorily correct label could be less informative regarding product-related dangers than one not in compliance with regulations. A label meeting all applicable standards may not create awareness of the dangers associated with product use, especially if certain features of the label direct the consumer's attention away from warnings. These conclusions may be even more ominous when considering disadvantaged consumers who may be less capable of understanding warning statements or more easily distracted from reading them as compared with the majority of consumers.

The results presented here take on added importance because inadequate warnings or instructions constitute a product defect, the primary focus in any products liability action (Weinstein, Twerski, Piehler, and Donaher, 1978). Warnings which are adequate for certain consumer groups (college-educated professionals) may be inadequate for others (unskilled workers without high school diplomas). Thus, managers will have to balance the eye appeal of a label and its role in promotional campaigns against its effectiveness in conveying danger warnings to potential buyers/users. Warnings should be accurate and strong, but they should not detract from correct product use by desired market segments. Methodologies, similar to that used by Shimp (1978) to study incomplete comparisons in advertising, must be developed to compare the effectiveness of different warning statements on different labels as viewed by different consumer segments.

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BRAND PROLIFERATION: A TOOL OF THE MONOPOLIST?

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Abstract

This paper considers the possibility of future restraint of trade litigation being based upon improper use of marketing techniques like brand proliferation, intensive advertising and price maintenance. The analysis involves the observation of the structure, conduct and performance of firms in potential "shared monopoly" situations.

Brand Proliferation

Most successful marketing managers utilize the techniques of market segmentation and product differentiation. These have long been touted as keys to the generation and maintenance of economically substantial sales volumes. But, is it possible that continual segmentation of markets and the intensive advertising that is required to differentiate products lead to a situation where the resulting market segments are so small that they are no longer profitable? And, if this is so, are firms using these strategies to force competitors from a given market or to keep potential competitors out? Few authors spend much time considering whether market segmentation and product differentiation techniques are used by firms to create oligopoly or monopoly situations. If fact, when they do, they are usually left confused as to whether they have just observed the techniques of the monopolist or the super marketer (Bloom, 1981). Since multibrand strategies involving extensive supportive advertising to accomplish product positioning goals have for so long been a part of the conventional wisdom passed along as models for competitive marketing, it is hard to imagine that they are anything else.

Some economists, though, might argue that firms overtly choose to subdivide market segments through slight product changes and intensive advertising effort for the purpose of making the market less attractive to existing competition and at the same time creating a "barrier to entry" that cannot be penetrated by outside firms. This is precisely the claim made by the Federal Trade Commission in its recent complaint against the big, ready-to-eat cereal manufacturers (FTC Complaint Counsel, 1976). The government reasoned, in this case, that the largest firms in the industry conspired to create an oligopoly condition that was in effect a shared monopoly. It further claimed that the firms used continual product introduction and intensive advertising to create a barrier to entry to anyone who could not play the big-money cereal game.

Before one dismisses the FTC's claim as a bureaucratic "witch hunt," a consideration of some recent writings in the economic literature is required. Schmalensee (1980) offers a cogent analysis of entry deterrence through the use of market fragmentation and brand proliferation. This author claims that the stage is set for a firm to earn excess profit, while no other firm would attempt to enter, if three conditions are met.

1. Increasing returns to scale at the brand level.
2. Localized rivalry among competitive brands.
3. Relative immobility of brand positioning.

In such a situation, the firm may introduce new products with some assurance of profitability due to the characteristics of a market with increasing returns to scale. The brand is relatively immobile due to the costs incurred in product development and introduction and there is relatively little effect upon the other brands of the firm due to the nature of consumer perceptions of brands in the product space (i.e., localized rivalry). Once these things have been accomplished, the firm maintains profitable sales volume through intensive advertising, keeping prices high. When a competitive threat is possible, the firm either increases advertising making the brand's financial position in the product space less attractive, or introduces a new brand itself that is just slightly different from the other brands in the product mix, effectively becoming its own competitor. Since the profit gained through the new product introduction is that which is lost by the other brands of the firm in the product space, the total profit derived by the firm in the market segment is preserved although the per unit profit of its brands is lower. Because the resulting product space is now more congested than before, it is less attractive to competing firms. Further, it is less attractive to outside firms considering entry because it is unlikely that the necessary sales volume could be generated to insure profit.

Scherer (1979) also supports the notion that a firm might pirate the profit of its own brand if it meant that a competitor would be less likely to introduce a brand in a profitable position in the product space or if it would prohibit an outside firm from entry. He uses welfare analysis of brand proliferation to show that profit cannibalization of a brand might result in lower producer surplus for that brand at the same time that total producer surplus is increased due to the contribution of the additional brand. From a social welfare perspective, this result would not be unattractive, except that the increase in total producer surplus comes at the expense of consumer surplus. What this means is that, in the long run, those firms who remain in the market as oligopolists share higher than normal profits while prohibiting the entry of other competitors. The consumer picks up the tab for this activity in the form of higher prices that are the result of increased advertising and wide margins.

It would be difficult to deny that many successful marketing firms use the techniques of market segmentation and product differentiation extensively. In fact, recognized authors like Kotler (1980) extol the marketing victories of Proctor and Gamble, and others, whose formula for success includes multibrand strategies, product flanking, brand extensions, heavy advertising, and competitive toughness. Kotler is joined by a host of others (see Mandell and Rosenberg, 1977; Stanton, 1981; and Enis, 1980) when he suggests that consumer preference mapping, segmentation based on consumer preferences and product differentiation designed to satisfy segment preferences are the keys to successful product mix management.

It would seem to be a logical extension of these techniques to continue the segmentation of markets and the differentiation of products to more completely satisfy segments until all segments that were profitable were

served. Obviously, few firms would be able to serve all segments and still fewer would be able to compete with the large firms who were able to best position their products in the preference map of the consumer. It becomes quickly evident that competitive rivalry in intensively segmented markets, if it is to exist at all, is realistically available only to a very few large firms who can afford to play the brand proliferation game.

While in the past, governmental agencies like the Federal Trade Commission seemed to be content to prosecute monopoly complaints on the basis of discriminatory pricing or distribution policy, it now appears that "over advertising" may be viewed as a corporate action in restraint of trade as well. (Economists have long argued that advertising expenditures may be perceived as a barrier to entry.) What portent this holds for the marketing manager is, as yet, unclear. Can product managers be forced to reduce advertising expenditures or to limit the number of new product introductions that they make? Will the future of restraint of trade litigation be an analysis of marketing mix variables including, product design, pricing, distribution network and promotion activity?

It seems likely that firms in certain situations can expect increasing pressure from governmental agencies under restraint of trade legislation. The historical economic concepts of industry structure, conduct, and performance provide the framework for the investigations that are almost sure to take place (Shepherd, 1979). These three factors provide a checklist of industry symptoms that might indicate a monopoly condition. The implementation of a market fragmentation and brand proliferation strategy will almost assuredly cause a set of conditions that will signal the arrival of a shared monopoly.

If established sellers can successfully crowd the product characteristics space, the remaining demand for any new brand will, in all likelihood, be too small to permit entrants to recover the costs associated with a full scale product launching (Scherer, 1980). Consequently, established firms will be secure in their positions with no threat of entry as long as the product characteristics space remains crowded and advertising and promotional expenditures to new brands remain prohibitively high.

While regulatory agencies rarely publish their guidelines for market structure, a firm can be sure that it will catch the attention of these groups if one or more of the following is present.

1. The products and brands of the firm account for a significantly large proportion of the industry sales volume.
2. The concentration ratio involving the largest of the firms in an industry becomes excessively high.
3. Barriers to entry exist in the form of prohibitive costs of product development and introduction.

These conditions exist in many areas of American industry. One could include in a list of such industries detergents, beer, toothpaste, automobiles, personal hygiene products, and others.

The discovery of a potential monopoly situation will lead regulators to an inevitable evaluation of industry performance. Those industries with above normal profitability that is attributable to the absence of competing firms become prime candidates for continued analysis. When this occurs, intensive scrutiny of all forms of marketing activity will result as concerned agencies seek to uncover conduct on the part of firms within the industry that results in the situations described previously.

While marketers of previous eras were able to assume that restraint of trade litigation would be supported on the grounds of price discrimination and distribution policy, recent cases have indicated that promotional policies and brand management decision making may well become a part of the supportive evidence used by regulative bodies in their attempts to press anti-monopoly cases. This behooves the marketing manager to study the implications of decisions made related to all marketing mix variables because all marketing activity may be viewed as behavior in restraint of trade.

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MARKETING CONFLICTS AND MNC's

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ABSTRACT

The marketing practices of multinational corporations in less developed countries (LDC's) have been attacked by many groups; most of these groups are located in the developed countries. These attacks are frequently warranted to some extent and have led to changes in the marketing policies of the corporations.

INTRODUCTION

During the last seventy years, multinational corporations (MNC's) have been attacked in many countries for real or imagined misdeeds. These criticisms are rooted in cultural or social factors and lead to conflicts.

Since the marketing concept is Western and specifically American in origin, it is not surprising that the cudgels used to beat MNC's are probably best understood in the industrialized countries and are wielded most effectively in developing countries by those people trained by us. The basic beliefs in the LDC's are frequently akin to old Western prejudices against the social usefulness of trading. In our civilization, these prejudices were given propriety by Aristotle and have survived the numerous and monumental changes in society during the past 2500 years. It is, therefore, not surprising that, in societies which have not yet gone through many stages of development, the objections to some marketing practices are a mixture of ancient attitudes and modern Western ideological conflicts.

The purpose of this paper is to analyze some of these conflicts and to suggest possible steps to defuse or avoid some of them.

Categories of Complaints

The numerous conflicts between MNC's and their host countries fall into the customary four marketing categories -- product, price, promotion and place. The major accusations directed at these elements of marketing strategy have been assembled in **Table 1** by Will Straver.

This paper will concentrate on the product aspect of the conflicts and will aim to arrive at conclusions and recommendations based on three specific cases.

Consumer Movements

Gladwin and Walter analyzed the conflicts in which five major MNC's were embroiled between 1969 and 1978 and found that these five corporations -- Dow Chemical Co., Gulf Oil Co., ITT, Hoffman La Roche, and Rio Tinto Zinc -- were involved in 650 conflicts during this time span. They analyzed the causes and locations of the conflicts; their results are shown in **Table 2**.

Clearly, the marketing policies of MNC's are attacked most strongly in the developed countries -- 66% of the conflicts occur in North America and 14% of the conflicts occur in Europe.

Accusations are frequently leveled at MNC's by consumer movements in developed countries and have formed the basis for political, economic, and legal actions against these firms. Consumer movements, as such, have not spread beyond the most highly developed countries although their actions have influenced government policies in developing nations. This fact is borne out by the Gladwin and Walter study which shows that in North America 22% and in Europe 21% of the MNC's opponents in marketing cases were "Citizen Lobbies" vs. 14% and 26% respectively being political groups. In Africa and the Middle East, none of the opponents were classified as "Citizen Lobbies," but 82% and 100% respectively were Political Actors.

The methods used by consumer groups have become quite sophisticated. They seek to form broadly based coalitions, sometimes with religious connections. Thus, in the U.S.A. the Interfaith Center for Corporate Responsibility (ICCR) was formed by the merger of several Protestant and Catholic consumer groups. Also, alliances of several disparate consumer groups are formed on a temporary basis, targeting specific goals, e.g., the interdiction of undesirable TV programs.

In Great Britain, France, and Sweden, the consumer protection groups operate under the aegis of the government (i.e., with the government's direct or indirect support). In Japan, they appear to be independent, but are still quite effective. One of their most successful mass actions was sponsored by Japanese housewives who organized a boycott of TV sets after learning that identical models were selling at a higher price in Japan than in the U.S.A. In the main, however, boycotts have not been very successful and are rarely attempted.

In the U.S.A., consumer groups have put pressure on corporations by means of shareholder resolutions. Some of these resolutions have not been directed at marketing policies but have been political, like the ones introduced at many annual corporate meetings to stop investment in South Africa. The justification for such actions is usually claimed to be moral even when the effect is political.

Publicity campaigns, particularly when supported by scientific data, and lobbying, are other frequently used methods. The campaign against "deceptive and dangerous advertising" on children's TV programs is an example of a successful campaign of this type. Clearly, these methods are almost completely restricted to the developed countries even if the ostensible subject of the effort is the developing world.

MNC's and Product Controversies

The product related controversies encountered by the MNC's are generally of two types:

- (a) Holding the companies responsible for changing cultural values, traditional ways of life, and spending behavior in the host countries.
- (b) Making the MNC's accountable in the host countries for product safety, performance, and damages caused directly or indirectly by their products.

TABLE 1

Major Accusations Levelled at Marketing Strategic Elements

Product Policy	Communication Methods
Product	
Proliferation of new products	Manipulates consumers
Too many similar products	Creates needs
False innovations	Lies and deceives
Artificial differentiation	Subliminal seduction
Dangerous, defective, marginal products	Contributes to inflation
Useless gadgets	Promotes planned obsolescence
	Causes mental pollution
Package	Reduces free competition
	Is of bad quality and morality
Polluting packaging; dangerous; useless; expensive	Pushes the mass-consumption society to excess materialism
Deceitful packages; avoid possibility of comparison	Gives the society false values
Labels do not provide adequate information	Smears the image of women
Inadequate warranties and service contracts	Does not provide adequate information
Lacks precise indications of use	Pushes psychological not performance characteristics of products
Lacks description of ingredients	Increases costs to oligopolistic competitors
Product dating	
Pricing Strategy	Distribution Developments
Creating new products at higher prices	High pressure selling
Profit maximizing	Deceitful promotions
Cartels	Aggressive merchandising techniques
Psychological pricing	New retailing methods push consumption
"Call" prices	Pushes high margin products
Fictitious prices	Does not weed out bad products
Bad price/quality relation	Bad after-sales service
Fake credit terms	Little in-store service
Unreasonable margins	High value added for little effort
Absence of unit prices	"Basement" sales
Fake price/quantity relationships	High-pressure door-to-door selling
Positioning of products by price level	
Fictitious promotions	

Source: Will Straver, "The International Consumer Movement," European Journal of Marketing 11 (No. 2, 1977), p. 97.

TABLE 2

Location of Multinational Corporate Conflict: 1969-1978
(650 Conflicts Involving Dow, Gulf, ITT, Roche and RTZ: % Rounded Off)

	North America	Europe	Latin America	Asia-Oceania	Africa	Middle East
1. ALL CONFLICTS	66	14	10	5	2	3
2. ISSUE						
Terroism	28	40	24	4	0	4
Human Rights	81	19	0	0	0	0
Politics	40	8	28	8	8	8
Questionable Payments	76	3	13	8	0	0
Marketing	61	33	2	2	2	0
Labor Relations	79	19	0	2	0	0
Environment	70	23	1	5	1	0
Technology	41	36	9	14	0	0
Economics/Finance	78	6	7	4	1	4

There are now literally hundreds of examples of encounters between host countries and MNC's. Among these, the health related ones have caused the most furor. The thalidomide case, where tragic side effects of this drug caused deformities in babies, led to strengthening of FDA regulations and more care in drug testing abroad.

The possible carcinogenic effect of "Tris," the most popular and effective flame retardant chemical, was determined in mutagenic screening tests in 1976. These data were expanded in 1977 and resulted within a few months in the complete cessation of manufacture of the chemical by its producers. However, a problem arose in the disposal of the garments treated with Tris. After the sale of these garments were prohibited domestically, some companies proceeded to export their inventory. The Consumer Product Safety Commission, at first, did not think it had the authority to stop export sales, but under pressure from citizen action groups and publicity, including a debate in a Senate Committee, it extended its ruling to include the sale of Tris-treated garments abroad. Thus this "export trade in death" was stopped.

These two examples are representative of dozens which show the safety and liability problems with which MNC's must deal.

There has been a decrease in the number of conflicts between MNC's and their critics. This is no doubt due to numerous factors, e.g., to a change in the political climate in the U.S.A., where the mood of the country is now much more conservative, to a greater sense of responsibility by MNC managements and greater adherence to the new regulations which try to prevent conflicts from arising. This is certainly true of U.S.-based MNC's, but it is also undoubtedly true of MNC's based in other developed countries.

A study of the published information on some past conflicts shows that the MNC's usually acted like typical bureaucracies rather than being intent on or aware of the mischief they were causing. The reader of the documents and public relations releases put out by the companies senses a lack of forethought and sensitivity to human and environmental problems. The methods employed by Distillers Company to settle the thalidomide problem is a good example.

There is also a reluctance to change direction which may well be due to the inertia characteristic of bureaucracies. Nestles Company's slow reaction to the World Health Organization debates on baby formula demonstrates this. Employees have difficulty admitting mistakes when they feel that their jobs may thus be endangered. "Saving face" is a popular concept in describing Eastern cultures. We, in the West, practice the same policies in somewhat different form.

Multinational corporations are often criticized because of their potential to do damage to the local culture. The local culture, social system, and values are jarred or actually changed by products and methods introduced by MNC's. Among the numerous examples of local objection to actual or potential effects of new products is the fight against Coca Cola in many places. In India, for example, the host government objected to the diversion of a proportion of the very limited personal income to the unnecessary and wasteful consumption of soft drinks and to the paying in hard currency (dollars) for non-essential purchases. As reported in The Economist in 1977, this policy by the Indian Government led directly to

the closing of the Coca Cola facilities in India. The Indian Government was, thus, able to stop this particular drain of dollars from the country but not deter the growing consumption of soft drinks which are being produced in the country by local firms.

Clearly, the question is how responsible for these developments are MNC's. Is it reasonable to expect a corporation to say: "We do not intend to enter this market because people should spend their money on milk and not be tempted to buy our soft drink?" Or should they say, "Our product is well received at home but if we sell it over there it will influence the religious beliefs of the younger generation and we do not want to do that?" In Russian-dominated European countries and in Russia itself, jeans and rock music are very popular among the young. The local governments have tried unsuccessfully to fight these hallmarks of the Western way of life. They have only succeeded in restricting the adoption of these items somewhat and to drive them underground so that jeans have become a "hot" item in the black market.

MNC's are the frequent target of attack for being the vehicle for demoralizing products. Yet, as the Gladwin and Walter study mentioned above shows, 94% of the marketing conflicts in which MNC's are involved occur in the developed countries. This may be due to several factors, e.g., the developing countries do not have the effective means to fight the MNC's or, perhaps, the local people do not consider the products and methods introduced by the MNC's to be as destructive as the action groups in this country do.

Promotion and Product Conflict

An example of the perplexing nature of some of these international marketing problems is found in the infant formula case.

The Nestles Company, headquartered in Switzerland, is by far the largest single supplier of infant formula in the world with a reputed market share of more than 67%. It was the prime target of the attack on suppliers of infant formula partly because of its size and partly because it did fight its critics alone. According to the World Health Organization, as reported in the Wall Street Journal, the argument of the critics was:

- (1) "Aggressive promotion tactics" by manufacturers threaten the health of babies in developing countries by leading mothers to believe that milk substitutes are better than breast-feeding.
- (2) "Aggressive promotion tactics" by manufacturers harm the health and even cause illness and deaths among babies in developing countries.
- (3) "The aggressive promotion of baby formula is leading to a decrease in breast-feeding in the developing countries."

The answers provided by the Nestles Company to these allegations in various publications, and particularly in testimony in Washington by Jackson, is that (1) their marketers constantly stress that breast-feeding is best but when the mother's milk is inadequate -- as frequently happens in poor countries -- the baby formula is an excellent supplement or replacement. (2) The argument that the impure water which is added to the formula causes deaths is unjust as this water is also added to other baby foods; so why single out the infant formula? Furthermore, if the local water is impure, inhabitants should be helped by their governments to get cleaner water and be educated in hygiene. (3) There is no evidence that the Nestles'

promotion program has been responsible for the decline in breast-feeding in the Third World. The trend is evident also in the Communist World where Nestles does not market. This decline is believed to be due to the countries' social factors such as urbanization and entry of women into the workforce.

Wall St. Journal: "WHO Approves Limits on Sales of Baby Formula," May 21, 1981, p. 31.

Nestles stopped the aggressive promotion of baby formula in 1976; yet in May 1981 the World Health Organization adopted a code designed to stop the excesses which they claimed Nestles had committed, by then, a useless exercise. Clearly, this was an emotional reaction by some Westerners exhibiting a romantic notion of what village life should be in the Third World. And this WHO interdiction was aided by Communist countries and others, who saw some advantage in it. It is clear, however, that the arguments by Nestles cannot be accepted at face value; water is used in food for babies when they are somewhat older and more resistant; the parents' reconstituted formula may not follow the company's instructions, etc.

Conclusions

This analysis of some factors in the marketing conflicts involving MNC's leads to the following conclusions and recommendations:

- (1) Nearly all marketing conflicts take place in the home country of the MNC, which is usually a developed country, or in another developed country, even if the issue involves the MNC's policy in developing countries.
- (2) The various action groups in the developed countries have achieved success in changing the policies of corporations either through public pressure or through legislative actions.
- (3) The corporations which complain that their opponents are politically motivated may be right, but they miss the point. The corporations must respond by intelligent, but not automatic, reactions and be sensitive to the changing circumstances regardless of their own perception of reality.
- (4) Managements must be fully aware of their tendency to judge according to their own standards and should imbue their organization with the sense to react quickly and sensitively rather than defensively and reluctantly.

Ultimately, marketing principles applicable in the developed countries must be modified when applied in the LDC's.

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NEW DIRECTIONS FOR THE CONSUMER MOVEMENT: THE ELECTORAL PROCESS

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Abstract

Arguing that the consumer movement has paid relatively little attention to an important area in our lives, viz. the electoral process, the author points out areas of dissatisfaction of the electorate and possible approaches to lessen such dissatisfaction.

The elections are over and a new administration has been in power since January 20, 1981. But, the areas of dissatisfaction of the electorate will probably continue and become more vocal closer to 1984. It is the intent of this paper to focus on some of those areas and direct the attention of consumer activists and academic researchers onto such areas.

Despite the popularity of the consumer movement in several areas such as product liability, truth-in-lending, unit pricing, open dating or nutritional labeling, a very vital area that concerns every one of us as citizens, has received relatively little attention. This is the area of the electoral process. During the most recent campaign, several areas of consumer¹ dissatisfaction came to light. The first involves the Selection of Candidates of the two parties for the Office of the President. Widespread dissatisfaction was expressed by the electorate as revealed by the polls on the choices of both the Republican and Democratic Parties. Currently, there does not seem to be an organized set-up in either party to screen the candidates and select a few for the primaries. Consequently, almost anyone with drive and ambition, but with or without a proven record of administration, inadequate knowledge in foreign and military affairs, can contest in the primaries. This process results in the most popular, not necessarily the most competent candidates, contesting in the primaries. The sad part of this process is the fact that many extremely talented persons working for business and industry never even get considered for the post. Of course, there is nothing that prevents them from contesting. But, to be nominated by a third person or a party is very different from self-nomination. The parties can take a leaf out of the pages of the selection process of the Deans of Colleges in many universities. Typically, the Dean's search process involves inviting nominations from schools across the nation and sometimes from industry. The Dean's Search Committee (most of whose members are members of the faculty of the specific school for which the Dean is to be appointed) evaluates the nominations, and selects a few (usually less than five) for interviewing and a presentation before the faculty. Out of this pool of five or so candidates, one or two names are recommended to the President, who then chooses the person he thinks is best and appoints him/her. The merit of the above procedure lies in the fact that the faculty spends a considerable amount of time and effort in choosing its leader. Such time and effort, if devoted by the political parties in screening and choosing candidates, would be a small price to pay, considering the fact that the destiny of our nation may be at stake in a Presidential election. This process of

screening at the party level may not eliminate the possibility of a party member from contesting against the Official Party Candidate. But, the chances of such a candidate winning the primaries or the election are minimal.

A second area of dissatisfaction involves the percentage of the electorate participating in the election process. Close to one half of the eligible voters did not vote in the 1980 election. Can any President be legitimately considered as a leader of a nation when one half of its electorate do not exercise their rights of franchise? Large scale voter abstention is not new to 1980. Conceivably, the nonvoters could have led President Johnson to believe that the people approved of his Vietnam policies in greater measure than actually was the case; Nixon to assume virtually unlimited power due to his landslide victory. What is the solution? One option to consider would be the Australian type "Mandatory Voting Law" by which every citizen is required to vote. A second option would be to consider providing some form of tax incentives for those who care to vote.

A third area of dissatisfaction has been the way the networks announced the projected winners. While polling was still brisk in California, one national network announced the projected winner. This announcement made several citizens, particularly in the West, feel that their votes were worthless. Several people who would have otherwise gone to the polls stayed back since the projected winner was already announced. Should networks be prohibited from announcing the projected winners until the polling is closed all over the nation? Of course, networks may argue that all projections could turn out to be incorrect and hence the public need not feel that their vote would always be worthless, but this argument is self-defeating since no network would strive to make a wrong projection and, if anything, networks are constantly trying to improve their projection accuracy.

A related fourth issue has been the fact of the President himself conceding early in the game when polling booths were still open in parts of the country. In such a situation which keeps would-have been voters from turning up at the polls, not only does the President lose some votes, but also some members of Congress who may have otherwise won. The issue is: should the President concede only after polls are closed everywhere in the nation and returns from a substantial majority of the precincts across the nation are in?

There is another, more fundamental area of concern based not just on the present election, but on several past ones and several past years of administration. Any President these days has to face a powerful but fragmented Congress. Consequently, unlike in a parliamentary system where a Prime Minister can form his own government and can be guaranteed that his program will be carried out, the President cannot form "his own government" that will carry out his overall program. The result of this is a tedious and inefficient stalemate, particularly in times when one house of Congress is in the hands of one party and the other in the hands of another like in 1980. Eminent lawyers like Lloyd Culter have, based on the above argument, called for a

¹ All citizens can be considered as consumers of political processes. The parties offer us the 'product' of the 'candidate(s)' and the electorate are the users of these products.

switch to a parliamentary system. The issue here is, although a radical switch to the parliamentary system may not be possible, should some changes be introduced that will help the President govern better? One change could be the conferral of the power of dissolution of the Congress (and call for fresh elections) on the President, if he finds the Congress seriously deadlocked and unmanageable.

Of these issues, the first four are relatively easier to solve than the last one. The intent of this paper has been to focus the attention of consumer activists and academic researchers in the Consumer Behavior area who have long been paying inadequate attention to one of the most vital areas of concern to all of us as citizens. Although there are no easy solutions to the above problems, citizen awareness of the problems and possible alternative approaches to solutions is likely to result in changes leading in the long run, to better governing of ourselves.

Further research is needed to determine the parties' and general public's reactions to these issues and their possible solutions.

ON A NEW RELATIONSHIP BETWEEN PHYSICAL DISTRIBUTION AND MARKETING: ON
DOING FOR MARKETING WHAT IT CANNOT DO FOR ITSELF

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Abstract

Physical distribution systems might become the major, differential advantage over the remaining marketing variables in obtaining profitable, incremental, and long-term sales volume. Specifically, the case study presented in this paper suggests that the market tends to recognize distribution costs and the need for the vendor to protect itself with long-term contracts, and at significantly higher volumes and in the higher margin products.

Background

The idea that customer service levels affect sales volume is not new (Stephenson and Willett, 1968; Perreault and Russ, 1974; Perreault and Russ, 1976). Yet much of the concern for sales volume has been to avoid losing the immediate sales orders because of stock outs, as well as to avoid the loss of some part of the existing customer base to competitors, over the long run (Herron, 1979; Cavinato and Perreault, 1976). Marketing texts (Kotler, 1980; Pride and Ferrell, 1980) are probably the most sensitive to the possibility of actually attracting additional sales through customer service.

The case study presented in this paper, however, goes beyond merely attracting additional sales volumes. It suggests the possibilities for a long term contract for a definite increase in sales volume in return for a change in physical distribution that is of interest to the customer. Such contracts allow the firm to effectively preempt the competition and on a relatively long-term basis as compared with other marketing activities discussed later. To the extent that this ability can become an enduring differential advantage, distribution might become "more equal" among the equals of the marketing mix, thus changing its relationship with marketing, in general.

Several clarifying points need to be made at this juncture. First, since the distribution costs of the contracted change are usually known in advance (or can be estimated within a reasonable range), the profit contribution of the change can also be determined. We prefer, however, to emphasize the revenue (sales) generating potential suggested by the study to avoid confusion with "profits" that are derived mainly from cost savings in the distribution system itself, while delivering a given level of customer service (Herron, 1979; Geoffrion, 1976; Ballou, 1978). In contrast, in the case study presented later, the physical distribution costs actually increase, but are more than offset through far greater revenue which is contracted for and thus determined in advance.

Second, the notion of long-term contracts in sales is certainly not new. Financing and channel relationships are frequently contractual in nature and are typically long term. Our point here is that the more familiar marketing activities for stimulating demand which are associated with the three "P's" of price, product, and promotion (e.g., discount pricing, promotional campaigns, product improvement, etc.) typically do not lead to contracts, much less long term contracts. In general, it is merely hoped that these other activities

will lead to increased sales. That is, they are offered by the firm, but the customer has no reciprocal obligation to buy, as in a contract. (Hereafter, such forms of demand stimulation from these three "P's" will be referred to only as "the other marketing variables" or "the other marketing activities.")

Third, it is envisioned that the specific changes in the physical distribution system to be proposed to the customers will be determined on a customer-by-customer basis rather than by a single, system-wide change (e.g., decreasing order cycle time from three to two days). Such system-wide changes ignore the obvious fact that all clients would not be favorably influenced by any single change (Perreault and Russ, 1974).

Fourth, this paper is based on a single case study which cannot be fully presented because of proprietary considerations. Consequently, the value of the paper lies more in whatever conceptual implications are suggested, rather than as a prescription for widespread practice.

An Example of a New Relationship

American Hospital Supply Corporation's American Dietary Products Division (hereinafter referred to as the "Dietary Products Division") provides an example that illustrates a possible new relationship between physical distribution and marketing. The marketing implications are discussed later.

The Dietary Products Division was formed in 1970 to aggressively market to hospital's food and food service budget. The Division's product line contains approximately 11,000 to 12,000 items ranging from specially prepared meals to completely equipped kitchens to architectural design services for new hospital kitchens. This example pertains to the distribution of prepared (i.e., frozen) meals, although the concept can be generalized to other commodities.

Generally speaking, the meals are prepared for patients who require an exacting type of diet (e.g., low sodium, low fat, etc.). The Dietary Products Division can offer prepared meals reflecting more rigorous controls than are consistently attainable in most hospitals. These meals are then individually packaged, frozen, and shipped to hospitals. Private carriage is used for larger shipments with small ones moving by common carrier. Because the quantity shipped was relatively small, delivery through for-hire carriage became unreliable and was limiting further sales, especially to the smaller, outlying hospitals that usually ordered in the smaller quantities.

Dietary Products then developed and pilot tested the following distribution program for a west Texas hospital of 350-400 beds. This study focuses on this example, although the program is now available to all accounts.

Referred to as the "Frozen Food Purchase Agreement," it operates as follows: if the hospital will contractually obligate itself to increase its annual purchases (in this case, to \$75,000 from its previous volume of

\$20,000) for two years, then Dietary Products will provide a walk-in freezer unit at the hospital's site. The purchases have to result in an incremental increase and in frozen foods rather than a reprogramming of existing purchases or an increase in purchases in other product areas. The freezer, which costs approximately \$5,000, becomes the property of the hospital at the end of the contract. The hospital, however, pays for the electrical hookup, preparation of site, overall installation, maintenance, and utility expenses. Default provisions prevail if the hospital does not buy the contracted amount or desires to terminate the Agreement after the first year. Under these provisions, the hospital agrees to buy the freezer, at successively lower prices over the term of the Agreement. Concerning the prices of the meals, they are listed in an appendix to the Agreement, with future price increases being preceded by 30 days written notice.

Since the inception of the Agreement, in mid 1979, some three more have been completed in the Southwest Region and another eight, nationally. Of the first two, which both contracted for \$75,000 sales, both have actually ordered more than \$100,000, indicating that the hospitals perceive the relationship as beneficial.

Marketing Implications

Several benefits accrue to marketing from the use of such contracts--benefits that might not be obtained through the remaining marketing variables. These benefits suggest the possibilities of a new relationship between marketing and physical distribution.

First, the most obvious result is the quantum increase in sales volume and in a relatively high-margin product line. The increase from \$20,000 to \$75,000 is a 275 percent increase ($\$75,000 - \$20,000 = \$55,000$ increase \div $\$20,000$ base = 275 percent). At \$100,000 the increase is 400 percent. Needless to say, the costs of implementing the Agreement (e.g., the cost of the freezer) need to be subtracted to determine the net contribution. On the other hand, there is the possibility of some savings in reduced freight costs (generally paid by the hospital, however, from consolidations that are now possible. Most of the shipments before the Agreement fell in the "minimum charge" category. For Dietary Products, there are reduced overhead costs such as savings in the sales representative's time on the product line. Whether or not the additional costs can be completely offset through savings, it is relatively certain that there will be a significant increase in total gross margin because the 275-to-400 percent increase is limited to high-margin products. In terms of increasing gross margin at reduced risk, this situation surely compares favorably with a better known marketing alternative of attempting to improve gross margins through, say, new product introductions, which have a notoriously high failure rate (Booz, Allen, and Hamilton, Inc., 1960).

Second, marketing through distribution contracts involves a guaranteed or necessary increase in sales, as previously mentioned. In contrast, the best that can be hoped for at the account level using the familiar marketing tactics is that the sales representative will establish a personal, long term, trust-bond relationship with one or more of the key buying executives. Yet executives come and go, sometimes being replaced by personnel who are committed to competitive products. A contractual relationship, however, endures in spite of personnel changes. (The value of this greater certainty is actually quantified in business valuations, wherein higher price/earnings multiples are accorded firms that have less fluctuation in their earnings, i.e., are more certain.) Moreover, such distribution programs can

elicit contractual guarantees because the client recognizes that the sales representative would have little chance in obtaining authorization for any change that involved a sizable expense (or even an adverse movement in a closely watched statistic such as stock turnover), without a compensating increase in sales or other form of remuneration. Thus the magnitude and long-term nature of physical distribution expenses, become an advantage. They are the very reasons for requesting the protection of a contract, (but one that is on mutually favorable terms). Moreover, these expenses, especially fuel costs and inventory holding costs, are unusually visible and topical because they are currently high by historical standards. They assume an even greater saliency if competitive firms were to cut back their distribution programs.

Third, the contractual relationship preempts the competition as no other marketing activity can. Simply stated, the potential market for competitors is effectively reduced by the amount of the contract. Moreover, even if a competitor were to become aware of the Agreement before it were executed, it might not be able to make an equivalent or similar proposal. Because physical distribution affects so many functional areas, each would have to be contacted and its concurrence obtained (probably after a lengthy study of the financial implications, precedent setting value, etc. in each area.) Given these difficulties, the competitive representative and/or his sales manager might not even make the attempt to respond in kind. Thus the account would be lost almost by default. This reaction is quite different from that of matching a price reduction or countering with another promotional campaign or introducing a similar product. These latter responses are more familiar, simpler, usually well rehearsed, and relatively swift when compared to an in-kind distribution response. Even if the competitor were to decide ultimately to make an in-kind distribution response, the Agreement would probably have already been executed, whereby the remaining volume in the account might not be large enough to justify the effort. It is this preemptive or "first-strike" capability (coupled with the anticipation of a competitive response that might be delayed and relatively ineffectual,) that marketing may find most intriguing about these distribution programs. It may become the differential advantage or the dominant vehicle for securing high levels of profitable business in a hotly competitive marketplace. As such, it might become the means for obtaining the high market shares that tend to correlate with the higher ROI observed in the PIMS literature (Anderson and Paine, 1978; Buzzell, Gale, and Sultan, 1975).

Fourth, the expensive selling effort can be reprogrammed to other accounts or committed to deeper penetration of that account with respect to other product lines. In either case, there is the potential for improving the productivity of the sales force.

Fifth, sales representatives who can market their products through such distribution arrangements (vis-a-vis the more common approaches, exclusively), may tend to be viewed as more of a consultant in the eyes of the client. Moreover, because a significant dollar volume and a long-term contract is involved, the client's top management might become involved. This could also be viewed as an opportunity for the client's purchasing personnel to receive some recognition for their role, which would do the selling relationship no great harm.

Sixth, the Agreement represents good marketing practice in general, because it responds to a particular distribution need of the client. As such, the physical distribution needs would be assessed on an account-by-account basis by the sales representative, assisted by

his traffic or distribution manager. The appropriate "distribution mix" would be developed, its profitability estimated, and, if it met profitability standards, presented to the client. The inherent responsiveness of the account-by-account approach also remedies the previously mentioned failing of instituting a system-wide distribution change for all accounts. In fact, the system-wide approach is reminiscent of the "production orientation" period in the development of marketing thought, in which the producing firms decided on the product, price, promotion, (and distribution) that they preferred to offer the market(s). However, as competition began to emerge, the firms that were to operate profitably and thus survive, implemented the marketing concept, developing options or mixes in products, pricing, and promotion in an effort to better respond to the different needs of the clients. As such, the Frozen Foods Purchasing Agreement can be viewed as an illustration of the marketing concept being extended to physical distribution through the development of distribution mixes that better meet the needs of the various clients than did a single, system-wide distribution approach.

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DIS-INTEGRATION AND RE-INTEGRATION STRATEGIES: ALTERNATIVES TO VERTICAL INTEGRATION

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Abstract

Much has been written about the advantages of vertical marketing systems. However, very little has been written about why VMS companies might decide to "dis-integrate" or "re-integrate" their corporate structures. This paper explores reasons why a company might wish to utilize the latter two strategies.

A vertically integrated organization may experience many disadvantages from such an arrangement ... It is not the "open sesame" to assured profits and continuous prosperity (Cole, 1952, p. 30).

In the 1970s, vertically organized marketing systems became the most prevalent distribution mechanism in the U.S. economy. By extending their marketing channels an additional stage toward either the basic material or retail activity, many companies achieved a strengthened negotiating position, eliminated duplication of services, and reduced per unit expenses. Yet, in some instances, cost increases and diseconomies of scale dissipated the advantages of vertical integration.

In a dynamic economy, with every firm's marketing environment subject to substantial and sudden alteration, it is essential that the extended organization periodically re-evaluate its marketing strategy to determine the advisability of continuing the status quo. A systematic annual review of marketing activities can help to determine the opportunities which exist for continued vertical extension. Additionally, an assessment may disclose any largely disjoint or marginal activities which, if divested, could impact favorably upon the firm's profit picture.

Vertical Marketing Systems

In the evolution of marketing channels, vertical marketing systems become a necessity for many companies that had reached their full potential in their primary activity. As such, these companies felt the need to acquire additional stages in the product-market chain to maintain or improve profitable performance.

Vertical integration strategy may be an extension of firms' activities "backward" to a supply or "forward" to distribution. This extension development basically appears in three forms:

1. Corporate vertical marketing systems (VMS) where a firm owns and controls more than one stage of the marketing channel, such as production, wholesale, and retail operations;
2. Administered VMS, where a single company exercises significant economic and "political" clout over other channel members; and
3. Contractual VMS which are independent firms at different levels in a channel which integrate their activities on a contractual basis. A franchise is an example.

The Case for VMS

There are several benefits to firms which vertically integrate, most of which abound in the literature. For example, in the case of "backward" integration, the firm has access to a predictable source of supplies and has control over product quality. Through "forward" integration, the firm insures distribution outlets to the market and has some measure of control over the consistency of its product offering. These are major benefits derived by the oil companies, fast-food franchisors, iron-steel companies, the automobile companies, etc. With the kinds of advantages a VMS has, are there any reasons to either "dis-integrate" or "re-integrate"? If so, what are the conditions for a change in strategy? In the following sections we describe several that management should review on an annual (or continuing basis) to determine possible disintegration or reintegration needs.

Dis-Integration Strategy

A dis-integration strategy is one in which a vertically integrated company disengages from its relationships with one or more companies in the VMS. It therefore represents a shrinking of the firm's activities.

Circumstances which might suggest the need for a reversal from continued vertical integration to dis-integration are briefly described:

1. When a VMS is perceived by consumers, consumer groups and/or the government or its agencies as a company having antisocial properties, then the VMS company must either attempt to change those perceptions, consider dis-integration, or await government action to dismantle the structure. This condition alone may not warrant an immediate decision to dis-integrate. However, this condition coupled with others described here may strongly suggest the change in strategy.
2. In a situation where a VMS company sees current or pending instability within foreign countries (governments), management may seriously want to consider dis-integration when, for example, their suppliers exist within those countries. This condition is particularly critical when the firm's sole suppliers are in potentially turbulent and unstable countries.
3. In another situation, companies must attempt to objectively view management's egos. In some cases top management continue to integrate beyond a point where it is economically efficient to do so. Their egos are expanded with the company. This is particularly true for small firms who typically do not have the resources and management skills to handle further extension. Large firms may "get away with it" but still operate less profitably at the "over-extended" level.
4. When a VMS company finds that its fixed costs relative to its total costs are increasing,

the company should consider a disintegration strategy because of higher risks. The company may have either, through its integration activities, acquired a higher fixed costs to total costs ratio or changes may have occurred which placed the company in that situation. Either way, the higher risk may imply divestment of one or more activities in the VMS.

5. Where market conditions change and intermediaries begin to operate at lower levels of transaction costs, a VMS company might realize economies by disengaging from similar operations within its own system. With a purer form of competition in the intermediary markets, lower prices can be realized by "independents", whereas the VMS intermediaries are likely to be burdened by bureaucratic costs of the system. Therefore, a disintegration strategy may prove more profitable.
6. Sometimes VMS companies become lethargic and lack the innovative thinking that made them successful. Either the company must attempt to revitalize that innovative spirit or go back to what made them successful in the first place. Therefore, disintegration is an option.
7. A VMS company that faces labor problems or powerful labor unions may wish to disengage from that element of the company. Higher than "normal" wages, potentially, frequent strikes, and "unreasonable" demands, holdups, etc. may suggest divestiture of that part of the VMS.
8. A corporate VMS which faces rapidly expanding sales may find that it does not have the managerial and financial resources to administer to all channel levels. Thus, the rapidly expanding VMS may have to employ independent intermediaries rather than expanding its own.
9. Where the "captain" of the administered VMS is a manufacturer, discounts and promotions to wholesalers and retailers is the firm's primary set of promotional tools. If costs of these tools, however, begin to rise rapidly and if prices to consumers are highly elastic, then these costs may be unaffordable to the manufacturer. Therefore, the manufacturer may decide to disintegrate.

The conditions described above are some of the concerns that VMS firms should evaluate on a periodic basis to determine whether continued use of a VMS strategy is in their best interests or whether a disintegration strategy might be a more profitable alternative. In most cases more than one of these conditions should exist before a change in strategy becomes imperative.

The Re-integration Strategy

If the marketing system requires a scale of activity different from the existing form, yet indicates no need for dis-integration, then another strategic alternative is re-integration. A re-integration strategy is one in which the firm changes from one kind of VMS to another kind of VMS (such as administered VMS to corporate VMS). Some of the same conditions mentioned above for consideration of a dis-integration strategy apply to the consideration of re-integration strategy. That is, these considerations are not mutually exclusive in deciding whether to change from a VMS to either dis-integration or re-integration.

Additional situations which may contribute to management's thinking about switching from one form of VMS to another (i.e., re-integration) are briefly described below:

1. A franchising (contractual) firm may be concerned that its franchisees are not performing as the firm would like and, therefore, change from the franchise version of the VMS to the corporate version to gain more control and uniformity of operations. In the franchise situation, these variations are very often difficult to change since member firms possess considerable autonomy.
2. A franchising firm may face difficulty in raising capital for expansion and modernization when compared with units in a corporate system which often has easier access to the capital market. Therefore, it might be advantageous to consider the change to a corporate VMS to gain more financial, administrative, and marketing control.
3. A firm in the administered system might wish to gain more control over other activities. For example, a department store chain might decide to buy its suppliers instead of using them on an "outside" basis and thereby reduce uncertainty and costs related to the supply-production-marketing relationship. This example illustrates a re-integration strategy from administered VMS to corporate VMS.

Although the number of situations presented for a dis-integration strategy "outnumber" the ones described for re-integration, many of the same criteria apply to both. Therefore, the reader should examine each criterion as a possible reason for considering a change from the presently held integration strategy. The reasons may not be overwhelming, nor compelling, but should be analyzed in terms of whether the firm should continue its present course of action.

Conclusions

It is interesting to note that the same criteria basically apply to a decision of whether to remain in the same integrated system, change to a dis-integrated system, or change to a re-integrated system. These reasons for continuance or change are (1) economic, (2) communications changes, (3) competitive changes, (4) technological and innovative changes, (5) social shifts, (6) legal changes, and (7) control/administrative reasons.

Thus, a firm must examine the reasons they had for vertically integrating to understand why they might need to vertically dis-integrate or re-integrate. Through such an analysis on a periodic basis, a company can discern the best course of action given the changing environment.

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DEREGULATED MOTOR CARRIER INDUSTRY -- MARKETING IMPLICATIONS

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Abstract

The passage of the Motor Carrier Act of 1980 represents a major change in the transportation regulatory environment. The 1980 Act is often called a deregulation law. Some experts point out that it really involves regulatory reform or reregulation since its enactment did not free motor carriers from economic regulation. Without question, the 1980 Act has promoted greater reliance on market forces. Therefore, the marketing of motor carrier services has had to change.

The purpose of this article is to cover important changes in the marketing of motor carrier services stemming from the 1980 Act. Results of a small survey of motor carrier executives will be presented in conjunction with some generally published observations on the trucking industry.

Changes in the Law

A wide range of modifications were included in the Motor Carrier Act of 1980. The most important revisions are briefly summarized in this section. (see Lieb, 1981; Fair and Williams, 1981)

Statement of National Transportation Policy

A paragraph was added to the Statement of National Transportation Policy. The paragraph represents a new regulatory philosophy that places greater dependence on competition to assure more efficient use of resources in meeting the needs of shippers, receivers and consumers.

Entry Controls

The Motor Carrier Act of 1980 reduced the difficulties connected with a carrier's entering or extending its service in interstate commerce. Applicants for a common carrier certificate must still be fit, willing, and able to serve. However, applicants no longer have to prove that the proposed service is responsive to public demand and need. Opponents of a proposed new service now must shoulder the burden of proof against the prospective entrant. Furthermore, a number of situations are outlined in the 1980 Law in which being fit, willing, and able is the only entry requirement.

Reduced Operating Restrictions

Under the 1980 Statute, the ICC was directed to: remove all gateway restrictions and circuitous route limitations; reasonably broaden categories of commodities a carrier could transport; authorize service to intermediate points on a carrier's routes; sanction round trip authority where only one-way authority existed; do away with unreasonable territorial limitations; eliminate restrictions that waste fuel, produce inefficiency or are contrary to the public interest.

Contract carrier restrictions have been modified. Entry is now less difficult. Contract carriers are no longer limited to: serving eight or less shippers (rule of eight), or any area, or any industry. Joint ownership or control of common and contract carrier service in the same territory is now easier to obtain. Also carriers that have dual authority are now allowed

to transport both common and contract traffic in the same vehicle at the same time.

Integrate for-hire operations by private carriers has been authorized when the corporate parent directly or indirectly owns 100 percent of the subsidiaries involved. Notice of such operations must be filed with the ICC.

Rate Making

Motor carriers and freight forwarders are now accorded a zone of rate making freedom (zone of reasonableness). A rate may be increased or decreased from the previous year's rate as much as 10 percent without ICC approval. The commission is permitted to allow an additional 5 percent rate increase if sufficient competition exists. Beginning in mid-1982 the ICC can allow a 5 percent increase to cover inflation and later increases are to be based on the Labor Department's producer's price index.

The ICC is required to authorize rate levels that are sufficient to permit well managed carriers to earn a fair return on investment. The commission retains the power to suspend a proposed rate on the basis that it is discriminatory or predatory.

Rate Bureaus

Rate bureaus have been curbed. In general, a group of carriers can no longer use the protective confines of the rate bureau to stop a carrier from changing its rates. Rules and rate proposals must be processed within 120 days. Members of a rate bureau are still allowed to discuss and vote on general rate changes, changes in commodity classifications and class rate structures. The Motor Carrier Act provides for the ending of collective rate making in bureaus after January 1, 1984 or sooner if the ICC chooses.

Other Provisions

A large number of other provisions are contained in the 1980 Statute that will not be covered in this article.

Developments in the Motor Carrier Marketplace

At the time of this article, more than a year had passed. A number of developments have emerged in the motor carrier marketplace. New marketing strategies and tactics have been employed by carriers.

Meanwhile, shippers have faced new opportunities and challenges. From a broader perspective, economic features of the motor carrier industry have altered. Various changes in these three related areas are discussed in this section.

Some opinions of motor carrier executives taken from a small survey will be presented.

Study

In the fall of 1980, 108 questionnaires were sent to common motor carrier executives throughout the U.S. The survey targets were chosen so that a balanced mix of various size firms and regions were included. After

one mailing, twenty usable responses were returned. Resource and time limitations precluded a larger or more extensive data collection effort.

Characteristics of the respondents include the following:

- half or more of them had operating authority in the mid-Atlantic and east-north-central ("midwest") states
- average number of terminals in their systems was 25
- average number of employees was 1160
- sales volume ranges - 9 with less than \$25 million, 6 between \$25-\$50 million, 1 between \$51-\$100 million, and 4 between \$101-\$500 million (note the top ten carriers in the U.S. had revenues above \$241 million and the top five had revenues above \$586 million in 1980)
- normal length of haul ranges - less than 50 miles - 2; 51-150 miles - 3; 151-300 miles - 8; 301-500 miles - 3; 501-1000 miles - 3
- operating ratios
81-90% - 2; 91-95% - 6; 96-100% - 9; over 100% - 1

Thus, a wide range of motor carriers are represented in the responses. However, the results of the survey are not scientific due to the judgemental selection of the survey list. Also, biases in the returned data are quite possible and considerable sampling error is possible due to the small number of responses. Nonetheless, information from the survey can be used to suggest hypotheses and to indicate some opinions and reactions of the wider motor carrier executive population.

Assessing Changes and Confounding Factors

Two confounding factors must be mentioned before discussing developments related to the 1980 Law in the trucking industry. First, gauging the effect deregulation is difficult because the economy has been sluggish since mid-1980. (Moskal and Verespej, 1981; Business Week, November 9, 1981; Williams, 1981) Tonnages hauled during 1980 were less than in 1979. By the end of 1981 a recession had been officially announced in Washington. Second, the real effects of deregulation depends substantially on interpretations and implementation of the rules by the Interstate Commerce Commission. The ICC must make specific definitions of key terms mentioned in the more broadly stated Statute. Specific definitions in turn form the basis for rule-making. (Moskal and Verespej, 1981) The ICC can also strictly and narrowly interpret both new and old rules. Thus the quasi-legislative and quasi-judicial powers of the ICC can be used to either speed or retard deregulation. The present (December 1981) ICC Chairman, vis a vis the previous Chairman, has been conservative in interpreting the act thus there is some uncertainty regarding the extent of trucking deregulation that will be permitted. (Business Week, November 9, 1981)

Customer Orientation and Research

Since the passage of the act carriers have placed more emphasis on marketing. "The new competition puts a premium on marketing. Before, says John F. Throckmorton, vice president at A.T. Kearney Inc., transportation consultants, the approach was 'Here we are - ship with us.' Now marketing is becoming more important. Carriers are offering more services and are tailoring them to shippers' individual needs." (Business Week, November 9, 1981) [Throckmorton also said] "Trucking companies that two or three years ago wouldn't have considered branching out are now thinking about leasing,

warehousing, and whatever the shipper needs..." (Moskal and Verespej, 1981)

Marketing research has a more important role as carriers seek to discover customers' needs in a less regulated market. Sixteen out of the twenty carrier executives in our survey felt that more marketing research activities would be needed in their firms. Twelve of the twenty respondents believe that more research and development efforts would be made.

Service Line Strategies

The battleground that will have the most profound strategic effects is in the market for less than truckload (LTL) service. LTL business provides the biggest carriers with about one-third of their tonnage and half of their revenues. The biggest carriers are now seeking expansion in LTL markets now that truckers can go after one another's customers. Expansion of LTL services leads to the following related increases by carriers: greater numbers of points served; more investments in terminals and vehicles; more consolidating and distributing service; and more employees. As evidence, "Yellow Freight Systems, Inc. [third largest] opened 100 new terminals from July 1980, to July, 1981 ... Consolidated Freightways, Inc. [second largest] ... plans to expand to 506 terminals from today's 334 by the end of 1982 ... roughly 50 truckers ... have gained the right to transport any cargo in the 48 contiguous states [whereas no carrier had that broad an authority prior to 1980]" (Business Week, Nov. 9, 1981) "Overnite Transportation Co. [tenth largest] ... serves 16,000 points [in mid 1981] ... up from 13,400 [in mid 1980]." (Williams, 1981)

In our survey, at least half of the respondents felt that their firms would increase the following: LTL service, number of terminals, points served, routes served, consolidation work, and distribution service. For the most part, the respondents who did not foresee increases in these areas for their firms did expect no changes.

Meanwhile, in the truck load (TL) service market, strategic marketing changes are taking shape. As seen above, the larger common carriers are going after LTL business. Under the new law both new and old nonunion owner-operators have aggressively enlarged their share of the TL common-carriage market. Large unionized common carriers cannot profitably compete, especially on outbound traffic. At the same time, small operators cannot support a network of terminals needed to conduct LTL service.

Contract carriers can now serve more than eight shippers. The number of long-term contracts has increased by almost half to a total of about 4,300. (Business Week, Nov. 9, 1981) The increases have been in connection with TL shipments, not LTL shipments. Shippers have cut the number of contract carriers with whom they deal in order to press for lower rates and better service. As a consequence, small contract carriers are being squeezed out while bigger ones are expanding.

The surveyed common carrier executives in our study were consistent with the generally observed LTL, TL shifts. Most of them expected their firms to lose LTL business while they gained in LTL business.

Pricing

According to one expert, during the first year under deregulation trucking rates increased by about 12 percent overall but discounting by certain leading car-

riers kept the overall rise from being higher. (Williams, 1981) The overall increase is largely due to inflation as most truckers suffered lower profits or losses.

Almost all of the respondents in our survey felt that long run rates would increase. A mixture of rate movements occurred among the respondents' firms. Half of them had increased their rates, a quarter of them had made no change and a quarter had made decreases. All respondents agreed that there would be price wars under deregulation.

More competitive emphasis on pricing is attributable to two causes: first, the weak economy has forced carriers to try to stimulate demand with discounts, and second, carriers were using lower prices to get new customers and to keep old ones. Aggressive pricing is being used by: large common carriers as they enlarge their share of the LTL business, nonunion owner operators as they increase their participation in the common carrier TL business, and large contract carriers as they compete for more TL business.

The long term effect of opening a ratemaking zone of reasonableness should be to push each rate closer to the true cost of service. Premium service will command a premium price while slower service will move at lower prices.

It is possible that ignorance of true costs on the part of some discounting carriers and predatory pricing on the part of some other carriers will occur. In addition, harmful price discrimination could occur when a carrier differentially charges various shippers for similar services. Recall that the ICC does retain the power to suspend proposed rates if the rates are deemed discriminatory or predatory. Thus the ICC still has considerable power to restrain carriers from using some new rates.

Promotion

Many carriers will be increasing their sales forces as they attempt to expand under deregulation. Half of the respondents in our survey had increased their sales forces. The other half had kept the same sales force size. An example of an aggressive promotional effort is provided by Overnite Transportation Company. Overnite, the tenth largest carrier, cut its rates 10% (maximum allowable) and hired 20 more salesmen for its expanded territory. (Williams, 1981)

The Shipper's View

A number of changes have occurred on the buying side of the trucking market. Some of the changes are covered in this section.

Generally speaking, shippers have been pleased with the broader services and more competitive rates that are available under the new competition. For example, a Boston management consulting firm conducted a survey of large manufacturers (2200 surveyed, 10 percent responded) and found that 65 percent replied that they favored deregulation by a three-to-one margin. (Williams, 1981)

Some shippers have bargained very aggressively in a buyers' market for trucking services.

Railroads and motor carriers have more flexibility in competing for traffic and therefore traffic managers in shipping firms have to be more skillful and analytical in buying transportation services.

Shippers will now have to make more complex decisions in managing their traffic because:

1. it is difficult to determine what various carriers are charging in searching for an optimum rate
2. it is difficult to know what competitors are paying for their services
3. it is possible that other shippers may foreclose options through adept negotiations with key carriers
4. a new set of revenue-cost trade-offs associated with rail, motor carrier, and private fleet options must be analyzed.

Thus, traffic executives will have to be competent managers who make use of computerized information systems.

The process of carrier selection by shippers has been affected by the new regulatory climate. The motor carrier executives in our survey perceived that shippers' rank selection factors as follows: first, delivery reliability; second, rate charged; third, speed of delivery; and several other factors at lower levels of importance. As a result of deregulation, the surveyed executives felt that the rates charged had changed the most in relative importance. They also believed that the carrier's financial position and the carrier's ability to provide error free service had gained significantly in relative importance. These three changes seem to reflect the shippers' need to choose low cost carriers while not risking disrupted or inadequate transport services.

In the contract carriage business the shippers have reduced the number of carriers they deal with (evoked set) in order to place negotiating pressure on carriers that they use. (BW p-70) (Business Week)

Some Macro Changes

The general shape of the transportation industry is shifting under the new legal environment. A number of changes are occurring in regard to entry and exit, mergers, sharing of traffic among the legal categories the carriers, intermodal competition, and various public sectors. These changes are briefly discussed in this section.

Entry to the industry was made easier under deregulation. In the first year of deregulation there was a net increase from 17,000 to 18,000 interstate common carriers despite the failure of several hundred carriers. (Williams, 1981) Hence, it was not surprising that the respondents in our study indicated that entry would be easier and that more owner-operators would enter. However, the motor carrier executives were uncertain regarding the long term prospects of the small owner-operators. Marginal carriers will be shaken-out especially during the present recession. Also, most of the survey respondents felt that mergers and acquisitions would increase.

It was the opinion of the surveyed carrier executives that contract and private motor carriers would increase their shares of overall traffic while the common carrier share would decrease. These opinions are not surprising. It may turn out that private carriage the new competition under deregulation will lessen the attractiveness of the private alternative. (Moskul and Versepj, 1981)

The motor carrier executives in our study on an overall basis weren't sure how much of a threat is posed by the railroads which have also been deregulated. Both modes appear to be concentrating more on intramodal competition to date.

In connection with various public sectors, there will be less cross-subsidization by big shippers for small shippers and by urban centers for rural areas. Political actions will determine to what extent and how rapidly cross subsidization will be diminished.

Conclusions

Both buyers and sellers of motor carrier services have had to develop new marketing strategies and tactics under a changed regulatory environment. Carriers have to be adept in marketing, especially in marketing segmentation and pricing. Shippers will truly have to be traffic managers.

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A COMPARATIVE STUDY OF FACILITY LOCATION SOLUTION TECHNIQUES

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Abstract

This paper describes and presents the results of an experiment dealing with facility location problems which differ with respect to their size -- the number of facilities and markets considered -- and the complexity of their cost functions. The research reported here describes the results obtained when examining two vastly different solution techniques and their applicability to different types of problems. It is especially useful because it deals with two questions which have received little attention to date:

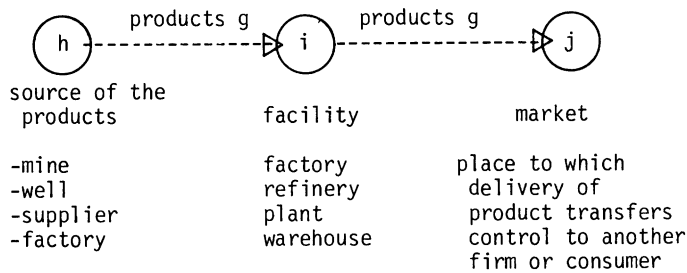
- 1) Do differences in the complexity of the cost functions affect the ability of specific solution techniques to solve the problem?; and
- 2) Does the size of the problem, that is, the number of location alternatives affect the ability of a specific technique to solve the problem?

The location problems considered in this paper are simplified ones. However, it is possible to use similar research techniques to examine the effect of using various solution methods with a set of more complex problems.

Introduction

The general mathematical formulation for the location-allocation problem is a multi-echelon, multi-product, and multi-location one. **Figure 1** illustrates the physical flow of products depicted by the mathematical model used.

FIGURE 1
Physical Flow of Goods



The objective function is

$$\text{MAXIMIZE } P = M \sum_j D_j - [\sum_{ghij} (A_{ghi} + B_{gij}) X_{ghij} + \sum_i F_i Y_i + \sum_i W_i (\sum_{ghj} X_{ghij}) + \sum_i \bar{X}_i + P \sum_j X_j] \quad (1)$$

Subject to the following constraints:

$$\sum_g \sum_i X_{gij} = D_j \quad (2)$$

The summation of all products g traveling from all facilities i to market j equals the total demand for all products at market j . The notation and the general formulation assumes that market j can receive goods from various facilities i .

$$\sum_{ij} X_{ghij} \leq Z_{gh} \quad (3)$$

The capacity of source h to product (mine, pump, ship) cannot be exceeded.

$$\sum_g \bar{X}_{ij} \leq T_i \quad (4)$$

The number of units of all products flowing through facility i cannot exceed the facility's capacity.

$$D_j = \sum_g X_{gj} \quad (5)$$

The total demand for all products g at market j equals the total demand, D at market j .

$Y_i = 0$ if warehouse i is not used (closed).
 $= 1$ if warehouse i is used (open).

Where:

P is the firm's profit for one year.

M is the gross profit margin per unit (expressed in dollars or physical units), computed as the sales price minus the production cost.

D_j is the demand for all goods at market j . This market can be either a retail market or a wholesale market. It is at market j that the firm loses its direct control over the product.

A_{ghi} is the transportation cost for product g from source h to facility i . The cost function can take any form, i.e., linear, concave, convex, step, fixed plus variable cost, or may even be discontinuous.

B_{gij} is the transportation cost for product g from facility i to market j . These costs can take the same variety of forms as can the cost function for the movement of goods from sources to facilities.

X_{ghij} is the number of units of product g coming from source h going through facility i and finally travelling to market j .

F_i is the annual fixed cost of operating facility i .

Y_i is a zero-one variable which indicates whether a facility at location i is open ($Y_i=1$) or closed ($Y_i=0$).

W_i is the variable portion of the warehouse operating cost at facility i . This cost can take a linear, concave, convex, step function, or discontinuous form. It is expressed either as a cost per unit of sales or as a cost per dollar of sales.

I is the holding cost for the average inventory level at facility i , $\bar{X}_{i,g}$.

P is an explicit or imputed penalty cost arising from the delay of product X at market j . This penalty could take the form either of a lost sale or in a price reduction granted the buyer due to the delay. It also could represent the opportunity cost arising from having to delay billing the customer as a result of the late delivery.

- Z_{gh} is the capacity or ability to make good g available at source h . This may be the production capacity to produce good g at plant h in some settings.
- T_i is the capacity to handle goods or throughput at facility i .
- $X_{i,g}$ is the average inventory level for all products g at facility i .

The problems associated with collecting all of the relevant data for such a large problem are enormous. Simply finding the exact nature of the various cost functions may involve making various compromises. The great number of variables involved due to the large number of products and customer demands, the many types of labor costs and the variations in these costs in different geographical areas and the several special types of freight rates which apply in different geographic regions all combine to create an even more complex exercise. Earlier attempts to solve the very real location-allocation problems in these general terms have been quite specific and limited due to these considerations. [7]

Simplifying Assumptions

We use several simplifying assumptions which make it possible to apply more solution techniques and to reduce the computation time required. Specifically, we do the following:

- 1) The multi-product subscript g is dropped and all product are combined into a common product expressed in terms of pounds of product demanded;
- 2) The inventory holding cost is eliminated;
- 3) The penalty cost is dropped and assumed that demand is met on time;
- 4) The problem is simplified from a three-echelon to a two-echelon one, sacrificing realism in order to reduce dramatically the solution time;
- 5) A perfect demand forecast is assumed, in effect assuming a fixed total contribution margin;
- 6) There is unlimited capacity at the facilities; and
- 7) There is unlimited availability of goods.

These simplifying assumptions reduce the problem to a model with the following objective function:

$$\text{Min } Z = \sum_{ij} C_{ij} X_{ij} + \sum_i W_i \sum_{ij} X_{ij} + \sum_i F_i Y_i \quad (7)$$

$$\text{subject to: } \sum_i X_{ij} = D_j \quad (8)$$

$$Y_i = 0 \text{ if facility } i \text{ is not used (closed)} \quad (9)$$

$$= 1 \text{ if facility } i \text{ is used (open)}$$

where:

C_{ij} is the unit transportation cost from facility i to market j

X_{ij} is the number of pounds of product transported

$\sum_i W_i \sum_{ij} X_{ij}$ is the variable portion of warehouse operating cost

F_i is the fixed cost of operating or opening facility i for one year.

Although this model looks rather simplistic, for research purposes there is a great deal of complexity. The type of cost functions, whether linear or non linear; the size of the location-allocation problem; and the relationship to the costs to each other leave the researcher with many important research questions.

This paper presents the experimental design for examining two solution techniques. However, for brevity, we evaluate only a fractional factorial design in this paper.

Experimental Factors

Nine experimental factors are included in this research. These appear below along with a brief description of the factor levels for each factor. The cost functions used in the study are camouflaged cost functions developed from accounting and traffic department data for a company during 1974-1976. The demand matrix was developed from the 1975 sales data.

One of the nine experimental variables is the solution technique. The research considers the two as described below:

- 1) A simulation method which can determine the value of the objective function for virtually any location-allocation problem and any formulation of cost function.
- 2) A modified Baumol and Wolfe technique in which a fixed opening or operating cost, F_i , is allocated over the facility throughput.

Ideally, it would be more interesting to investigate more solution techniques, such as [1], [4], and [5]. But this research lays the ground work for further investigation of other techniques. The two solution techniques that were chosen were both easily programmed and depicted vastly different types of solution models.

Exhibit 1 summarizes the remaining nine factors and their factor levels.

EXHIBIT 1
Description of Factors and Their Levels

Factor	Level
2- Transportation Cost Function	1- linear outbound cost function 2- step cost function 3- concave transportation cost function
3- Weight or Importances of Transportation Cost Relative to Other Costs	1- Cost set at value=1.0 (equal to actual cost) 2- Cost set at value=2.0 (double actual cost)
4- Type of Variable Warehouse Operating Cost	1- Linear warehouse operating cost function 2- Concave warehouse operating cost function
5- Weight or Importance of Variable Operating Cost	1- Cost set at value=1.0 (equal to actual cost) 2- Cost set at value=2.0 (double actual cost)
6- Fixed Operating or Opening Cost	1- Small (\$7,000) 2- Medium (\$43,000) 3- Large (\$86,000)
7- Customer Service	No penalty cost, but we set <u>a priori</u> a service distance limit which the solution technique must take into consideration. Levels are: 1-400 miles; 2-700 miles; 3-No distance limit.
8- Location Flexibility of Market Structure	1- Regional location--only certain cities may contain facilities, with regional limits on total number of facilities 2- Can locate facility at any city in the solution matrix
9- Size of Test Problem	1- 86 possible locations 2- 49 possible locations 3- 23 possible locations

Given the nature of the nine factors considered in this research, it would be necessary to run 2,592 experiments in order to do only one replication each of the possible treatment combinations. Financial and time considerations obviously rule out such an approach. Therefore, we developed a fractional factorial approach in an effort to make a determination of the most significant of the nine factors.

A fractional factorial was developed from a 2^9 factorial design. We perform two 2^{9-5} fractional factorials in order to confound most of the higher order effects while still allowing all of the main order effects to be determined. Two fractional factorials are analyzed for two important reasons. First, we feel that the size of the test problem is very important. Consequently, we ran one fractional factorial with the ninth factor having a low level of 23 possible locations. We ran the second with a low level on the ninth factor of 49 possible locations. Second, we wish to prevent a large variance in the solutions from distorting the results. One of the solution techniques in the fractional factorial is the simulation method which depends on the honesty and the willingness of the subject to search for a long time to obtain a good solution. It is possible for an unwilling subject who performs very poorly to prevent the simulation solution technique from producing the best solution of which it is capable.

Factors Included in the Fractional Factorials

Exhibit Two shows the factors included in fractional factorial #1 and #2, along with their levels in each phase.

EXHIBIT 2
Factors Used in Fractional Factorials and
Their High and Low Levels

Factor	High Level	Low Level
Fractional Factorial #1		
1- Solution Model	Baumol-Wolfe	Simulation
2- Transportation Cost Function	Linear	Concave
3- Magnitude of Transportation Cost Function	Actual Cost *2	Actual Cost *1
4- Variable Warehouse Operating Cost Function	Linear	Concave
5- Magnitude of Variable Warehouse Operating Cost Function	Actual Cost *2	Actual Cost *1
6- Magnitude of Fixed Warehouse Operating Cost	High (\$86,000)	Low (\$7,000)
7- Limit on Service Distance	No Limit	400 Miles
8- Freedom in Locating Facilities	Locate at any Market	Regional Location
9- Problem Size	86 Markets	23 Markets

Fractional Factorial #2		
1- Solution Model	Simulation	Baumol-Wolfe
Factors 2-8	Identical to #1	Identical to #1
9- Problem Size	86 Markets	49 Markets

Experimental Setting

We performed the experiments on a Harris S120. The simulators used CRT screens and on-line program. All location patterns and their associated costs were shown to the simulators immediately on the CRT screens and also were recorded on a disc file for future printing. The simulators were able to change the location

and the allocation patterns at once and would immediately see the results of their decisions on the CRT screens. Simulators had the option either of inputting their own allocation pattern or of permitting the computer program to determine the allocation pattern by letting the closest facility to a given market service it.

The simulators consisted of two groups of students, one being an undergraduate class in Production/Operations Management and the other an MBA class in Production/Operations Management. Each student was given two experiments to perform. We expected to see little evidence of a learning curve effect since the two experiments differed greatly with respect to the problem location size and to the type of cost functions used. The students had virtually unlimited time to solve the problems, and many spent 10-15 hours on the two experiments.

During the course of the experiment, only one problem in the simulation program arose. The original simulation computer program permitted no more than 30 facilities to be open simultaneously. When the F_i cost was very small (\$7,000) and the transportation cost was weighted at twice its actual cost, students repeatedly expressed the desire to open more facilities.

There were two basic steps to the Baumol-Wolfe solution technique. First, the transportation algorithm determined the initial solution using the stepping stone method. This meant that the number of iterations needed to solve the transportation problem usually was as great as the number of possible locations. An iteration took eighty seconds or more for the large problems.

Second, once the transportation problem was solved, the computer program determined the throughput for each facility and allocated the fixed warehouse operating cost over the throughput. The program then added this fixed cost allocation to the unit transportation cost, C_{ij} , and solved the transportation problem again. Next, the program determined the throughput for each facility, allocated the fixed cost over the throughput, and computed a revised unit transportation cost before, once again, solving the transportation problem. This process was repeated until two consecutive solutions were identical. Finally, as a check, one further re-allocation and solution was performed.

The total run time for the larger problems ranged from four to five hours, while the run time for the smaller problems was approximately twenty minutes. The CPU time was approximately eighty percent of the total run time.

Table 1 and 2 presents the confounding schemes and the total costs for the two fractional factorials. Remember that the Baumol-Wolfe approach assumes linear transportation costs. Remember also that this modified approach assumes warehouse costs consisting of a fixed component, F_i , and a variable operating cost element which is linear. In cases where the experiment calls for using a concave cost function, we use a linear approximation with the Baumol-Wolfe approach. Consequently, once the Baumol-Wolfe technique yields a solution, it was necessary to run the location-allocation pattern on the simulation model using the actual cost functions for the experiment.

TABLE 1
Confounding Scheme and Results of
Fractional Factorial #1

Run #	1	2	3	Factor 4	5	6	7	8	9	Total Cost
1	L	L	L	L	L	L	L	L	L	2,630,353
2	H	L	H	H	H	L	L	L	H	9,406,837
3	H	H	H	L	H	L	L	H	L	5,158,121
4	L	H	L	H	L	L	L	H	H	4,665,992
5	H	H	H	H	L	L	H	L	L	2,944,606
6	L	H	L	L	H	L	H	L	H	8,674,325
7	L	L	L	H	H	L	H	H	L	4,726,436
8	H	L	H	L	L	L	H	H	H	5,460,915
9	H	H	L	H	H	H	L	L	L	5,670,227
10	L	H	H	L	L	H	L	L	H	6,574,636
11	L	L	H	H	L	H	L	H	L	3,787,125
12	H	L	L	L	H	H	L	H	H	9,771,178
13	L	L	H	L	H	H	H	L	L	5,905,865
14	H	L	L	H	L	H	H	L	H	5,613,288
15	H	H	L	L	L	H	H	H	L	3,389,867
16	L	H	H	H	H	H	H	H	H	10,286,564

Factor 1: H = Baumol-Wolfe
L = Simulation
Factor 9: H = 86 markets
L = 23 markets

TABLE 2
Confounding Scheme and Results of
Fractional Factorial #2

Run #	1	2	3	Factor 4	5	6	7	8	9	Total Cost
1	L	L	L	L	L	L	L	L	L	4,717,271
2	H	L	H	H	H	L	L	L	H	9,406,837
3	H	H	H	L	H	L	L	H	L	9,098,631
4	L	H	L	H	L	L	L	H	H	4,656,815
5	H	H	H	H	L	L	H	L	L	5,399,567
6	L	H	L	L	H	L	H	L	H	8,681,228
7	L	L	L	H	H	L	H	H	L	8,449,171
8	H	L	H	L	L	L	H	H	H	5,440,837
9	H	H	L	H	H	H	L	L	L	9,409,732
10	L	H	H	L	L	H	L	L	H	6,677,705
11	L	L	H	H	L	H	L	H	L	6,519,077
12	H	L	L	L	H	H	L	H	H	9,675,558
13	L	L	H	L	H	H	H	L	L	10,419,370
14	H	L	L	H	L	H	H	L	H	5,511,179
15	H	H	L	L	L	H	H	H	L	5,448,307
16	L	H	H	H	H	H	H	H	H	10,433,094

Factor 1: H = Simulation
L = Baumol-Wolfe
Factor 9: H = 86 markets
L = 49 markets

Analysis of the Experiment

Yates [6] devised a simple technique for estimating the effects and determining the sum of squares for a 2ⁿ factorial design. His algorithm for determining the sum of squares of a 2⁹⁻⁵ fractional factorial is obtained by considering that the data was obtained from a full factorial of 2⁴ (9-5=4).

The treatment combinations are listed in standard form as shown in Table 3 and 4 and Yates' algorithm is applied. Once the contrast is determined, as shown in column (4) of each table, the sum of squares is determined by:

$$\text{Sum of Squares} = \frac{(\text{contrast})^2}{N} \quad (10)$$

TABLE 3
Yates Method of Analysis 2⁴ Factorial Design
(from a 2⁹⁻⁵ fractional #1)

Experiment #	Response	(1)	(2)	(3)	(4) Contrast	SS
1	26.30	120.37	218.61	436.67	946.66	-----
2	94.07	98.24	218.06	509.99	262.42	4304.02
3	51.58	116.19	258.03	127.49	-1.74	0.19
4	46.66	101.87	251.96	134.93	0.06	0.00
5	29.45	122.45	62.85	-36.45	-6.62	2.74
6	86.74	135.58	64.64	34.71	-0.06	0.00
7	47.26	115.19	68.89	-122.63	16.26	16.52
8	54.61	136.77	66.04	122.69	43.86	120.23
9	56.70	67.77	-22.13	-0.55	73.32	335.99
10	65.75	-4.92	-14.32	-6.07	7.44	3.46
11	38.87	57.29	13.13	2.79	71.16	316.48
12	97.71	7.35	21.58	-2.85	245.22	3758.30
13	59.06	9.05	-72.69	7.81	-5.52	1.90
14	56.13	59.84	-49.94	8.45	5.64	1.99
15	33.90	-2.93	50.79	22.75	0.64	0.03
16	102.87	68.97	71.90	21.11	-1.64	0.17

Actual responses in dollars are divided by 10,000.

TABLE 4
Yates Method of Analysis 2⁴ Factorial Design
(from a 2⁹⁻⁵ fractional #2)

Experiment #	Response	(1)	(2)	(3)	(4) Contrast	SS
1	47.17	141.24	278.80	558.51	1199.45	-----
2	94.07	137.56	279.71	640.94	10.24	6.55
3	90.99	140.81	322.83	5.21	-6.01	2.26
4	46.57	138.90	318.11	5.03	3.61	0.81
5	54.00	160.88	2.48	-6.59	-3.81	0.91
6	86.81	161.95	2.73	0.58	-3.22	0.65
7	84.49	159.30	4.25	-154.21	0.21	0.00
8	54.41	158.81	0.78	157.82	68.47	293.01
9	94.10	46.90	-3.68	0.91	82.43	424.67
10	66.78	-44.42	-1.91	-4.72	-0.18	0.00
11	65.19	32.81	1.07	0.25	7.17	3.21
12	96.76	-30.08	-0.49	-3.47	312.03	6085.17
13	104.19	-27.32	-91.32	1.77	-5.63	1.98
14	55.11	31.57	-62.89	-1.56	-3.72	0.86
15	54.48	-49.08	58.89	28.43	-3.33	0.69
16	104.33	49.85	98.93	40.04	11.61	8.42

There are a total of 16 observations (N) or 15 degrees of freedom. With one degree of freedom for each treatment effect, the mean square error equals the sum of squares. The analysis of variance chart for each fractional factorial appears in Table 5 and 6.

The ANOVA chart displays the pooling of certain interaction runs. Care was taken not to include interaction effects with large mean squares, such as line #11 in the first fractional factorial.

The statistic used to determine factor significance is the "F" statistic with 1 and the number of pooled terms as degrees of freedom. In the two fractional factorials 4, 5, and 6 terms were pooled, hence the F_{1,4}, F_{1,5}, and F_{1,6} tests and the respective significance levels of the various main effects are presented.

Briefly glancing at the ANOVA tables, it can easily be seen that Factors 3, 5, and 6 are highly

significant in both fractional factorials. Factor 9 and Factor 1 have mixed results. Finally, Factors 8, 7, 4, and 2 are insignificant in both fractionals.

TABLE 5
Analysis of Variance Fraction #1

Source (Factor #)	df	SS=MS	F ₁	% Sig Level	F ₂	% Sig Level
Size (9)	1	4304.02	802.99	99	196.71	99
Location (8)	1	0.19				
Service(7)	1	2.74	0.51			
F _i - magnitude (6)	1	335.99	62.68	99	15.36	95
W _i - magnitude (5)	1	3758.30	701.18	99	171.77	99
W _i - type (4)	1	1.99	0.37			
C _{ij} - magnitude (3)	1	120.23	22.43	99	5.49	90
C _{ij} - type (2)	1	0.03				
Model (1)	1	0.17				
Interaction Experiment #11	1	316.48	59.04	99	14.46	95
Interaction Experiment #7	1	16.52	3.08	75		
Pooled for Error (F ₁) Interaction Experiment #4, #6, #10, #13	4	5.36	F _{1,4}			
Pooled for Error (F ₂) Interaction Experiment #4, #6, #7, #10, #13	5	21.88			F _{1,5}	

TABLE 6
Analysis of Variance Fractional #2

Source-Factor	df	SS=MS	F ₃	% Sig
Size (9)	1	6.55	0.98	
Location (8)	1	2.26	0.34	
Service (7)	1	0.91	0.14	
F _i Magnitude (6)	1	424.67	63.86	99
W _i Magnitude (5)	1	6085.17	915.06	99
W _i Type (4)	1	0.86	0.13	
C _{ij} Magnitude (3)	1	293.01	44.06	99
C _{ij} Type (2)	1	0.69	0.10	
Model (1)	1	8.42	1.27	<75
Pooled for Error (F ₃) Interaction Experiments #4, #6, #7, #10, #11, #13	6	6.65	F _{1,6}	

Two further analyses were performed on the experiments. First, in an effort to overcome the possibility of poor simulation subjects, four replications of each simulation experiment was performed. For the previous analysis, the lowest cost solution of the four was used as the response. Table 7 presents the Yates method of determination of the Sum of Squares. The responses for the simulation experiments are now the average of the four replications performed by the simulators. Table 8 presents the ANOVA of the fractional factorial.

Looking briefly at Table 8, the pooled terms of experiments #6, #7, and #10 are quite low, thus when they are pooled for the error term, F₅, a much higher F statistic results. This artificially low mean square of the F₅ term "forces" the significance of several of the main effects into a higher level. The size of the problem and the solution technique factors are now significant at the 95% level.

Secondly, a direct comparison of the solution models while holding all other factor the same is shown in Table 9. A quick comparison reveals that the simulation technique out performed the Baumol-Wolfe solution in six of the eight experiments, with one of the eight experiments revealed equal costs. In only one experiment did the Baumol-Wolfe approach out perform the simulation model.

TABLE 7
Yates Method of Analysis 2⁴ Factorial Design--
(Average Response for Simulation)

Experiment #	Response	(1)	(2)	(3)	(4)	SS
1	47.17	141.24	279.68	559.84	1201.96	----
2	94.07	138.33	280.16	642.12	10.16	6.45
3	91.87	140.82	323.87	4.76	-3.52	0.77
4	46.57	139.34	318.25	5.40	4.08	1.04
5	54.01	161.26	1.60	-42.80	-5.14	1.65
6	86.81	162.61	3.16	0.76	-2.12	0.28
7	84.49	159.42	4.53	-154.64	-0.62	0.02
8	54.85	158.83	0.87	158.72	68.62	294.29
9	94.48	46.90	-2.80	0.48	82.28	49.00
10	66.78	-45.30	-1.48	-5.62	0.64	0.03
11	65.19	32.80	1.35	1.54	5.04	1.59
12	97.42	-29.64	-0.59	-3.66	313.36	6137.16
13	104.19	-27.70	-92.20	1.32	-6.10	2.33
14	55.23	32.23	-62.44	-1.94	-5.20	1.69
15	54.50	-48.96	59.93	29.76	-3.26	0.66
16	104.33	49.83	98.79	38.86	9.10	5.18

Actual responses in dollars are divided by 10,000

TABLE 8
Analysis of Variance Fractional #2
(Average Response for Simulation)

Source (Factor)	df	SS=MS	F ₄	% Sig Level	F ₅	% Sig Level
Size of Problem (9)	1	6.45	1.20	<75	19.55	95
Location (8)	1	0.77			2.33	75
Service (7)	1	1.65			5.00	75
F _i - Magnitude (6)	1	49.00	9.09	95	148.48	99
W _i - Magnitude (5)	1	6137.16	1138.62	99		99
W _i - Type (4)	1	1.69			5.12	75
C _{ij} - Magnitude (3)	1	294.29	54.60	99		99
C _{ij} - Type (2)	1	0.66			2.00	<75
Model (1)	1	5.18	0.96	<75	15.70	95
Pooled for error (F ₄) Interaction Experiment #4, #6, #7, #10, #11, #13	6	5.39	F _{1,6}			
Pooled for Error (F ₅) Interaction Experiment #6, #7, #10	3	0.33			F _{1,3}	

TABLE 9
Comparison of Simulation Versus Baumol-Wolfe For 8 Runs
of Identical Factor Levels
- 86 Market Locations -

		Factors							Simulation	B-W
<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>	<u>8</u>	<u>9</u>	<u>Total Cost</u>	<u>Total Cost</u>	
H	L	H	L	L	L	H	H	4,665,992	4,656,815	
H	L	L	H	L	H	L	H	8,674,325	8,681,228	
H	H	L	L	H	L	L	H	6,574,636	6,677,705	
H	H	H	H	H	H	H	H	10,286,564	10,433,094	
L	H	H	H	L	L	L	H	9,406,837	9,406,837	
L	H	L	L	L	H	H	H	5,440,837	5,460,915	
L	L	L	H	H	L	H	H	9,675,558	9,771,178	
L	L	H	L	H	H	L	H	5,511,179	5,613,288	

Conclusion

Three basic conclusions can be drawn from the research.

1) The complexity of the cost functions, whether linear or nonlinear, seems to have little effect on the solution of the problem. Even if the solution technique is not able to handle the actual cost function, the linear approximation is a close and reasonable simplification.

2) The size of the problem does have some significance to the ability of the solution technique to solve the problem. With both Factor #1 and Factor #9 showing significance at the 75% to 90% level for the various fractional factorials, at least some credence can be given to the importance of picking a solution model carefully.

3) Perhaps the most important conclusion deals with the mechanics of the fractional factorial itself. Although simplified problems were tested, the methodology is presented to allow for comparison of many factors as well as many solution techniques in a relatively inexpensive way. The use of the fractional factorial reduces greatly the amount of computer time and money needed and still allows the major effects to be determined. More detailed research in this area will not be impossible because of the experimental costs.

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Introduction

In recent years freight consolidation has received increased attention as a way to reduce both transportation costs and investments in inventories and warehouse facilities both of which are desirable objectives in an environment of high interest rates and inflation. Research of freight consolidation reported in the literature has dealt only with one method or technique of freight consolidation, namely, pool distribution (Masters, 1980; Jackson, 1981).¹ Besides pool distribution there are several other methods which can be employed to consolidate small orders into large shipments such as multiple tenders and stop-offs to load or unload. It is the purpose of this paper to present a detailed description of stop-offs through a review of the literature dealing with stop-offs and to present the results of an exploratory analysis of the use of stop-offs in physical distribution.

The following section describes in detail the stop-off privilege. Subsequent sections present three questions to be analyzed, the methodology employed to investigate them, the findings, the limitations of the analysis, and the implications of the analysis.

The Stop-Off Privilege as Described in the Literature

Flood points out that if handled properly the stop-off privilege can result in tremendous savings to the shipper. He provides an example of a 40% savings in freight costs by consolidating two 12,500 lb. machines for shipment from Milwaukee to Atlanta with a stop-off at Chattanooga (Flood, 1972, p. 257).

Stop-offs for both partial loading or unloading are possible. Taff describes how the stop-off privilege can be used for both inbound and outbound consolidation:

"Under this privilege, a manufacturer can sell goods to two or more customers, load the goods in one car, and bill to the final destination, with instructions to stop at the intermediate point or points where part of the goods will be unloaded, after which the car will continue on its way with the balance of the load to the ultimate destination." (Taff, 1968, p. 347)

The shipper faces three major constraints in the use of stop-offs: (1) the number of stops allowed, (2) the charges for stopping off and (3) determining if a point is intermediate to the final destination.

The number of stop-offs allowed varies by the carrier and the rate bureau. Some tariffs permit only one stop while in other tariffs three or more may be allowed excluding the initial pick-up stop and final delivery stop (Flood, 1972, p. 272). The number of stops to load, the number to unload and the total number of stops per trip may be individually specified.

¹Pool distribution refers to combining small, less-than-volume orders destined for several customers in the same geographic area into volume, intercity shipments. These volume shipments are taken to a centrally located break-bulk point from which each order is delivered to the final destination.

Stop-off charges will also vary by tariff and individual carrier. Some tariffs have a flat charge per stop for not more than three stops and a somewhat more expensive charge for each stop in excess of three stops. Others charge for stop-offs on the basis of weight handled at the stop-off point subject to a minimum charge (Flood, 1972, p. 272). Occasionally a carrier will charge for stopping in transit on an hourly basis computed from time of arrival of the vehicle at the place of loading until completion of unloading at the final delivery site. Stop-off charges are in addition to the line-haul transportation charges and any other lawful charges applying to the shipment.

Route circuitry may be treated in one of three ways depending on the carrier:

1. The stop-off point must be intermediate on the normal operating route.
2. As long as the stop-off is profitable they will accept the shipment regardless of circuitry.
3. As long as the total distance of the trip with stop-off does not exceed a certain percentage of the total distance from initial origin to final destination the shipment will be accepted. (Flood, 1972, p. 272)

The line-haul transportation charges are assessed on the basis of the greatest weight in the car or truck at any time between point of origin and final destination (not the stop-off point) or the applicable minimum volume weight if that is higher.

The applicable line-haul freight charges are determined by means of the "three-way rule" which provides that the applicable rate is the one that produces the highest charge of the three following rates:

1. The rate from point of origin to final destination via the stop-off point or points.
2. The rate from point of origin to the stop-off point.
3. The rate from stop-off point to final destination. (Flood, 1972, p. 261-2)

Two other limitations which apply to the use of stop-offs and which may be of importance are:

1. All of the component parts of a shipment must be loaded and in transit before a stop for partial unloading can be made.
2. All charges must be prepaid by the consignor and only one freight bill will be issued for the entire shipment. The carrier will not collect at the stop-off point.

The second limitation will require a firm selling its products on a freight collect basis to alter its terms of sale.

It is important to be aware of the fact that distance is not always a good guide to the spread between the through rate to the stop-off point and the through rate to destination due to the boundaries of rate territories (Flood, 1972, p. 263).

Time in transit is another important factor in planning stop-off cars particularly since considerable delay may be experienced in switching and unloading

at the stop-off point. Some delays would be experienced with a motor carrier stop-off also. This can be a particularly thorny problem if the products are sold on a delivered basis

"...and the consignee does not gain anything from the consolidation of the shipment, he may object to this method of shipping, especially if he has to reblock the car or take team track delivery or if the shipments are being delayed at stop-off point." (Flood, 1972, p. 29)

Split pickups and split deliveries are a variation of stopping in transit to load or unload. The primary difference is that the stops occur within the commercial zones of the initial pickup or the final destination (Newbourne, 1976, p. 29). Split pickups and deliveries are subject to the same charges and limitations as stop-offs.

The literature clearly provides valuable information on the economic benefits of stop-offs over less-than-truckload (LTL) direct shipments, on the rules governing the use of stop-offs and on some of the pitfalls to be avoided when using stop-offs. However, it does not provide much help in identifying those situations which might be more or less amenable to stop-offs. For example, from a reading of the literature the relationship of stop-offs to other small shipment strategies is not defined. Similarly, it would seem logical that such factors as the size of the shipment to be stopped-off and the proximity of the stop-off point to the origin and the destination of the shipment would have some bearing on the economic feasibility of stop-offs. For example, it may be feasible to only consider stopping-off rather large shipments destined for intermediate points near the final destination. The following sections present an analysis of stop-offs which takes a step toward defining those relationships.

Description of the Analysis

The analysis focuses on three questions which are presented and discussed below. All three deal with stop-offs to unload via motor carrier.

1. What is the relationship of the weight of the order to be stopped-off to unload and the transportation cost per hundredweight (cwt.) compared to LTL direct and freight consolidation through pool distribution?

The answer to this question can help to identify those orders or shipments by weight which are the most profitable candidates for stopping-off to unload. Also, by comparing the cost of the stop-off with the cost of handling the same order by shipping LTL direct or consolidating it through a pool distributor the relationship of these three distribution methods can be determined in terms of shipment size.

2. How does the distance between the origin and the final destination affect the cost of stopping-off an order to unload compared to the cost of shipping the order LTL direct?

This question assumes that the stop-off will occur within the commercial zone of the destination and is therefore technically a split delivery. The answer to this question can help to identify those markets by distance from the origin to which stop-offs would be the most attractive. It seems reasonable to assume that the economic feasibility of a stop-off would improve as the distance between the origin and destination increases since the savings over LTL direct are realized from the line-haul freight rate. However, it is not clear if very distant markets offer substantially greater

savings than those relatively close to the origin or if the size of the order has any impact on the potential savings.

3. How close to the final destination must the stop-off point be to be economically feasible?

This question seeks to determine the intermediate point at which it first becomes cheaper to stop-off the order rather than shipping it LTL direct. The answer to this question can help to define the area to which stop-offs should be considered.

The following section presents the methodology used to answer the questions presented above.

Methodology

The methodology employed consists of simulating the necessary alternatives using motor carrier class rates. Truck-load (TL) shipments are rated at Class 70 and less-than-truckload (LTL) orders are rated Class 100.

A flat stop-off charge of \$50 per stop, not counting the final destination, was used and multiple stop-offs were not considered. Also, when calculating the cost of a pool distribution shipment or a stop-off shipment, the order being simulated was assumed to be part of a 24,000 lb. TL shipment.

The cost per cwt. for a stop-off shipment was determined by adding the TL rate of the order to the result of dividing the stop-off charge by the actual weight of the shipment.

Equation (1) present a mathematical representation of the equation used to determine the cost per hundredweight for the shipment which was stopped-off.

$$SO = TL_i + \frac{S}{OW} \quad (1)$$

Where, SO = stop-off transportation cost per cwt.
 TL_i = truckload freight rate for distance i
 OW = actual weight of the order to be stopped-off
 S = stop-off charge

The cost per cwt. for orders consolidated through a pool distributor is calculated by multiplying the truckload freight rate by the weight of the individual order added to the product of the LTL delivery freight rate for the shipment times the actual weight or the appropriate minimum weight. The resulting quantity is then divided by the actual weight of the shipment in hundredweight. Equation (2) below presents the calculation.

$$OC = \frac{(TL_i)(OW) + (L_{jk})(W_{jk})}{OW} \quad (2)$$

Where, TL_i = Truckload freight rate for distance i
 OW = Actual weight of the shipment in hundreds of pounds
 L_{jk} = The local LTL delivery freight rate for quantity j and distance k in hundred pounds
 W_{jk} = Actual weight of the order or the appropriate minimum weight for distance j and quantity k

Equation (3) presents the method used to calculate the LTL direct transportation costs per cwt. The LTL transportation rate is multiplied by the actual weight of the shipment or an appropriate minimum weight expressed in cwt. and then divided by the actual weight of the shipment expressed in cwt.

$$LTL = \frac{(L_{ij})(W_{ij})}{OW} \quad (3)$$

Where, LTL = LTL direct transportation costs per cwt.
 L_{ij} = LTL freight rate per cwt. for a shipment weighing i lbs. and traveling j miles
 W_{ij} = actual weight of the order or the appropriate minimum weight in hundred pounds
 OW = actual weight of the shipment in hundred pounds

The next section presents the findings of the analysis.

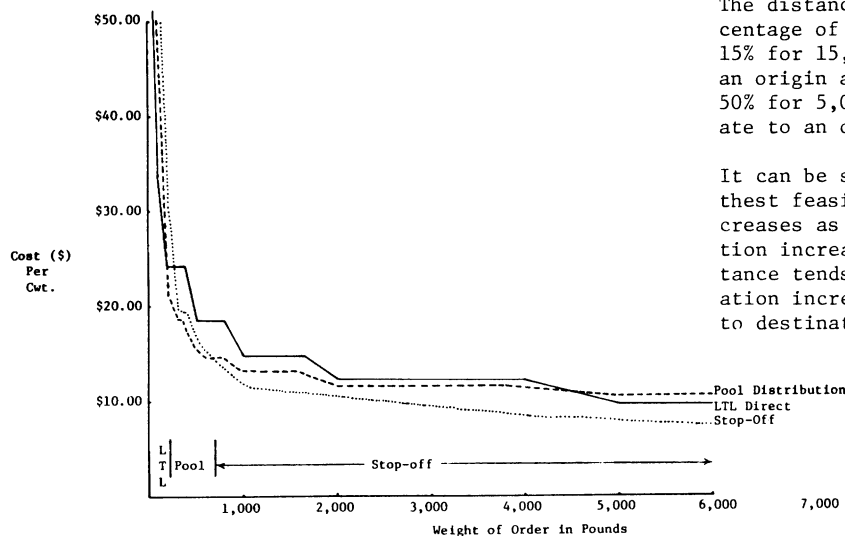
Findings

Question 1 concerned the relationship of shipment size to be stopped-off in the commercial zone of the final destination to the transportation costs per cwt. The distance from the origin to the final destination was held constant at 600 miles and the stop-off costs were compared to the costs of freight consolidation through a pool distributor at the destination and to the costs of shipping LTL direct. Orders consolidated through a pool distributor and orders stopped-off are assumed to have moved in TL quantities.

As can be seen from the graph in **Figure 1**, transportation costs per cwt. decline as order size increases regardless of the method of shipment. However, they decline at different rates. LTL direct is the cheapest of the three up to about 200 lbs., freight consolidation through a pool distributor is cheapest from about 200 to 700 lbs. and consolidation using a stop-off to unload is cheapest from approximately 700 lbs. up to nearly a truckload.

FIGURE 1

THE EFFECT OF ORDER WEIGHT ON THE COST PER UNIT OF SHIPPING AN ORDER LTL DIRECT, CONSOLIDATING IT THROUGH A POOL DISTRIBUTOR AND CONSOLIDATING IT FOR A STOP-OFF



(Based on Rates in Central States Motor Freight Bureau Tariff 575-A, Rates Effective March 31, 1981)

Research question 2 was concerned with the relationship of the transportation savings of a stop-off over an LTL direct shipment as the distance from the origin to the destination increases. The transportation costs per cwt. were calculated for stop-offs and LTL direct for 9 distances and three order sizes. As can be seen in **Table 1**, the savings from stop-offs are positive for

all distances and increase with distance up to 700 miles at which point they drop somewhat. Also, it can be seen that savings decline for all distances as order size is increased. The smaller orders result in larger per unit savings.

TABLE 1

STOP-OFF SAVINGS PER CWT. OVER LTL DIRECT ASSUMING STOP-OFF OCCURRED IN THE COMMERCIAL ZONE OF THE DESTINATION

Miles Between Origin and Destination	Weight of Order Stopped-Off		
	2,000 lbs.	10,000 lbs.	15,000 lbs.
40	.11	.47	.40
100	.83	.80	.62
200	1.38	1.18	.89
300	1.78	1.29	.95
400	2.09	1.48	1.07
500	2.65	1.82	1.57
600	2.85	1.78	1.24
700	3.23	2.00	1.43
800	3.03	1.63	1.15

Research question 3 concerns the distance from the final destination at which a stop-off can be made and still be cheaper than shipping the order LTL direct. As can be seen in **Table 2**, four distances and five order sizes were tested. The numbers in parentheses are percentages of the total distance from origin to destination at which a stop-off can be made. The distance from the destination at which a stop-off could economically be made ranged from 49 miles for a 1,000 lb. order stopping-off intermediate to a destination 200 miles from the origin to 319 miles for a 1,000 lb. shipment stopping-off intermediate to a destination 800 miles from the origin.

The distance from the destination expressed as a percentage of the total origin to destination ranged from 15% for 15,000 and 20,000 lb. shipments intermediate to an origin and destination 800 miles apart to a high of 50% for 5,000 and 10,000 lb. orders stopping intermediate to an origin and destination 200 miles apart.

It can be seen in **Table 2** that the distance of the farthest feasible stop-off point from the destination increases as the distance between the origin and destination increases but the percentage of the stop-off distance tends to decrease as the distance from the destination increases from 99 miles to 200 miles from origin to destination to 239 miles at 800 miles from origin to destination. The comparable percentages are 50% and 30% respectively. The miles increased but the percentages decreased.

Finally, the stop-off distance from the destination in miles and as a percentage of the total origin to destination distance tended to decrease as the size of the order to be stopped-off increased.

TABLE 2

MILES FROM THE FINAL DESTINATION AT WHICH A STOP-OFF CAN BE MADE MORE CHEAPLY THAN SHIPPING LTL DIRECT FOR TWENTY ORDER WEIGHT AND ORIGIN TO FINAL DESTINATION COMBINATIONS. THE NUMBERS IN THE PARENTHESES EXPRESS THE STOP-OFF MILES AS A PERCENTAGE OF THE TOTAL ORIGIN TO FINAL DESTINATION DISTANCE.

Order Weight (lbs)	Miles From Origin to Destination				Avg.
	200	400	600	800	
1,000	49(25)	159(40)	239(40)	319(40)	192(36)
5,000	99(50)	169(42)	239(40)	239(30)	187(41)
10,000	99(50)	179(45)	219(37)	219(27)	179(40)
15,000	89(45)	159(40)	179(30)	119(15)	137(33)
20,000	69(35)	119(30)	159(27)	119(15)	117(27)
Avg.	81(41)	157(39)	207(35)	203(25)	162(35)

Limitations

The major limitation of the analysis is the use of class rates. Most firms with any volume at all will have negotiated commodity rates especially for their truckload traffic and since deregulation many LTL shipments also are moving under negotiated rates. However, there is an advantage to using class rates in that they serve as somewhat of a standard or norm. Most managers can factor into the findings reported in this paper deviations from class rates such as negotiated rates or even private carriage costs. Therefore, while class rates represent no actual situation, they do provide results which are the most easily generalizable and understood. The use of class rates underscores the exploratory nature of this study in that the results reflect something of an "ideal" state which will be distorted in varying degrees by the realities of individual situations.

Negotiated rates which are lower than class rates can influence the findings of this study in several ways. Negotiated, line-haul truckload rates would favor pool distribution and stop-offs relative to LTL direct thus shifting the findings accordingly. For example, stop-offs would be feasible a greater distance from the final destination.

Negotiated line-haul LTL rates based on multiple tenders or located on high density LTL corridors would have the opposite effect of the relatively lower TL rates discussed above in that they would enhance the LTL direct option.

Relatively lower, negotiated local distribution freight rates would favor pool distribution.

Another limitation is the use of only two classes, 70 and 100 for TL and LTL respectively. The products of many firms will have a wider split between TL and LTL which would tend to favor stop-off and pool distribution alternatives. Also, most firms will have a line of products which are subject to a variety of freight classifications.

Limiting the analysis to one rate territory ignores the problems cited by Flood earlier in this paper concerning the distortions in transportation costs caused by crossing into a different rate territory. The findings reported here would lose some of their symmetry if several rate territories were included in the analysis.

Another limitation of the study is that only transportation costs are analyzed. The analysis is static in

that time is not considered nor are other costs such as inventory carrying costs and administrative costs. The service characteristics of the different systems might override the cost factors.

Also, much of the study focuses on only one shipment weight at a time. Most firms will have a mix of order weights and the mix of order sizes may have considerable influence on the economics of the stop-off and pool distribution systems not to mention its service characteristics.

Finally, only pool distribution and LTL direct are considered as alternatives to stop-offs. In fact there are others. For example, for very small shipments there are alternatives which are more economical than LTL direct, stop-offs or pool distribution such as one of the several small shipment specialists such as United Parcel Service or Parcel Post.

The results of this analysis therefore provide a base or jumping-off point for understanding the relationships affecting the decision to use stop-offs.

The following section presents the implications of this analysis.

Implications

There are a number of implications which can be drawn from the findings presented in the preceding section.

The findings concerning order size and comparing freight consolidation using a pool distributor with freight consolidation using stop-offs and with LTL direct clearly indicates a distribution strategy based on order size. Small orders should be shipped LTL direct or by a small shipment service such as UPS while somewhat larger orders, 200 to 700 lbs. in this analysis should be shipped through a pool distributor and all orders over 700 lbs. but less than a truckload should be stopped-off.

It also seems clear from this analysis that freight consolidation using stop-offs is complementary to freight consolidation using pool distributors. For example, a 10,000 lb. order for destination intermediate to a pool point could be combined with the pool shipment to fill it out thus speeding up the pool distribution system and produce savings for both over LTL direct. The intermediate point could also be a pool point. Stop-offs should therefore be considered as complementary to pool distribution systems and perhaps essential for adequate service to markets generating moderate volumes.

The findings reported in the previous section also indicate that stop-offs should be considered to fill out shipments destined for locations at virtually any distance from the origin. For example, in Table 2, even at only 40 miles a stop-off could be made in the commercial zone of the destination city and still produce savings over LTL direct.

It appears that stop-offs can be economically feasible quite far from the final destination. For some order size and origin to destination distance combinations stop-offs could be considered as close as the halfway point between origin and destination. Negotiated commodity rates would probably move the point even closer to the origin. The rather great distances from the destination at which stop-offs can be practical indicates a great deal of flexibility in putting stop-offs together. For many shippers it may be possible to tie together a number of smaller, intermediate points thus making pool distribution feasible from not only an

economic standpoint but also in terms of service. A potential problem with such a system would be the increased complexity and the administrative hassle. However, the potential rewards may justify the effort and it appears that it may be feasible to establish guidelines for order processing personnel to implement a stop-off strategy based on the size of the shipment and the specific final destination.

Summary and Conclusions

This paper has shown that stop-offs offer the potential to reduce transportation costs and it has also set forth the basic rules which common carrier trucking firms impose on shippers who use the stop-off privilege. It was also pointed out that there is nothing in the literature which describes the relationship of such variables as shipment size or proximity of the stop-off point to the origin and destination to the economic feasibility of stop-offs. The findings of an exploratory analysis, simulating a stop-off system were then presented.

The analysis reported in this paper investigated the use of freight consolidation employing stop-offs and compared it to shipping LTL direct and through pool distributors. It was found that stop-offs are the most economical strategy for shipments weighing from approximately 700 lbs. up to nearly a truckload and that pool distribution was best for shipments roughly weighing from 200 to 700 lbs.

It was also found that stop-offs can be used economically in combination with shipments to virtually any market or customer regardless of the distance from the origin but that the savings over LTL direct increase with distance.

Finally, it was found that stop-offs can be cheaper than LTL direct at distances from 49 to 319 miles from the final destination depending on the size of the shipment and the total distance from origin to final destination.

The major implications of the study are that stop-offs can provide a very flexible tool for reducing transportation costs and that they are very complementary to a pool distribution system.

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A HIERARCHICAL ATTITUDE MODEL FOR CORPORATE
ADVERTISING AND MARKET SEGMENTATION

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Abstract

This paper provides a decision framework based on a hierarchical attitude model for use in the development of overall corporate advertising strategy. The authors show how consumer attitudes at various levels of an attitude hierarchy can be used in deciding whether to advertise at the corporate, product line or individual product levels for specific market segments.

Introduction

Every year, a considerable amount of advertising dollars are spent on advertising designed to enhance the overall image of organizations and their products. Such advertising may be designed only to enhance the image of the organization itself. However, the use of much of this type of advertising is based on the notion that attitudes toward the organization as a whole carry over to and influence attitudes toward the organization's products. Despite the magnitude of corporate advertising and its importance to firms, there is little research or development of theory dealing with the issue of how firms decide whether, and to what extent, to advertise at the corporate, product line or individual product level.

The purpose of this paper is to: (1) review existing research on corporate advertising, (2) present the Hunter, Levine, and Sayer's (1978) hierarchical model of communication and attitude change, (3) demonstrate the usefulness of the hierarchical model to decision-making for corporate, product line, and specific product advertising, and (4) present a communication-market segmentation strategy based upon the hierarchical model.

One of the major reasons given for the use of corporate or product line advertising as opposed to advertising individual brands is savings in advertising expenditures. A single corporate ad campaign that results in enhanced attitudes toward all products associated with the corporate name may cost much less than a fragmented advertising approach dealing with each brand separately (Morein 1975). Of course there also is the view that by associating each product with the corporate name, firms run the risk that a consumer's bad experience with one product may influence his/her attitudes toward the firm's other products. However, there is little research to support this conclusion.

Not all firms associate their corporate name with their products. This paper is concerned with advertising strategy for those firms that do identify their products with the corporate name.

Relevant Research and Theory

There is very little published empirical research dealing with the corporate vs. product advertising issue. There have been some studies relating to the impact of corporate image advertising (see for example, Grass, Bartges and Piech 1972). These studies have not, however, made any comparative analyses of the effects of corporate vs. product line or product advertisements.

The authors have been able to uncover only one study dealing specifically with a comparison of the effects of the two approaches to advertising. Lehman and Cardozo (1975), in a study of purchasing and management personnel in a variety of firms, showed that institutional advertising (including only nominal mention of the product) produced more favorable attitudes toward the product and the supplier and greater perceived likelihood of purchase-related behavior than did product advertising in both low and high risk purchase situations. However, the effectiveness of product ads was observed to increase in higher-risk purchase situations. The authors suggest, contrary to present practice in industrial circles, that firms should not use advertising of individual products in an attempt to enhance the image of the firm as a whole.

Recently Hunter, Levine, and Sayers (1976) have presented a communication based model of attitude change when attitudes are embedded in a hierarchical belief structure. If we define the corporate name as the "top" object, the product lines as the "middle" objects, and the individual products as the "bottom" objects, we can then demonstrate the utility of Hunter's *et al.* (1976) hierarchical model to corporate, product line, and individual product advertising strategy. We first present the hierarchical model and the empirical research in support of this model.

The Hierarchical Model

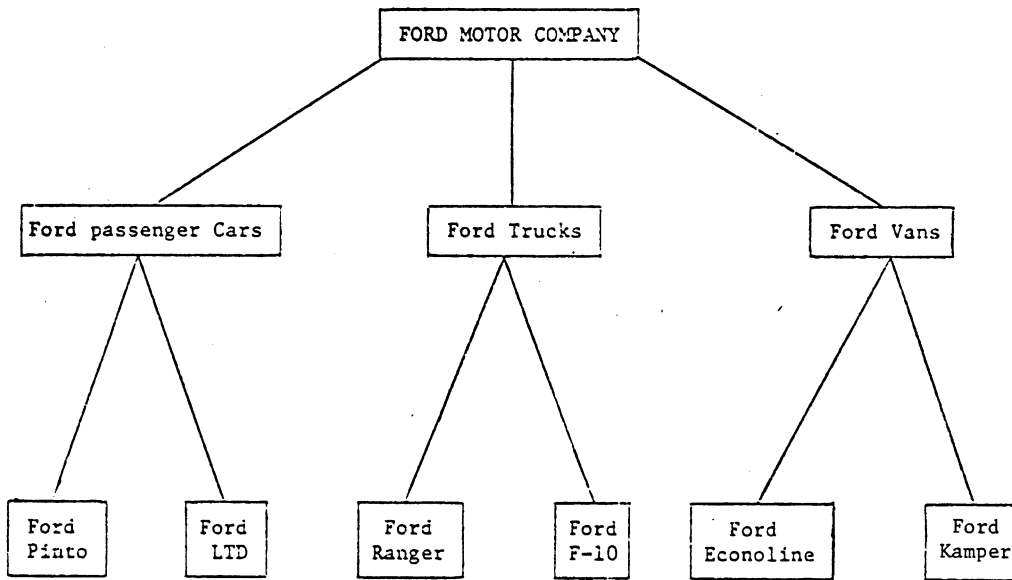
There are several notions of attitude hierarchies present in the marketing, psychology and advertising literature. Lavidge and Steiner (1961) have suggested the "hierarchy of effects" model regarding the effects of advertising. Awareness is said to occur first, followed by knowledge, liking, preference, conviction and purchase. The stages in this hierarchy correspond to the three components of attitude suggested in the tricomponent view of attitudes--i.e. the cognitive, affective and conative components.

More recently, Fishbein and Ajzen (1975) have proposed a belief hierarchical model based upon belief strength. In contrast, Hunter, Levine, and Sayers (1976) have defined belief hierarchy in terms of logical structure. Fishbein and Ajzen (1975) have asserted that salient "...beliefs form a hierarchy in terms of strength with which they are held. This hierarchy may be viewed as a person's belief system with respect to a given object or issue (p. 99)." Hunter, Levine, and Sayers (1976) provide a different definition of belief hierarchy; i.e., they defined belief hierarchy as the logical superordinate - subordinate relations among concepts or objects.

An example belief hierarchy of the type suggested by Hunter, *et al.* (1976) is presented in **Figure 1**. From the "top" down, the levels represent changes from the general (e.g., Ford Motor Company) to the specific (e.g., Ford Pinto, Ford Econoline, Ford Ranger, etc.). The example hierarchy presented in **Figure 1** could be extended up, across, and down to include other motor companies.

FIGURE 1

Example Hierarchy



Hunter, *et al.* (1976) assert that each object in the hierarchy is characterized by an affective response or attitude; but, how do attitudes which are embedded in a hierarchical tree change? Hunter, *et al.* (1976) assumed two processes: (1) external messages such as advertising change attitudes in proportion to the discrepancy between the attitude value communicated in a message and the attitude held by the consumer before the message is received; (2) attitude changes in proportion to the discrepancy between the internal message, i.e., the attitude to the object which is immediately higher up in the hierarchy and the attitude toward the object which is addressed in the message. For example, messages directed at changing the attitudes toward "Ford Pinto" constitute the first process; how consumers compare attitudes toward "Ford passengers cars" and attitudes toward "Ford Pinto" constitutes the second process.

A dynamic attitude change model proposed to express these assumptions for a three-object, three-level hierarchy is:

$$\begin{aligned} \Delta x &= \alpha(M_x - x) \\ \Delta y &= \alpha(M_y - y) + \beta(x-y) \\ \Delta z &= \alpha(M_z - z) + \lambda(y-z) \end{aligned} \quad (1)$$

where x denotes the attitude toward the object at the "top" of the hierarchy and z represents the attitude toward the object at the "bottom." M_x, M_y, M_z are attitude - change messages directed at $x, y,$ and $z,$ and $0 < \alpha, \beta, \lambda < 1.$ The α parameter reflects the impact of external messages and β and λ are internal processing parameters. These coefficients may be estimated using ordinary least squares regression.

In their model, Hunter, *et al.* (1976) assert that: (1) if the "top" (e.g., attitude toward Ford Motor Company) is changed, attitude change should filter down to the lower levels; (2) for externally produced attitude change at the "bottom" attitude, the change over time should decay, i.e., eventually assume that value assigned to the object immediately higher up in the hierarchical tree. For example, an advertising campaign directed only at "Ford Pinto" should produce

attitude change toward "Ford Pinto." However, upon the cessation of this campaign, attitude toward "Ford Pinto" should eventually be realigned with the attitude toward "Ford passenger cars"; (3) there is no lateral influence, i.e., attitude change toward an object will not influence other attitude objects which exist at the same level in the hierarchical structure. Attitude change for "Ford passenger car" will not influence attitudes toward "Ford trucks" or toward "Ford vans." In brief, the hierarchical model asserts that attitude change only filters "down" a belief hierarchy; "upward" and "lateral" influence do not exist.

One major implication of the hierarchical model is that if one desires attitude change to persist over time, advertising campaigns should be directed at the corporate level, i.e., directed to the object at the "top" of the hierarchy. When messages are sent to the "top" of a hierarchy, the general model presented in equation 1 reduces to:

$$\begin{aligned} \Delta x &= \alpha(M_x - x) \\ \Delta y &= \beta(x - y) \\ \Delta z &= \lambda(y - z) \end{aligned} \quad (2)$$

What are the attitude values for $x, y,$ and z after a lengthy advertising campaign directed toward x --after a long succession of attitude - change messages? Given a sufficiently large number of messages, attitude change reaches a point of equilibrium; i.e., attitudes quit changing or attitude change equals zero. If we set equations 2 equal to zero and solve for the equilibrium values for $x, y,$ and $z:$

$$\begin{aligned} \Delta x &= \alpha(M_x - x) = 0, \text{ or } x = M_x \\ \Delta y &= \beta(x - y) = 0, \text{ or } y = x \\ \Delta z &= \lambda(y - z) = 0, \text{ or } z = y \end{aligned}$$

we see that, in the long run, all attitudes in the hierarchy will equal the attitude value communicated in the external message, $M_x.$ A more extended equilibrium analysis of the hierarchical model is presented in Hunter, *et al.* (1976).

Empirical Support For the Hierarchical Model

Rokeach (1968) was one of the first to suggest that beliefs, attitudes, and values are hierarchically organized. In fact, there is a large body of research which suggests that more general attitude concepts serve to extend a "downward" influence on less general attitudes. Dillehay, Insko, and Smith (1966), Hovland, Lumsdaine, and Sheffield (1949), Hovland and Mandell (1952), and McGuire (1960b; 1960a) have found attitude change to filter "downward," from attitudes changed by an external message to logically related, derived attitudes. Hovland, *et al.*, (1949), and McGuire, (1960b) observed attitude change to persist for a longer period of time for those attitude objects more strongly related to the attitude object changed by the external message.

To date only one study has attempted to test the Hunter *et al.* (1976) model as a whole. Pool and Hunter (1979) provide this test. In their test, attitude and attitude change toward the following objects was studied: (1) Federal Government Bureaucracy, (2a) Federal Regulatory Commissions, (2b) Justice Department, (3a) Federal Communication Commission, (3b) Interstate Commerce Commission, (3c) Drug Enforcement Agency, and (3b) Bureau of Prisons. In one experiment attitude-change messages were aimed at the "top" attitude, i.e., "Federal Government Bureaucracy," and in a second experiment messages were aimed at a "bottom" attitude, i.e., "Interstate Commerce Commission." Using a dynamic version of path analysis, the first experiment found a strong "downward" influence--over time, all lower-order attitudes were also changed. The message in the second experiment produced a change in attitudes toward the "Interstate Commerce Commission." Upward influence as well as lateral influence was not observed. Over time measures found attitudes toward the "Interstate Commerce Commission" to become consistent with the attitude object immediately higher up in the hierarchy--the Federal Regulatory Commissions. In short, Pool and Hunter (1979) provide convincing empirical support for the hierarchical model.

Applications of the Hierarchical Model

We now propose some relatively straightforward applications of the hierarchical model to corporate advertising. Let us assume that a corporation does associate its various product lines with the corporate symbol such as is the case for the Ford Motor Company. Further, let us assume that hierarchical beliefs such as those presented in **Figure 1** are identified; and that attitudes toward the objects of the hierarchy have been measured for a given sample. Also, let us assume that other "relevant" demographic information including media behaviors are identified and recorded. We now present an advertising-market segmentation strategy as a series of steps; **Figure 1** will be used to guide the discussion.

Step I: Attitude Segmentation For "Top" Object

The first step of the procedure is to segment the sample into two (or more) groups, for example, those who have favorable attitudes toward "Ford Motor Company" and those who have unfavorable attitudes. The primary concern of Step I is to identify those who do not like Ford Motor Company. According to the hierarchical model, what are the implications of advertising messages sent to objects "beneath" Ford Motor Company? The hierarchical model predicts only temporary attitude change; upon the cessation of the advertising campaign, lower-level attitudes should revert to an attitude value in line with the negative attitudes

toward Ford Motor Company. Therefore, for the unfavorable attitude market segment the most reasonable communication strategy is corporate advertising, i.e., the design of an advertising campaign directed at attitude change toward "Ford Motor Company." Relevant demographic and media behavior information may be used to identify this market segment and their primary sources of information.

Step II: Attitude Segmentation for "Middle-Level" Objects

The first step identified two market segments, those with unfavorable attitudes and those with favorable attitudes toward "Ford Motor Company." No communication strategy was supplied for the favorable attitude segment. This segment, however, may be further segmented on the basis of their attitudes toward the "middle" objects; **Figure 1** present three such attitudes objects: "Ford passenger cars," "Ford trucks," and "Ford vans." As in Step I, we may split this segment into six (or more) groups: (a) those with favorable and those with unfavorable attitudes toward "Ford passenger cars," (b) those with favorable and those with unfavorable attitudes toward "Ford trucks," and (c) those with favorable and those with unfavorable attitudes toward "Ford vans." Once again, the emphasis is placed upon those with unfavorable attitudes; and the recommended advertising strategy is to communicate attitude-change messages at those segments who have unfavorable attitudes toward the three product lines. Moreover, relevant demographic and media behavior data could be used to identify these segments and their sources of information.

Step III: Attitude Segmentation for "Lower-Level" Objects

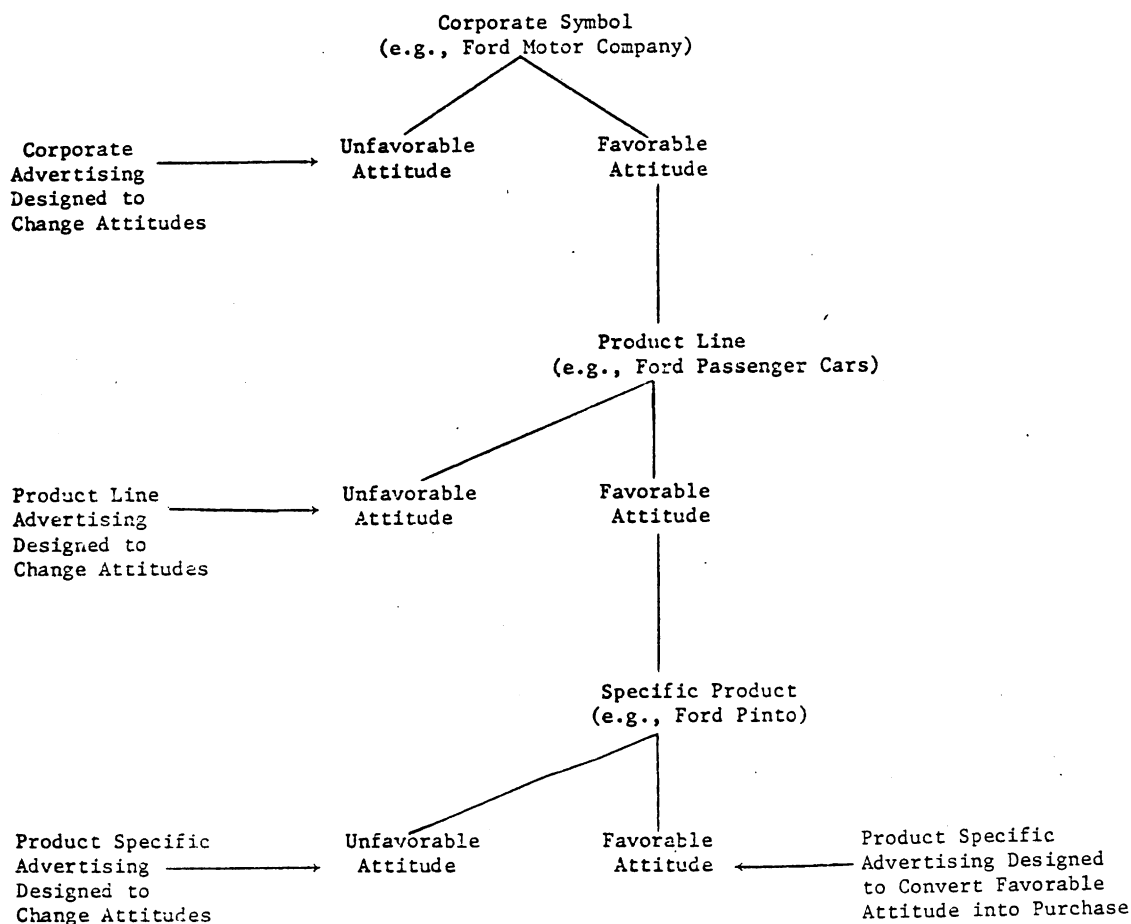
Let us now simplify the discussion and emphasize only one lower-level object, "Ford Pinto." Let us assume that the results of the prior segmentation decisions have left us with market segments which currently consists of those who are favorable to "Ford Motor Company" and are favorable to "Ford passenger cars." Step III then follows the same pattern presented for Step II; that is, this segment is further segmented into two (or more) segments: those with favorable and those with unfavorable attitudes toward "Ford Pinto." For the segment which likes Ford Motor Company, likes Ford passenger cars, but dislikes Ford Pinto, an advertising campaign directed at changing attitudes toward "Ford Pinto" is recommended. The last segment which results from this analysis are those who like "Ford Motor Company," who like "Ford passenger cars," and who like "Ford Pinto." For this group we recommend a campaign aimed at encouraging the purchase of "Ford Pinto." Furthermore, firms should continue to monitor the favorability of higher-level attitudes and, if necessary, engage in advertising efforts to insure that favorable attitudes are maintained. A schematic diagram of the above discussion appears in **Figure 2**.

Summary

This paper has discussed the relevance of the Hunter, Levine and Sayer's (1976) hierarchical model of communication and attitude change to corporate, product line and product advertising decisions. Through a review of existing theory and empirical research the paper has shown that substantial support for the existence of downward influence in attitude hierarchies exists. The existence of downward influence is important to the success of corporate advertising

FIGURE 2

A Hierarchical Approach For Corporate,
Product Line, and Specific Product Advertising Decisions



which is designed to create "spillover" effects and thereby achieve economies in advertising expenditures.

Based upon the hierarchical model, the paper concludes with a presentation of a communication-market segmentation strategy.

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FRANCHISE AFFILIATION AND PROMOTIONAL TECHNIQUES: COMPETITION AND
COMPARATIVE PERFORMANCE AMONG NORTH CAROLINA REAL ESTATE BROKERS

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Abstract

Franchise affiliations by real estate brokers have increased greatly in the last decade, yet little research has been directed toward the impact of presumed franchise advantages on broker competition or comparative performance. This paper, using data from a 1979 Survey of North Carolina Homebuyers, studies the effectiveness of franchise mass media advertising in creating a professional image, enhancing consumer recognition, attracting distant clients, and obtaining listings. Results indicate that franchise affiliation achieves all of the above, and that clients of franchised brokers are satisfied with broker services rendered. Data from a Multiple Listing Service was used to examine performance differences between national and regional affiliations. It was determined that national franchises which utilize mass media promotion tend to assist purchasers of lower priced homes, and that other franchises tend to sell significantly higher priced homes.

Introduction

In 1978, residential real estate sales totaled \$300 billion. Almost four million pre-owned homes were sold at an average price of \$57,300. Rapid industry growth has attracted many new participants; over one million people are involved in some aspect of real estate sales (Gaines, 1979).

Broker affiliations with national and regional franchises have increased rapidly, with membership doubling between 1968 and 1974, and reaching 500,000 by 1977 (Horsley, 1978). A 1978 survey found that 17 percent of responding brokers were franchisees, 2/3 of whom had joined in the prior three years (National Association of Realtors, 1978).

The impact of the franchise movement has been felt in North Carolina. A Survey of 1979 homebuyers in five North Carolina cities found that one-half of the respondents had purchased homes listed with franchised brokers (Jud, 1980).

This study examines some competitive aspects of franchise affiliation in North Carolina, and evaluates comparative franchise performance in one of the surveyed cities.

The Structure of the Real Estate Industry

The residential brokerage industry has traditionally been localized and fragmented (Gaines, 1979). Minimal investment and educational requirements allow easy entry and exit; high agent turnover and part-time salespeople create staffing problems; and broker reinvestment in real estate inhibits firm growth (Bove, 1979).

Traditional Methods of Sale

An open listing allows a seller to use any number of brokers; the first broker to consummate the sale earns the commission. An exclusive listing allows only the designated broker to claim the commission. The Multiple Listing Service (MLS) developed as bro-

kers pooled exclusive rights to listings and clients (Gaines, 1979). If a home is placed on the MLS, the commission is split between selling and listing brokers. The MLS has traditionally benefitted smaller, less efficient brokers, unable to generate sufficient listings on their own (Minard, 1978).

Development of Real Estate Franchises

Independent brokers were troubled by the emergence of professionally managed real estate chains which offered a full line of services, providing additional revenue above commission (Mylnaryk, 1975). Fear of being driven from the industry created positive broker attitudes toward real estate franchises. Another favorable growth factor was increased population mobility, which created opportunities for national brand development. Independent brokers, recognizing the need for a more professional image, found that franchise affiliation allowed maintenance of autonomy, exposure to methods of dealing with increasingly complex real estate transactions, and acquisition of sophisticated marketing techniques.

Franchisors offer several inducements to affiliate:

1. Market identification through national brand image, allowing the young broker with inadequate community contacts to capitalize on market potential created by population mobility.
2. National and regional mass advertising, allowing volume discounts.
3. Training and recruitment programs tailored for an industry characterized by high turnover and poor sales reputation.
4. Management Services systems, which attract young brokers attempting to manage new agencies by teaching them unfamiliar procedures, and attracting and training sales associates.
5. Referral services for regional or national trading of listings and leads.

Franchise Structure

Several types of franchises have evolved. National groups include Century 21, Red Carpet, Realty World, ERA, and Better Homes and Gardens Real Estate Service. Some national referral and relocation systems, such as Gallery of Homes and Homes for Living, are almost indistinguishable from full-service franchises. There are also regional affiliations.

Real estate franchisors receive an initiation fee and a percentage of profits. For example, the Century 21 affiliation fee ranges from \$1,000 to \$10,000, with annual charges of 2-6% of gross profits, and an advertising contribution of 1.5-2% of gross. The initial fee for an ERA franchise is about \$6,000, and monthly overrides range from \$200 to \$500, depending on territory and number of offices (A New ERA...1978).

Promotion in the Pre-Owned Residential Market

Traditionally, realtors acquired listings through newspaper classifieds, neighborhood signs, and canvassing, with television campaigns recently added to the mix. Within the general promotion framework, however, franchised and independent brokers stress different vehicles and tactics.

Promotion by Franchised Firms

Franchisors vary in their approach to potential clients. Red Carpet, organized in the 1960's, and holding 8.7% of real estate franchises in 1978, concentrates on acquiring as many franchises as possible within a community, and spends large amounts on local promotion.

Century 21, with 45.8% of the affiliates, was the first to develop full-line franchising and increase market share by concentrating advertising dollars in local communities to sell a single brand name and promote interoffice referrals. In extensive television campaigns, Century 21 portrays the "neighborhood professional" who is familiar with intricate real estate transactions and, in particular, targets the transferree by illustrating the ability to perform both sale and purchase functions. Listings are also solicited by offering a "Neighborhood Services Directory", including a "Market Value Certificate" which entitles the homeowner to a home valuation by an affiliated agent (Bove, 1979).

Electronic Realty Associates (ERA), founded in 1972, held 14.7% of the franchises in 1978. It claims to be the only franchise featuring both a Buyer and Seller Protection Plan, and the "Moving Machine" - a computerized telephoto transmission device that sends pictures of available homes across the country. ("A New ERA..."1978). ERA promises relocation assistance and stresses ability to find mortgage money.

Most franchisors also utilize joint classified advertising, neighborhood signs, direct mail, and house-to-house visits. Signs on listed properties proclaiming a "SOLD" status demonstrate successful track records.

Thus, franchised brokers stress professionalism, national referral capability combined with extensive local knowledge, and financial connections to mortgage money. The proclaimed ability to arrange buyer financing is attractive to the seller. Also, the professional image is important to the first-time seller, unfamiliar with the terminology, and with only a vague idea of his home's value. Consequently, a "Market Valuation" offer is reassuring.

The concept of the first-time seller as a franchise client is reinforced by the observation that national franchisors tend to specialize in the lower end of the market (Kilborne, 1979). Since successive real estate experience involves "trading up", the lower end of the market is expected to contain more first-time sellers who need the reassurances offered by national franchisors.

Promotion by Independent Firms

Independent brokers utilize newspaper classifieds to varying degrees. Lacking volume discounts, small firms use limited, specific listings. Larger, more established brokers have fewer advertising constraints and may utilize comparable space to franchisors. Independent firms also rely heavily on neighborhood promotion, particularly property signs. A different type of professionalism is stressed - individualized service to clients and extensive knowledge of particular neighborhoods. Reputation is essential; recommendations are important sources of listings. Independents may specialize in higher-priced units, whose owners have sold a previous home, and are more selective in broker choice. Consequently, many upper-

range listings are obtained through social or business connections.

Research Objectives

No research has been directed toward the impact of presumed franchise advantages and promotional differences on competition between real estate brokers, or comparative franchise performance. The objective of this study is to examine these issues, and attempt to answer the following questions:

1. Since franchised agencies tend to be younger firms, do they sell lower priced homes, or can they compete with established firms for more expensive listings?
2. Do mass media campaigns enhance broker recognition such that sellers are more likely to select franchise affiliates?
3. Do national franchisor advertisements or referral services attract transferred homeseekers?
4. Does a professional image result in greater satisfaction with the services of franchised affiliates among those who buy homes with their assistance?
5. Are there significant performance differences between specific franchises, and between national and regional affiliations? If so, can they be attributed to different promotional techniques?

To help answer these questions, two data sets were utilized. The 1979 Survey of North Carolina Homebuyers was used to address the first four questions. Additional data on real estate transactions in Greensboro, North Carolina was used to examine the last issue.

Analysis: The North Carolina Study

The 1979 survey was conducted in five North Carolina cities: Charlotte, Greensboro, Hickory, Raleigh, and Wilson. In each survey area a random sample of residential properties bought during 1979 was selected from the Registrar of Deeds. The number of respondents knowing whether they had dealt with a franchised or independent broker was almost equally divided between those employing both types. The percentage employing franchised brokers in each area were: Charlotte, 31%; Greensboro, 73%; Hickory, 61%; Raleigh, 42%; and Wilson, 47%. Those who were aware of using a national or regional franchise are in Category 1; the others are in Category 2. Chi-square tests were performed to determine when category responses differed at the 95% confidence level.

TABLE 1
BROKER CATEGORY BY SELLING PRICE

Broker Category	Price of Home (in thousands)				Total
	<50	50-79	80-120	>120	
Fran	53.7%	50.94%	36.0%*	50.0%	50.18%
Non-fran	46.3%	49.06%	64.0%*	50.0%	49.82%
Total	45.73%	37.72%	13.35%	3.20%	100.00%
	257	212	75	18	

* - Alpha = .05 or less

As shown in **Table 1**, a noticeably greater percentage of those buying homes in the lower price categories and a significantly lower percentage of those buying

in the second highest category, were assisted by franchised brokers. This supports the hypothesis that franchisees tend to sell the lower-priced homes. However, this was not individually true in Greensboro or Wilson. Since they are slower growth areas, the brokerage industry may be sufficiently competitive to encourage established agencies to join franchisees, or affiliates in these areas may be enjoying more referral and reputation benefits, allowing them to penetrate the high priced market.

Market position was further explored through buyer income data:

TABLE 2*
BROKER CATEGORY BY BUYER INCOME
Family Income (in thousands)

Broker	<15	15-24	25-40	>40	Total
Fran	53.85%	48.09%	55.68%	40.91%	50.62%
Non-fran	46.15%	51.91%	44.32%	59.09%	49.38%
Total	10.7%	37.65%	38.07%	13.8%	100.00%
	52	183	185	66	486

* - Overall Chi-square statistic showed general pattern of response to be significantly different at .05 level

In the aggregate survey, franchised brokers assisted more buyers in the lowest (less than \$15,000), and second highest (\$25,000-\$40,000) income categories. This may indicate that a greater share of lower-priced listings increases franchise appeal to lower income groups. Significant franchise usage by the second-highest income group suggests that an appeal stressing national expertise is found attractive by young professionals with sufficient incomes, but insufficient wealth to purchase a high-priced home, and limited homebuying experience. Franchised agencies in Greensboro and Wilson showed greater appeal to upper categories, assisting more highest income respondents in Greensboro, and second highest in Wilson. Since Wilson reported the highest percentage of working couples in response to a survey question (71% compared to 62% aggregate), and had the highest percentage change in per capita personal income from 1970 to 1977 (104% vs 80-85% aggregate), there may be a potential segment of young professionals with high incomes involved.

The effectiveness of mass promotion was investigated by asking respondents how they found their broker. Unfortunately, the 1979 survey did not include television as a specific category. However, significant evidence was found to indicate the effectiveness of joint classified promotion. Overall, a much greater percentage of those employing franchised brokers selected them from newspaper advertisements than did those employing independents. (And 62% of those who selected a broker through a newspaper advertisement selected a franchise affiliate). This general pattern was true in all individual areas except Raleigh. Thus there is support for the "recognition" appeal of a real estate franchise.

To determine whether national recognition or referral services helped franchised brokers attract distant clients, a breakdown of previous residence location was performed. The aggregate results showed a significant proportion in the same county of purchase; however, individual areas differed considerably. Greensboro's franchised brokers had significantly fewer clients with previous North Carolina residences

and more than twice as many with prior out-of-state residences, thereby displaying strong evidence that franchise affiliation attracts clients from distant areas.

Two survey questions were intended to elicit a measure of client satisfaction with broker services. Buyers were asked "How did you find your home?" (i.e.: was the home found through the broker's efforts or some specific activity on the part of the client). In the aggregate survey, no significant differences are present; however in one individual area - Charlotte - more buyers who employed franchised brokers finally found their homes through their own neighborhood searches. It is also noteworthy that a slightly greater percentage of homes were suggested by franchised brokers in most areas, and that over half of the homes finally purchased were suggested by the brokers in each category (franchise and independent).

A second attempt to evaluate client satisfaction involved the question, "If you sell your house, would you list your home with the broker you bought from?" Unfortunately this phrasing created some ambiguity about the broker being evaluated; however, it is assumed that a substantial part of the response concerns the franchised or independent broker who aided the respondent in the search. The aggregate response to this question shows slightly greater satisfaction with franchised brokers, although the results were positive for each group:

TABLE 3*
WOULD YOU LIST YOUR HOME WITH THE
BROKER YOU BOUGHT FROM?

Broker Category	Yes	No	Total
Fran	51.65%	41.9%	49.60%
Non-fran	48.35%	58.10%	50.40%
Total	78%	22%	100.00%
	393	105	498

* - Overall Chi-square statistic showed general pattern of responses to be significantly different at .05 level.

Discussion

The analysis of the 1979 homebuyer data suggests the following:

1. Franchised agencies tend to assist purchasers of lower-priced homes in the faster-growing areas of North Carolina, and also to assist lower-income clients in their housing search. However, in some areas they also assist greater numbers of clients in the second highest income category, suggesting a successful appeal to young professionals.
2. The hypothesis that franchise affiliation increases recognition was supported. A greater percentage of those selecting brokers from newspaper advertisements picked franchised agencies in all areas except Raleigh.
3. Greensboro is the only area in which a greater percentage of clients moving from distant locations employed franchised brokers, yet the difference was significant. This may explain why Greensboro ranked first in the percentage of buyers employing franchised agencies.

4. Satisfaction with franchised brokers was apparent, although only slightly better than the non-franchised group.

Analysis: The Greensboro Study

To determine relative performance of Greensboro brokers, data on over one thousand residential real estate transactions was collected. Preliminary examination revealed some exceptionally low selling prices, indicating the sale of some homes for the value of the land. Therefore, transactions of less than \$20,000 were excluded from further analysis. The remaining data set contained 902 transactions, of which 420 originated as listings from independent brokers and 482 from franchise affiliates.

The mean price of franchisee listings was \$44,610, while the mean of the independent brokers' was \$45,749. This observation supports the hypothesis that franchise affiliates tend to carry lower-priced listings, but was not significant at the .10 level. Perhaps the franchises assisting those purchasing higher-priced homes (mentioned earlier), offset those carrying lower-priced listings. To test the hypothesis that franchises perform better than independent firms, a comparison of the percentage of price reduction that brokers acquired for their buyers was conducted. It was discovered that franchised brokers achieved a greater percentage of price reduction at the .10 significance level.

Subsequent analyses were run to determine relative franchise performance. Variables considered included: listing price (LP), selling price (SP), and days on the market. T-tests for differences between means were conducted on these variables, comparing each franchise to the remaining group. Significant results are reported in Tables 4 and 5.

TABLE 4
FRANCHISES BY LISTING OFFICE

Franchise	Type	N	Mean LP	Mean SP	Days on Market
1	National	177	38,380*	37,680*	
Others		307	47,550	46,562	
2	National	57	40,151**	39,564**	
Others		427	44,720	43,897	
3	National	48	49,387*	48,556*	
Others		436	43,609	42,800	
4	National	43	55,279**	53,925**	
Others		441	43,100	42,342	
5	Regional	125	49,766*	48,935*	35.6*
Others		359	42,237	41,437	44.07
6	Regional	29	38,563**	37,500**	54.09**
Others		455	44,540	43,745	41.065

* - Alpha = .05 or less
** - Alpha = .10 or less

Two of the four national franchises (1 and 2) listed and sold homes whose average LP and SP were significantly lower than the others. These are the franchises which utilize considerable mass advertising. Perhaps their intensive national promotion attracts more first-time homesellers with less valuable properties, as well as more neophyte purchasers.

TABLE 5
Franchises by Selling Office

Franchise	Type	N	Mean LP	Mean SP	Days on Market
1	Nat.	177	40,115*	39,349*	
Others		344	47,925	46,975	
2	Nat.	74	37,572*	36,855*	
Others		413	46,887	45,963	
3	Nat.	47	50,105*	49,070**	54.4*
Others		440	44,976	44,099	39.78
4	Nat.	47	49,691**	48,818**	
Others		440	45,020	44,126	
5	Reg.	124	55,455*	54,361*	33.88*
Others		363	42,061	41,238	43.69
6	Reg.	36	39,079*	38,302*	
		451	45,981	45,080	

The two remaining national franchises (3 and 4) listed and sold homes at significantly higher prices. Unlike the other national franchises, these engage in less national advertising, and use more traditional promotion methods to attract listings. In addition, Franchise 3 sold homes which were on the market significantly longer. Its higher-priced listings may represent more unique homes, hence requiring more time to attract interested and qualified buyers.

Franchise (5) is a regional North Carolina affiliation. Its higher list and selling prices, and the fewer days its listings remain on the market were all significantly different from group outcomes. Its ability to sell higher-priced homes in a shorter-than-average period indicates superior performance. This franchise relies heavily on traditional promotion methods and referrals to acquire listings.

The last group (6) is a regional affiliate which is little more than a referral service among cooperating realtors. Its lower LP and SP represent significantly different results from other franchise performance. In addition, the significantly greater number of days its listings remained on the market indicates less efficient performance. This group uses little joint advertising, and it is difficult to determine what advantages its members obtain from franchise affiliation.

Conclusions

The Survey of Homebuyers indicates that franchise affiliation increases consumer awareness and recognition, and that clients are satisfied with the performance of franchised brokers. Franchised agencies assist both lower-income clients and those in the \$25,000-40,000 category. This is consistent with differences among franchise types revealed in the Greensboro study of real estate transactions. Those agencies affiliated with national franchises engaging in intensive mass advertising (1 and 2) tend to list and sell homes at lower-than-average prices. For this group, franchise affiliation apparently enhances the effect of their promotion by increasing recognition, and thereby attracting more inexperienced buyers and sellers.

The other national franchises (3 and 4) which do not rely on mass media, but rather on more traditional techniques, tend to sell more expensive homes. Perhaps traditional promotion attracts those experienced

homesellers who list higher-priced properties. The longer market period indicates a listing which requires a closer client-purchaser "match", rather than success with a mass market "numbers" philosophy.

The large regional franchise (5) lists significantly higher-priced homes and sells them in significantly fewer days. Specialized neighborhood knowledge and traditional advertising apparently attract better listings, as well as more serious qualified buyers. Affiliation with this franchise allows agencies to share in this image of superior regional expertise.

Thus franchise affiliation may be desirable for two very different reasons -- either to join national advertising campaigns constructed to enhance recognition among inexperienced market participants, or to share an attractive image that has been developed by regional associates.

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COMPARISON ADVERTISING STRATEGIES FOR NEW MARKETS

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Abstract

Comparison advertising has become established in the United States despite a history of restrictions. An examination of how this change was accomplished suggests three strategies that may be utilized.

Opportunities still exist for concerns to pioneer with these techniques, especially in foreign markets. Moreover, certain characteristics of foreign markets actually may facilitate such application. A specific situation is presented to demonstrate this possibility.

Introducing Comparison Advertising

Despite controversy about its desirability, comparison advertising has become established as a promotional tool in the United States. Analysis of its development suggests three strategies which firms appear to have utilized successfully to introduce comparison advertising despite a restrictive environment.

This article outlines the three strategies. It also presents a model for the phasing in of comparison promotions. Finally, it demonstrates how such advertising strategies may be especially opportune in foreign markets. In these markets, virtually no comparison advertising exists because of current legal and cultural restraints.

Moreover, characteristics of some foreign markets actually may facilitate this application. Thus, for companies which have decided that comparison advertising is profitable in the domestic market, there are opportunities to innovate with the technique in new trading areas.

A case in point is that of a French automobile company which pioneered a method of comparison promotion despite the restrictive legal environment in that country. Primary data for this analysis were obtained from interviews with company management, trade associations and advertising agencies. Secondary sources on the strategy of comparison advertising introduction in the United States were utilized to provide a background for a similar strategy abroad.

Comparison Advertising in the United States

Comparison advertising has been defined as advertising that "(1) compares two or more specifically named or recognizably presented brands of the same general product or service class, and (2) makes such a comparison in terms of one or more specific product or service attributes."¹⁰ (The terms "comparison advertising" and "comparative advertising" are used synonymously, but the former is preferred for this article because it pertains to advertisements which contain comparisons of products; the latter term implies that forms of advertising are being compared.)

Comparison advertising has been the subject of much argument. Some businessmen, advertising professionals, psychologists and others have attacked it as unethical and counterproductive for its sponsors.⁸ Others have found it effective at least for certain product types, media situations, and market circumstances.⁵

As a matter of fact, comparison advertising has flourished despite criticism. Some barriers were removed by the

Federal Trade Commission's approval of the technique. Moreover, it has been utilized increasingly in the United States since the 1960s, which may be the best evidence that firms have indeed been finding it an effective tool for increasing sales volume and market share.³

With the increased incidence of comparison advertising, the American Association of Advertising Agencies, whose 1966 policy statement "discouraged" such advertising, was induced to accept it as a reality. The Association's policy statement, issued in 1974, pointed out that: "All three networks accept it. The Federal Trade Commission encourages it. Some major advertisers use it."¹

Since the advent of comparison advertising in the United States, two trends have become apparent: (1) more explicit and specific comparison, and (2) increasing consumer awareness of comparison advertising. These trends indicate that explicit contrasts are increasingly effective and that sponsorship of such advertising is increasingly acceptable.³

Some advertising executives still express concern that long-term consequences of comparison advertising may be detrimental to all advertising. Michael Etgar and Stephen A. Goodwin state that the advertiser can minimize problems and create the most effective comparison advertisements by considering the following points.

- (1) Positions presented must be acceptable and understandable to the audience. Researched, nonconfusing messages should be carried in media having audiences well-matched to the communication's sophistication.
- (2) Consumers should have enough prior knowledge of a product to use the evaluative information effectively.
- (3) Comparison advertising is most effective for ads "which compare specific measurable product attributes such as weight, price, speed and so forth," and for products purchased on the basis of measurable performance.
- (4) Comparison advertising is most beneficial for new brands or for small name brands pitted against a market leader.
- (5) Print media offers advantages over audio-visual in that the consumer can ponder the comparative information presented.
- (6) And, of course, comparison advertising's effectiveness must be tested for each individual product. No generalizations can be deduced for any and every product.⁵ Stanley I. Tennenbaum adds, "A combination of product superiority, truth, fairness and presentation skill" will product the most effective comparison advertising.⁹

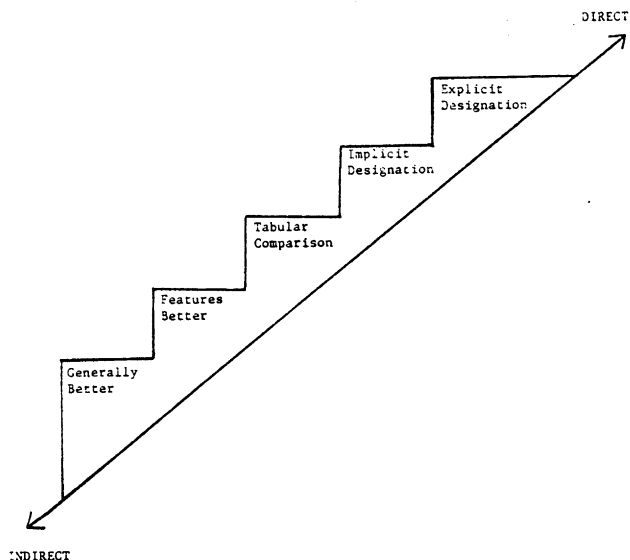
Strategy Suggestions

Historical development suggests the strategy considerations for introducing comparison promotion in a new milieu, especially a marketplace with promising compari-

son potential for the utilization of visual media and for advertising from nearby countries. From this situation, three general strategies emerge for developing comparison advertising in new markets: phasing-in, circumvention, and intermediation.

- (1) The phasing-in strategy commences with indirect comparisons and gradually shifts to more direct ones. **Figure 1** depicts the range of these comparisons exemplified in the growth of comparison advertising in the United States.

Figure 1: RANGE OF COMPARISON PRESENTATIONS



- (a) Generally Better: The first is the most indirect type of comparison. The sponsor simply claims superiority to the competition in general, but does not name any competitors. Its objective is to suggest that the audience should compare offerings even though the advertisement itself makes no specific comparison.
- (b) Features Better: This type is less indirect. The advertiser highlights the comparative advantages by pointing out specific attributes which make the product superior to (unnamed) other products on the market. The aim is to induce the audience to think of more specific comparisons, even though the advertisement avoids designating the other brands. (A competitor's name may be hinted, for example, by referring to "Brand X").
- (c) Tabular Comparison: This technique presents a table comparing products according to a list of significant features (for example, miles per gallon, tinted windows, three-speed windshield washer). This approach is still a somewhat indirect comparison if the sponsor only hints which competitors (for example, auto X, auto Z) are being contrasted feature by feature. The goal is to provide the consumer with more detailed information to compare with competitive products, in a seemingly objective manner.
- (d) Implicit Designation: This form is a moderately direct comparison. The advertiser avoids specifically naming the competitor, but compares the products in situations where the competitor is recognizable to the audience. For example, the competitor's distinctive package or product design may appear in the background. The purpose is to leave little doubt about the subject of comparison while avoiding a clear-cut comparison (as well as

minimizing free publicity to the competitor).

- (e) Explicit Designation: The most direct form of comparison is to name the competitors. The objective is to ensure that the audience fully understands the comparison. This form may be acceptable even in countries which restrict comparison advertising, if it is necessary to correct misinformation. For example, if a competitor had advertised its product as the lowest priced on a market, a specific comparison rebuttal might be permitted to show that this is not longer true, or only true in conveniently selected market areas. In any case, the earlier indirect comparisons are precedents for the most direct ones.
- (2) Another approach, the circumvention strategy, is equivalent to outflanking in military situations to avoid dangerous confrontations. The advertiser may utilize media in nearby countries, where comparison promotion is less constrained, to reach the target domestic audience. Countries such as Sweden, Denmark, the United Kingdom and the United States are examples of countries with minor restrictions. Thus, a comparison advertisement can be broadcast in Italian from Greece to reach an audience in Italy. Also, in some foreign markets, such as Switzerland, much of the population is multilingual. This audience will understand comparison advertising broadcast in the local languages from countries where it is less restricted. This technique will apply equally to the print media.
- (3) A third strategy is to utilize high ranking personal intermediaries. Top management officials in foreign countries often can exert tremendous influence on legislative bodies because of their social class membership or family connections. These persons may be able to get favorable modifications in legislation about comparison advertising in nations which traditionally have great respect for the "upper classes."

In some countries, quasi-governmental trade committees, associations and cartel organizations can exert major influence on legislative activities. If the company which wishes to run the comparison advertisements has friends or members of its top management on these bodies, it likewise is in an excellent position to promote a more favorable legal environment for its comparison presentations.

Comparison Advertising Opportunities in Foreign Markets

Now that comparison advertising is an established practice in the United States and research findings indicate how to use it most effectively, companies may wish to approach markets where new opportunities exist. Foreign markets may provide fresh fields for companies which utilize the technique, but believe that they have reached the point of marginal returns in the domestic markets.

However, because of legal restrictions against comparison advertising in many countries, companies cannot utilize it as aggressively as currently practiced in the United States. Comparison advertising is legal with minor restrictions in Australia, Canada, Denmark, Sweden, the United Kingdom and the United States. It is legal with major restrictions or self-regulation in the Netherlands, West Germany, Greece, Hong Kong, New Zealand, the Philippines, and South Africa. In other countries comparison advertising is legal but somewhat restricted by cultural attitudes or gentlemen's agreements; this situation exists in Brazil, Japan, South Korea and Switzerland.

Only in Austria, Belgium, France, Italy, Luxembourg and Spain is comparison advertising essentially illegal in Europe. Most of this legislation prohibits naming competitors and presenting misleading or derogatory information; in some cases even truthful comparisons are barred. In many instances, comparisons are allowed to reply to unfair criticism, objectively to describe improvements, methods and technical systems, or to make statements about superlativeness which are not aimed directly at competitors.³

In spite of restrictions, comparison advertisements have appeared in several countries, even those where it is supposedly illegal. Examples of comparison advertisements in these countries follow. Sweden: From 1972-1974, the Ford Motor Company AB ran advertisements in Swedish metropolitan and local newspapers comparing the Ford Consul with the Volvo, Saab and Open Rekord. Denmark: In 1977, Fredgaard (a radio-TV chain store) ran print ads comparing Fredgaard and Fona (the best-known competitor). The Netherlands: Lux detergent versus Dreft advertisements sponsored by Unilever (Lux) appeared in television and print media in April and June, 1976. Brazil: Using newspapers, outdoor advertising, radio and television, the Chevrolet dealers of Belo Horizonte sponsored ads comparing Chevrolet to Ford, Fiat, Opala and others.³

Another example of a country where comparison advertising is generally illegal, but has appeared, is France. An in-depth examination of the circumstances under which a French automobile manufacturer ran a comparison advertisement may elucidate the three strategies for introducing comparison promotion.

An Automobile Comparison in the French Advertising Environment

In May and June, 1977, an advertising campaign for the Matra-Simca (produced by a company affiliated with the Chrysler Corporation) ran a comparison advertisement for the first time in the history of automobile advertising in France. The two-page advertisement contrasted the Matra-Simca, a lower-priced economy car, with a Lamborghini, an Italian luxury sports car. It pictured both cars and explicitly named specific product attributes. Features compared ranged from fuel economy and trunk space to interior upholstery and stereo systems.

This comparison appeared in a country which was unanimously described by the French businessmen interviewed for this study as one of the most highly regulated in the capitalist world. Advertising practices in particular are much more severely controlled than in the United States. Le Bureau de Verification de La Publicite (the French equivalent of the American Federal Trade Commission) considers it unfair competition for any commercial institution to publicly fault another similar institution for the purpose of gaining customers. This unfair competition may result from any comparison or simple allusion, even where a competitor is not designated by name, but whose identity might be recognized by consumers.⁶

Nevertheless, no significant government reaction nor scandal in the trade resulted from the advertising, according to persons interviewed for this study. The Matra-Simca advertisement was definitely a comparison-type promotion; therefore, it apparently violated French law. But no government action was aroused; the advertisement contrasted two cars no one would ever dream of comparing seriously. Lamborghini customers would not at all be concerned about fuel economy or trunk space. However, in the future, if the comparisons become less far-fetched and hit closer to home, the Matra-Simca/Lamborghini advertisement could be pulled

out as a precedent.

Certain characteristics of the French advertising environment also were considered for potential expansion of the comparison campaign. First, French companies can exercise considerable latitude with advertising placed in nearby countries. Advertising can be telecast from stations in Monte Carlo which have a substantial audience in the French population. There also is a large audience for foreign radio stations. Many radios sold in France are capable of receiving short-wave and long-wave as well as the medium-wave length stations typical in the United States. Concomitantly, French-language media published in nearby countries such as Belgium and Luxembourg also circulate in France. Thus, advertising placed in other countries can be aimed at a significant portion of the market in France.

Second, visual media, which American advertisers have found especially effective in implementing comparison advertising, are the most important in France as measured by expenditures. Outdoor advertising is particularly applicable to the French audience which traditionally has looked to public signs as an important source of information about everything from entertainment to politics. In fact, in the smaller cities, outdoor advertising is the major outlet for local printed promotions; the newspapers devote much more space to editorial copy than to advertising. Thus, posters hold significant potential for comparison advertising; in addition to permitting visual comparisons, their placement in locations near points of sale is likely to exert strong influence on the last buying decision.

Another distinctive device more heavily used in France than in the United States, and which is intrinsically well suited to comparison advertising, is the disguised advertisement.⁴ Termed "La publicite qui n'ose pas dire son nom," loosely translated, it means "Advertising which hesitates to give sponsor identification." In France, it takes the form of a simple article in a paper or magazine; that is, it does not seem to be advertising. At the bottom of the page, the word "publireportage" appears, which means "disguised advertising." The intent is to have the reader go through the article without thinking of the information as advertising. This form may be especially effective for comparison advertising because its innocuous appearance minimizes the defensiveness which prospects may feel when confronted by a sales message.

According to an official with the French Automobile Manufacturers' Association, the less highly affluent population of France may present a more promising opportunity for comparison advertising than did the American marketplace.⁷ Some distinguishing characteristics of the French automobile market follow: (1) Only 65 percent of French families own a car, and the ownership period averages four years. Automobile ownership, consequently, serves as an especially high status symbol and a very important purchase decision. Therefore, it is imperative for the buyer to obtain as much information as possible from promotional communications. (2) Some French consumer groups have expressed the desire to see comparison advertising which they expect would provide information about the relative merits of rival brands. (3) French automobile customers are exposed to advertising messages much less than are Americans. C. Benoit feels that this lesser exposure could encourage the French audience to devote more time to examining a detailed set of claims.² (4) As stated earlier, the media available may be useful for comparison advertising. Included are posters, billboards, television and printed media from nearby countries where advertising is less restricted.

Conclusion

Actually, the very problems which have curtailed comparison advertising abroad may provide market opportunities for this form of promotion. Because of the absence of such advertising, there can be a profitable payoff for the sponsor being innovative in those countries where it is lacking. The novelty will yield greater message impact. Market share may be increased by shifting customers who had been neutral about the brands before they were induced to contrast specific features.

The three basic strategies which are available to deal with negative legislation and societal attitudes will find their applicability constrained by the local circumstances. In general, however, by careful analysis of the promotional environment of the target market, and by following a policy of gradualism, the comparison advertiser profitably may surmount seemingly inhospitable conditions.

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NEWSPAPERS AND THE MARKETING CONCEPT:
AN EXPLORATORY STUDY OF THE
ATTITUDES OF NEWSROOM AND MANAGEMENT PERSONNEL

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Introduction

Since the humble beginnings of the first newspaper in the Colonies, Public Occurrences, established in 1690 by Benjamin Harris, most all of them have been guided in their operations by the social responsibility theory of the press. This notion is so basic and fundamental that it is unarguable in principle. However expressed, it means that the purpose of a newspaper is to report the news. To the professional journalist, it is much more than just a goal. It is a social responsibility based on the First Amendment of the U. S. Constitution. Perceived threats to this philosophical principle are met with fierce resistance in the streets and in the courts, but most often in the columns of individual publications. Today, the emerging application of the marketing concept in the operation of many newspapers appears as such a threat, and has evoked quite a negative reaction in some quarters. All one need do is to glance at some of the titles of recently published articles like "Supermarketing the Newspaper", "Beware the Market Thinkers", and "News Doctors" to be left with the general impression that marketing and good newspapers are mutually exclusive.

While the marketing concept has grown and matured in the business literature and actually practiced in a large number of firms, it is only now being applied in the newspaper industry. Although it has not received a cordial invitation from some members of the journalism profession, it has been warmly welcomed by many publishers and news executives (Marple 1977, Rupp 1977, Wilkens 1979, Hirt 1973, Marbut 1977 and Meyer 1978). Its newness to newspapers was evident from the International Newspaper Promotion Association's 1978 nation-wide survey that reported only 21 percent of papers with a circulation under 100,000 had a marketing director and those over 100,000 only 31 percent (Editor and Publisher 1978). Comparison was impossible with the 1969 survey because such a question had not even been asked.

Conversion to Marketing. The "newspaper marketing concept" (as it is often referred to in journalism literature) and the managerial orientation it proposes to bring to newspapers were introduced out of necessity, which is declining demand for or circulation of newspapers (Clark 1979, Schweitzer 1980, and Williamson 1979). Its acceptance by publishers and news executives could have been anticipated, for after all, they are the ones primarily concerned with the paper's circulation and its profits. Such a view was expressed by a publisher of a leading paper when he said that a newspaper's future is in the market place and depends on understanding its readers and putting them first (Rupp 1977).

Another publisher, Lee J. Gutter of the Dallas Herald, has gone so far as to urge the creation of the notion "King Customer" which he hopes will hasten the adoption of the marketing concept (Wilkens 1979). He feels that the reluctance to accept marketing practices is due to a basic fear of the marketing concept, because to embrace such a notion where the fickle consumer is King, is a humbling experience for professionals. The vice president of consumer marketing at the New York Times, Donald A. Nizen, (1979), takes a different approach with his definition of what the marketing concept means for

newspapers. He sees the marketing function positioned between the publisher, editors and public and having a two-way communications responsibility. Specifically, marketing's function is to communicate with readers the output of the newsroom, and secondly, to editors the attitudes and needs of the readers which will affect not only the content, but packaging of the newspaper. He indicates that the latter function is at the heart of the marketing concept. Robert Marbut, (1977), president and CEO of Hartke-Hanks Newspapers, cites a marketing revolution in the industry as the reason to adopt the marketing concept. With a trend in the past ten years toward more segmentation, a more heterogeneous audience, and people no longer reading papers out of habit or loyalty, he suggests it is essential to put the needs of the reader first.

Paul S. Hirt (1973), vice president promotion at the Chicago Sun Times, is generally credited with the introduction of the newspaper marketing concept and its emphasis on promotion of the "total newspaper". He recognized that traditionally newspapers consist of fiefdoms --newsroom, advertising, circulation, and promotion--which perform their tasks sequentially rather than as a team. He urges a more unified approach. He suggests:

The newspaper marketing concept begins with an attempt to determine what general types of content and presentation potential customers regard as helpful and useful. Every department then becomes involved in developing a product that meets those specifications to the extent that is feasible. The approach does not preclude content that the editors feel is necessary to meet a community need even though it may not be specifically requested by readers.

He reminds the profession that papers do not have a guarantee on life and growth merely because they provide an excellent product. (A fact seen most vividly in the demise of the Chicago Daily News). Since newspapers do not sell themselves, he offers a two-pronged approach to newspaper management. First, papers must serve people, and second, once the market is recognized, all within the paper must realize how closely related the services are they provide to the market. While he emphasizes the social responsibility of the press, he says that the market must be recognized and offered a balanced product which encourages wide readership. The "total newspaper" is his approach to accomplish this goal.

Beware the Marketing Thinkers. Although first presented in 1973, the total newspaper concept has not achieved universal acceptance. A staunch critic is Roger Hornsby (1976), executive editor of the Denver Post. He views newspapers as quasi-public institutions with a constitutional purpose, a purpose which some of its readers may not understand but which will serve them anyway. He sees marketing as a real danger to the three fundamentals of the press - dependence on the skills of writing and reading, fulfillment of the human desire to have the news, and the public's understanding of the press's role in society. It is in this context that he alludes, somewhat cynically, to Levitt's marketing classic, "Marketing Myopia", saying that one school of management urges us to ask what business we are really in? When he

speaks of profits, Hornsby feels that the product (paper) must produce a profit to exist, but it does not exist for profit.

Fergus M. Bordewich (1977) in an editorial of one of the most prestigious journals of the profession, The Columbia Journalism Review, questions whether or not the application of the marketing concept will change the character and mission of newspapers. He notes some of the changing methods newspapers use to maintain circulation while acknowledging the need to create papers more people will read. His concern is that all this is being done not with more news, but with those things marketing/communication consultants say readers want.

Purpose of Study

It seems clear there are differences, often strongly expressed, on the benefits of the marketing concept as another guiding philosophy for the operation of newspapers. While some object, there is considerable support, primarily from news executives. An important question not addressed in this debate is: Are these the views of the working journalist and management personnel? If so, then one may wonder whether the newspaper marketing concept will work as well in practice as many of its proponents indicate.

This article reports the results of a survey conducted to determine the attitudes of newspaper executives and newsroom personnel (editors and reporters) toward the marketing concept and several of its dimensions that may be of operational significance. Specifically, the study develops an opinion profile toward the marketing concept and the contributions its dimensions have to offer for the operations at one large metropolitan newspaper.

Methodology

A two-part questionnaire was developed to measure attitudes toward the marketing concept. The questionnaire was similar to methods used in two earlier works, one comparing attitudes toward a societal system (Gifford et. al. 1978) and the other measuring attitudes of educators and executives toward specific attributes of the marketing concept (Barksdale and Darden 1971). Part one of the instrument introduced and defined the two idealistic notions, Theory I being the social responsible theory of the press and Theory II being the marketing concept, which might be used to guide the operations of a newspaper. The respondents were asked to express a preference for one of the two theories, to express their feeling about the current status of each, and expectations for the future (see **Figure 1**). The second portion of the questionnaire consisted of 19 Likert-type statements with five levels of agreement, ranging from "strongly disagree" to "strongly agree" (see **Tables 1-4**).

The data were collected from newsroom and business personnel at one large metropolitan newspaper. The newsroom respondents were a random sample of 95 reporter and editors which represents about one half of this group. A total of 60 usable questionnaires were returned. The business group consisted of the upper management personnel from the major non-editorial departments including promotion, circulation, advertising and administration. There was a total of 33 such business personnel from which 24 usable questionnaires were returned.

When examining the results and their implications, it should be kept in mind that the data were collected from a small sample at one newspaper. However, if one assumes that this newspaper is representative of the industry, then one has some indication of the status of

the marketing concept. A chi-square statistic was computed for all the statements. Due to the small sample size, it was necessary to reduce the original five-point scale to three in order to prevent empty cells.

Results

Responses to Part One

The responses here reflect clear, and in some cases, wide differences of opinion. Editors/reporters, as expected, overwhelmingly prefer the social responsibility theory (Theory I). While the marketing approach failed to gain majority support among the business managers, 40 percent did prefer the marketing concept (Theory II).

The groups also differ on which theory is dominant. The 54 percent of editors/reporters who think Theory II is dominant today perhaps reflects their fear that marketing has already made inroads in the industry. Sixty-nine percent of business managers feel Theory I is dominant, an indication that marketing still has a long way to go. For expectations, the majority in each group agree that the marketing concept will dominate by 1985. Concerning service to readers, the majority in the newsroom (89 percent) feel Theory I is best, while the business managers are about evenly divided.

These differences can be attributed to different values, concerns, and level of understanding, especially regarding the marketing concept. It has been suggested that the lack of understanding is an indication that the marketing concept is in the very early stages of its implementation (Kotler 1977). If so, one may conclude that marketing is in its early stages of development in the newspaper industry. Overall, the results appear to support this conclusion when one considers that a majority of both groups prefer Theory I, they see a move toward Theory II, and are uncertain of the benefits to readers.

Response to Part II

For purpose of analysis, the 19 Likert-type statements have been grouped in the following categories: 1) adequacy of marketing concept - **Table 1**, 2) influence of concept - **Table 2**, 3) Reader Benefits - **Tables 3**, and 4) newspaper responsibility and marketing concept - **Table 4**. In all categories, except influence, there are significant differences between the newsroom and business respondents.

Adequacy of Marketing Concept. While the majority of those surveyed do not see the concept as inadequate as a decision criterion, there is a clear difference of opinion on whether the marketing concept is an acceptable philosophy for the management of a newspaper. The business respondents, possibly more familiar with the concept, are more receptive of it as a practical framework. The journalists are more uncertain, as reflected in the 21.6 percent who respond "not certain" to question one. The general unwillingness of editors/reporters to opt for adoption (only 23 percent) appears to parallel their responses in part one.

Influence of Concept. In this category (questions 4-7), there are no significant differences. However, one might speculate that the reasons behind the responses differ. For example, about 70 percent in each group feel that the marketing concept has had a "tremendous influence". Yet, we know from part one there is disagreement on whether such influence is desired. In addition, there are differences regarding the adequacy of the concept. Therefore, since both respondent

groups agree on the marketing concept's increasing influence, and at the same time exhibit differences in terms of preference and adequacy, it becomes essential, if one wants to implement the concept, to identify the specific differences so they may be discussed and resolved to the satisfaction of all.

Reader Benefits. For statements in this category directly concerned with reader benefits, there are significant differences between the groups (statements 8, 9, and 11). As expected, when focus is on the traditional business areas (circulation and advertising - statements 10 and 12), there are no significant differences. It appears that business managers feel the marketing concept will serve the reader well when practiced by all departments, while those in the newsroom prefer it be limited to the business area. These findings support the view of some that functions within the paper should operate independently.

The responses to the final two statements in this category appear to propose a dilemma for professional journalist. On the one hand, almost half (48 percent) feel the marketing concept is an important factor in making the newsroom responsive to reader needs, and the readers know their news needs, yet on the other hand, the news professionals feel they are better qualified to decide. In summary, this section confirms, at least for this sample of editors and reporters a resistance to the adoption of the marketing concept. The key to this resistance perhaps lies in the issues of press responsibility, freedom, and the belief that newspapers are more than just another business. This is explored below.

Newspaper Responsibility. The statements in this category identify the basis upon which journalist build their resistance to marketing. Here, there are significant differences between newsroom and management on all items except one (statement 16 regarding readers lack of appreciation for newspapers which is understandable). This section brings out quite clearly the perceived conflict between the social responsible theory of the press and the marketing concept. Most journalist (92 percent) feel newspapers have a duty to give readers some things they do not want. Interestingly, 58 percent of business managers also agree. A majority of the newsroom (55 percent) agrees that adoption of the marketing concept will result in less news in the paper, while 75 percent of the business managers disagree. These findings tend to support the conventional view that a journalist's function is to report the news and they are best qualified to decide what "news" is. They see the marketing concept and marketing practices as threats to this role.

These observations tend to be supported by the editors/reporters' responses to statement 18 where they agree that news activities should be carried on independent of other paper functions. This belief is a corollary of journalists' First Amendment freedoms, a constitutional right most covet and fight to protect. Managers do not agree (75 percent) posing an interesting question on how to implement a unified approach. Journalist tend to feel (53 percent) that if they do a good job of reporting the news the paper will sell itself, while 67 percent of business managers do not agree. However, 33 percent of journalist do not agree and 13 percent are uncertain.

Implications

The survey suggest, as has been the case in other industries, marketing is met with resistance when being introduced. For newspapers, the most resistance, or lack of acceptance, is from professional journalists. Yet, it must be kept in mind that while the two groups in

this study exhibit significant differences in their attitudes toward marketing, they are not always on opposite ends of the scale. On examination of Tables 1-4, one will observe, especially for newsroom personnel, a considerable degree of uncertainty. The conclusion suggested is that business managers basically accept the marketing concept as appropriate for the operation of newspapers. Journalists on the other hand approach it with an attitude of practical acceptance, reservation, some fear, and a mixture of resignation and inevitability.

Professor Kotler (1977) has suggested five stages marketing passes through as it is introduced in a new environment, as well as three approaches for overcoming opposition to its introduction. Briefly the five stages are: 1) lack of understanding and considering oneself above marketing, 2) beginning of advertising and promotion, 3) innovation with new services, 4) positioning, and finally 5) total marketing analysis, planning and control. The three approaches offered are: 1) present marketing as a promotion force to increase sales, 2) describe marketing as a systematic study of market needs and opportunities in order to develop better mixes, and 3) saying that marketing is really the opposite of selling and advertising.

The results in this survey suggest newspapers are somewhere between the lack of understanding and promotional stages. The responses indicate that Kotler's second approach offers the best solution for resolving the differences that exist within the typical newspaper. Therefore, those who adopt the marketing concept as an addition to the management philosophy of a newspaper must convince all concerned that it is a systematic approach for creating a better product and accomplishing the goals of a newspaper, rather than a threat to the news reporting function.

The results also imply that as marketing moves to the innovation stage and beyond, newspaper executives must not fail to recognize the magnitude of the changes they are making and the impact it is likely to have on reporters and editors. One possible avenue for reducing resistance and creating an atmosphere of acceptance is through participation. Especially editors and reporters must be involved in marketing planning and implementation. The resistance reflected in the responses is a lack of understanding of the marketing concept and its perceived threat to traditional freedoms and practices. The key to development from the early stages then seems to be education directed toward understanding. Involvement in processes such as market research to define target markets should assist in improving reporters' and editors' understanding of the tools of marketing and help make them favorably disposed to its adoption. Until the strong fears and misunderstandings expressed throughout this survey are removed, there appears to be little hope for resolution of the "marketing controversy" in the newspaper industry. This means that efforts must begin with a total marketing effort within each paper. Without an "internal effort" any attempt to say newspapers have converted to marketing is meaningless.

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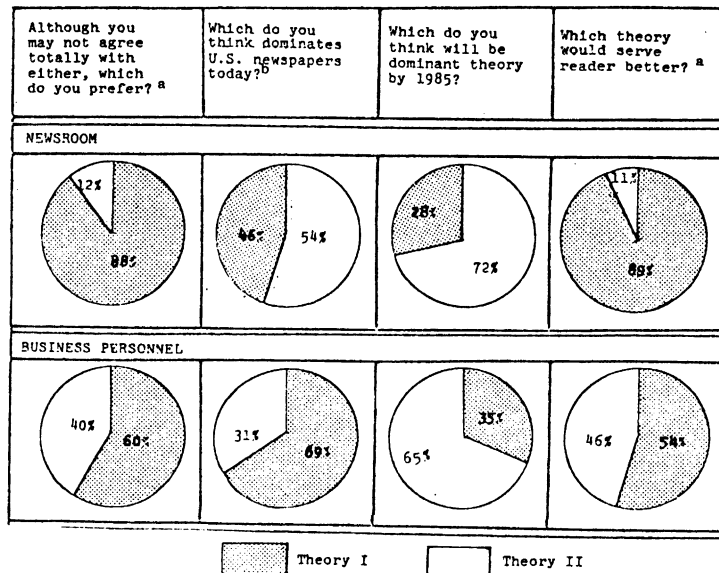
TABLE 1

ADEQUACY OF MARKETING CONCEPT

Statements	Respondents	Level of Agreement		
		Disagree	Not Certain	Agree
1. The marketing concept is an academic idea that works better in theory than in practice. ^a	Newsroom (60)	36.6%	21.6%	41.8%
	Business (24)	75.0	4.0	21.0
	Total (84)	48.0	17.0	35.0
2. The notion of consumer orientation is so general and vague that it is inadequate as a decision criterion on the day-to-day management of newspapers.	Newsroom	50.0	6.7	43.3
	Business	66.7	12.5	20.8
	Total	54.8	8.3	36.9
3. The marketing concept should be adopted as an operating philosophy by most newspapers in the U.S. ^a	Newsroom	61.7	15.0	23.3
	Business	16.7	16.7	66.6
	Total	48.8	15.5	35.7

^aChi-square test indicates a significant difference at the .01 level.

Figure 1. Key responses to Part I



^aChi-square test indicates a significant difference at the .01 level.

^bChi-square test indicates a significant difference at the .05 level.

Theory I	Theory II
<p>The press, which enjoys a privileged position under our government, is obliged to be responsible to society for carrying out certain essential functions of mass communication in contemporary society. The responsibilities of the press include (1) servicing the political system by providing information, discussion and debate on public affairs; (2) enlightening the public so as to make it capable of self-government; (3) safeguarding the rights of the individual by serving as a watchdog against government; (4) servicing the economic system, primarily by bringing together buyers and sellers of goods and services through advertising; (5) providing entertainment; (6) maintaining its own financial self-sufficiency so as to be free from pressures of special interests. The press sells more than a commodity. What the reader is given is of concern to editors and publishers. It is the duty of the reader to study the facts; weigh ideas which do not necessarily match his own, and put his basic assumptions up for challenge. The press is accepting only half of its responsibility if it does not help the reader realize this duty.</p>	<p>The whole newspaper is an interacting editorial-advertising-circulation-promotion operation growing out of the fulfillment of special social service functions, applied to a specific geographic, demographic and economic base -- the market the newspaper serves. Planning should begin with an orientation outward toward the market the newspaper serves, rather than inward toward some unilateral goal of one department. It is necessary to discover what contemporary services the readers seek in their newspapers; what changes they think should be incorporated in content or presentation to make the newspaper more useful, helpful and essential to the reader. Newsroom, circulation, advertising and promotion personnel must join in an interlocking effort to fulfill the needs and wants of the reader. Satisfying readers' wants and needs is crucial to satisfying the newspaper's organizational goals, including maximizing profits.</p>

TABLE 2
INFLUENCE OF CONCEPT

Statements	Respondents	Level of Agreement		
		Disagree	Not Certain	Agree
4. Over the past few years, the marketing concept has had a tremendous influence on the philosophy and thought of management of leading newspapers.	Newsroom (60)	6.7%	23.3%	70.0%
	Business (24)	16.7	8.3	75.0
	Total (84)	9.5	19.0	75.0
5. Executives may give considerable lip service to the marketing concept, but in general, it will have little influence on the day-to-day management of newspapers.	Newsroom	61.7	23.3	15.0
	Business	70.8	4.2	25.0
	Total	64.2	17.9	17.9
6. The marketing concept will have its greatest influence - within newspapers - on the organization and management of advertising and promotion activities.	Newsroom	20.0	13.3	66.7
	Business	25.0	8.3	66.7
	Total	21.4	11.9	66.7
7. If measured in terms of its contributions to the management of marketing activities within the newspaper, the concept could be expected to be effective.	Newsroom	1.7	43.3	55.0
	Business	4.2	16.7	79.1
	Total	2.4	35.7	61.9

TABLE 3
READER BENEFITS

Statements	Respondents	Level of Agreement		
		Disagree	Not Certain	Agree
8. From the standpoint of readers, the marketing concept can produce relatively few benefits. ^b	Newsroom (60)	41.7%	15.0%	43.3%
	Business (24)	83.3	4.2	12.5
	Total (84)	53.6	11.9	34.5
9. The marketing concept will force newspapers to design papers which fit more precisely the needs and wants of readers. ^a	Newsroom	36.7	15.0	48.3
	Business	8.3	8.3	83.4
	Total	28.6	13.1	58.3
10. The marketing concept can stimulate newspapers to alter circulation methods to match newspaper availability more closely with consumer reading habits and needs.	Newsroom	15.0	18.3	66.7
	Business	8.3	4.2	87.5
	Total	13.1	14.3	72.6
11. When evaluated in terms of actual benefits created for readers, the marketing concept must be judged unacceptable. ^a	Newsroom	31.7	26.7	41.6
	Business	83.4	8.3	8.3
	Total	46.4	21.4	32.2
12. The marketing concept can be an important factor in making the advertising department responsive to readers' wants.	Newsroom	6.7	30.0	63.3
	Business	4.2	12.5	83.3
	Total	6.0	25.0	69.0
13. The marketing concept can be an important factor in making the newsroom responsive to readers' wants.	Newsroom	33.3	18.3	48.4
	Business	20.8	4.2	75.0
	Total	29.8	14.3	55.9
14. The marketing concept will not work because readers do not know what they want in a newspaper.	Newsroom	56.7	15.0	28.3
	Business	79.2	12.5	8.3
	Total	63.1	14.3	22.6

^aChi-square test indicates a significant difference at the .01 level.

^bChi-square test indicates a significant difference at the .05 level.

TABLE 4
NEWSPAPER RESPONSIBILITY AND MARKETING CONCEPT

Statement	Respondents	Level of Agreement		
		Disagree	Not Certain	Agree
15. Newspapers have a duty to give readers some things they do not want. ^a	Newsroom (60)	6.7	1.7	91.6
	Business (24)	12.5	29.2	58.3
	Total (84)	8.3	9.5	82.2
16. Most readers do not understand or appreciate the efforts made by newspapers to satisfy their wants and needs.	Newsroom	15.0	11.7	73.3
	Business	20.8	12.5	66.7
	Total	16.7	11.9	71.4
17. Adoption of marketing concept inevitably will lead to less news in the newspaper. ^a	Newsroom	25.0	20.0	55.0
	Business	75.0	4.2	20.8
	Total	39.3	15.5	45.2
18. Newsroom activities should be carried on independent of the other activities of the newspaper. ^a	Newsroom	30.0	1.7	68.3
	Business	75.0	12.5	12.5
	Total	42.8	4.8	52.4
19. If a newspaper does a good job of fulfilling its responsibility to report the news, then it will sell itself. ^a	Newsroom	33.3	13.3	53.4
	Business	66.7	8.3	12.5
	Total	42.8	11.9	45.3

THE EFFECTS OF NUDITY, SUGGESTIVENESS, AND
ATTRACTIVENESS ON PRODUCT CLASS AND BRAND
NAME RECALL

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Abstract

This laboratory experiment found that nudity had a serious negative impact on brand name recall. This result is especially important because the degree of nudity was quite mild. Contrary to prediction, nudity had no effect on product class recall. As expected, no other significant effects were found.

Introduction

The past decade has been a period of extensive social change. Two of these changes are especially important in shaping the present research. First, is the increasing sexual permissiveness of society. This has given rise to a degree of explicitness in the use of sexual themes in advertising which would have been unthinkable in the 1950s or early 1960s. Second, is the coming to maturity of the womens' movement in the 1970s. One important aspect of this movement has been rather strong criticisms of the manner in which women, and to a much lesser extent men, are portrayed in advertising. A particular concern here has been the exploitation of women as sex objects.

These social changes have given rise to a variety of research efforts to determine the effects of sexually explicit material. Much of this research has occurred in psychology where the sexual material is strongly erotic, even pornographic, and therefore not especially relevant to advertising (Wilson and Moore, 1978). Considerably fewer studies have been conducted by marketing researchers. Wilson and Moore (1978, pp. 58-60) provide a relatively good review of most of these studies. In commenting on this and two other papers, Alpert (1978, p. 74) concludes

the paper (by Wilson and Moore) has synthesized considerable literature, and yet one has the sense that there is not much that can be generalized at this point.

Given the small number of advertising studies conducted to date and the diversity in theoretical perspectives and methodologies, the lack of generalizable results is not surprising. Despite the lack of generalizable results, certain patterns do seem discernable in the available empirical research. It is our intention to develop these patterns and related a priori speculations into a set of hypotheses which may be empirically tested. In particular, we will examine the effects of model nudity, suggestiveness, and attractiveness on product class and brand name recall.

Hypotheses

The dependent variables in this research are recall of product class and brand name. These dependent measures have been adopted for several reasons. First, they are relatively unambiguous. Second, they seem to be subject to less bias and measurement error than measures of affect or behavioral intentions. And, third, Ray et. al. (1973) have developed evidence that consumer learning may be represented by three

different hierarchies of effects. In two of these hierarchies (Learning and Low Involvement) cognitions develop before either affect or behavioral intentions. In the third hierarchy (Dissonance/Attribution) cognitions develop last. Mass communication, however, has relatively little importance in this last hierarchy and it is, therefore, not especially relevant for the present research. Thus, an argument can be made that establishing basic cognitions such as product class and brand name is the first, and in one sense the most basic task to be accomplished by advertising.

The first independent variable is degree of nudity. Two presumably offsetting trends appear to be at work here (Wilson and Moore, 1978; Alpert, 1978). First, advertisements with a higher degree of nudity may have greater attention getting value. As the methodology involves a laboratory experiment any relative attention effect from nudity is likely to be very small or nonexistent. Second, advertisements with a higher degree of nudity may have more of a distraction effect which interferes in learning both the product class and the brand name. There is at least one study (Peterson and Kerin, 1977) which provides a hint that nudity may have some positive effects when nudity is relevant to the product class. The Peterson and Kerin study, however, did not measure recall. Thus it is hypothesized that nudity will have a negative impact on product class and brand name recall with the effect on brand name recall being most pronounced.

Suggestiveness might be expected to operate in a manner similar to nudity. Thus one might expect a negative relationship between suggestiveness and recall. Two factors, however, argue against such a relationship. First, suggestiveness was operationalized at a level which is in conformance with currently acceptable advertising practices. Thus any effects arising from suggestiveness are likely to be subtle and therefore should lack the strong distractive effects of nudity. Second, the product class (whiskey) used in this study is relevant to a sexual advertising approach. Thus we hypothesize no effect or only a very small positive effect on product class and brand name recall from suggestiveness.

The third independent variable, attractiveness, has been extensively investigated in psychology, primarily in the area of person perception. This research clearly shows that physical attractiveness can affect cognitions, affect, behavioral intentions, and behavior (Tagiuri, 1969). In the marketing area, however, only one study (Baker and Churchill, 1977) has examined the effects of physical attractiveness of models in advertisements. This study found a clear positive relationship between physical attractiveness and an aggregated measure of affect which is in accord with the psychological literature. Baker and Churchill, however, found no appearance effects on cognitions or behavioral intentions. This is especially interesting in light of what seems to be an increasing tendency in the print and television media to use models of more "average" appearance and a recent study by Doyle Dane Bernbach urging the use of "a greater range of women in ads, featuring different kinds of looks and age

groups" to "increase the opportunity for all women to identify with someone in the advertising" (Advertising Age, 1980, p. 67). Thus, we expect to find no effects from attractiveness on either product class or brand name recall.

Method

The experiment was operationalized as a 2 x 2 x 2 factorial. The product used in the experimental advertisements was Canadian Mist whiskey. This product was used because it was deemed relevant both to the subjects (male undergraduates) used in the experiment and to a sexual advertising theme.

The eight experimental advertisements were created in the following way. Each ad consisted of the following elements: a bottle of Canadian Mist whiskey and two filled glasses, the brand name displayed clearly and prominently on the bottle in bold type along with the theme "Canada at its best," and a male and female model. Each of these elements was taken from existing advertisements. An important aspect of this procedure is that the levels of nudity and suggestiveness were within the boundaries of currently acceptable advertising practices.

The experimental manipulations involved only the male and female models; all other elements were held constant. Nudity and attractiveness were judged primarily on the basis of the female model. The attractiveness of the male and female models, however, were quite similar. It should be noted that in no case was any model completely nude. Rather in the "nude" condition a great deal of skin was exposed which in the "not-nude" condition the models were fully clothed. Suggestiveness was manipulated by the positioning of the male and female models. In the suggestive condition the models were positioned to suggest a romantic, and possibly sexual, involvement. It should be noted that this definition of suggestiveness is quite different from other studies where the term often refers to a state of partial undress or seductive appearance. It seems to us that this is a more relevant definition of the term.

Forty male undergraduates at an eastern university served as subjects. Subjects were told that the experimenters were students in an advertising course and that they would like to get the subject's reactions to several advertisements they had created as part of a course project. Each subject was shown one of the experimental ads interspersed among four non-experimental ads. Order was controlled by placing the experimental ads in the first, second, ..., place once. No time constraint was placed on the subjects. After the subject had finished viewing the ads the ads were removed and a series of background questions were asked regarding the subject's class, hometown, and hobbies and extra-curricular activities. This was designed to interfere with direct recall from short term memory. The subject was then asked to write down in as much detail as possible, all of the relevant information he could remember for the five advertisements. The subject was then shown the experimental ad and asked to rate it on a 1 to 7 scale for degree of nudity, suggestiveness, and attractiveness. Finally, the subject was debriefed.

The table presents the analysis of variance results.

Manipulation Check

The analysis of variance shows that the manipulation of the independent variables was generally effective. In all cases the significant effects are in the expected direction. For Nudity and Attractiveness only the main effect for Nudity or Attractiveness respectively, is significant. For Suggestiveness there is, in addition to a significant main effect for Suggestiveness, a Nudity by Suggestiveness interaction which, although unplanned, is not surprising and is in accord with Steadman's (1969) findings. More specifically, the expected effect for Suggestiveness occurred only for the Nude condition.

Recall

Three measures of recall were computed from the subjects' written descriptions of the advertisements to which they were exposed. In each case one was recorded for a correct recall and a zero for an incorrect recall. The correct product class identification was "whiskey." The general term liquor was not accepted. The correct brand name identification was "Canadian Mist." After a preliminary analysis of the data a less restrictive brand recall measure was constructed and analyzed. A response of "Canadian Whiskey" was considered correct for this alternate brand recall measure. In terms of accuracy of the identification this last measure falls between product class and brand name recall.

Product class was correctly recalled by 65 percent of the subjects. Brand name was correctly recalled by 38 percent of the subjects. As expected, the alternate brand measure fell at an intermediate value being correctly recalled by 55 percent of the subjects.

TABLE
SIGNIFICANCE VALUES FOR MANIPULATION CHECKS AND
PRODUCT CLASS AND BRAND NAME RECALL

Source of Variation	Dependent Variables		
	Attractive- ness (A)	Suggestive- ness (S)	Alt. Brand Recall
Nudity (N)	.001		.011
Attractive- ness (A)	.006		
Suggestive- ness (S)		.002	
NA			
NS		.003	
AS			
NAS			

Note: All significance values less than .05 are tabled.

The only significant effect was the main effect for nudity on brand name recall. The results here were highly significant ($p < .011$) and strong. In the nude condition the brand name was correctly identified by 21 percent of the subjects. In the fully clothed condition recall rose to 55 percent. As expected, the main effect for attractiveness was not significant.

The hypothesized negative effect of nudity on product class recall was not found. As expected, there were no significant effects for either attractiveness or suggestiveness. Thus, the analysis supports five of the six original hypotheses.

Discussion

Interpreting the results of an experiment such as this is difficult for a variety of reasons which are discussed below. The simplest and most straightforward explanation of the results is that even a mild degree of nudity has a serious distracting effect which may interfere, and in no instance enhances, the learning of cognitions such as product class and brand name. Thus, it would appear wise for advertisers to avoid the use of nudity in advertisements at least in situations similar to those represented by this experiment. This conclusion, of course, neglects the question of the attention getting value of nudity. Given the strong negative results for brand recall, however, it can be argued that the relevant question is not the attention getting value of nude versus non-nude advertisements but rather the attention getting value of nudity versus other methods of gaining attention which may interfere less with learning of the advertising message.

The lack of significance for attractiveness is interesting for two reasons. First, it supports Baker and Churchill's (1977) findings regarding the absence of a relationship between the physical attractiveness of models and the learning of relevant cognitions. In this regard it should be noted that Baker and Churchill's experimental advertisements contained either a male or female model but not both. Thus, the present study not only supports but also extends their study. Second, it also suggests that the present trend toward using models of average, and presumably more "normal," physical attractiveness does not affect the learning of cognitions such as product class and brand name. To the extent that other advantages accrue, such as greater identification of subjects with models, the use of models of average attractiveness should be advantageous to advertisers. Three caveats, however, are necessary. First, the advantages of using "normal" models are at this point quite speculative. Second, there is the question of the attention getting value of exceptionally attractive models which is ignored in this study. Third, and most importantly, there is the fact, which is well established in person perception research (Tagiuri, 1969), that people tend to associate positive affect with physical attractiveness. Whether this positive affect generalizes to products in advertisements is still an open question since apparently only one study has addressed this specific issue. Baker and Churchill's (1977, pp. 547 and 549) results, however, do provide tentative support for such an effect. Given these results and hypotheses more research on the effects of physical attractiveness appears warranted.

As expected, there was no significant effect for suggestiveness on recall. The manipulation check showed that suggestiveness was effectively manipulated only for the nude condition. Therefore, it is appropriate to check the simple effects of suggestiveness for the nude condition. This test was not significant. The level of suggestiveness, however, was quite mild. That is, there was no intimate touching in the advertisements or other blatant elements which might give a highly suggestive connotation. There were two major reasons for this treatment. First, the experimental advertisements were constrained to be within currently acceptable advertising practices. Second, since the

experimental advertisements were constructed by cutting and pasting from existing ads we were severely limited in the relative positioning of male and female models. Thus, although the manipulation check confirms the effectiveness of the intended manipulation, the level of suggestiveness could have been noticeably increased without violating acceptable standards. This may prove to be an interesting area for future research.

In an interesting, and frequently witty, commentary on research on sex in advertising Strong (1978) argues that humans are inherently sexual beings and that the effects of sex in advertising are likely to be complex. Strong also notes that the response to sexual material is strongly conditioned by the social and cultural environment of the receiver. Similarly, in a study of the effect of demographic and cognitive factors on evaluations of "sexy advertisements" Sciglimpalia, et. al. (1978) found substantial differences in evaluations for a number of factors such as the respondent's sex and personal sexual orientation. Before drawing conclusions from the present study it is, therefore, appropriate to point out the degree of homogeneity of both the stimuli and the subjects used in this study. The stimuli were limited in at least three major respects: a single product class was investigated, the advertisements contained both male and female models in each advertisement, and the advertisements contained both male and female models in each advertisement, and the advertisements had very limited copy. The most obvious subject limitation was that all subjects were college males. These particular stimuli and subjects, however, were selected specifically because it was felt that they presented a total context in which sexual advertisements were most likely to have the greatest positive effect. In particular, it was felt that the product class was relevant to a sexual advertising theme, that males would be more likely than females to respond positively to sexual advertisements, and that the very simple copy would be easy to learn.

Conclusions

On the basis of this study, and related studies which have been reviewed, it seems safe to conclude that nudity in advertising does not enhance product class or brand name recall and that nudity may have severe adverse effects on recall. In interpreting the results of this experiment it should be remembered that, unlike some studies where the model is totally nude, the level of nudity in the present study was quite modest. Although it is often presumed that nudity has substantial attention getting value this presumption appears to be based on little empirical data. Furthermore, as previously noted, the relevant question is not the attention value of nude vs. non-nude models per se but the attention value of nudity vs. other attention getting methods which may interfere less with learning of the advertising message. Thus, it would seem that advertisers would be well advised to avoid nudity unless very careful pretesting shows it to be appropriate to the advertiser's goals. One possible exception to this recommendation is for a very well established brand concept where the advertisement is simply a reminder.

In this study attractiveness did not affect recall. This result supports Baker and Churchill's (1977) findings. Thus we can offer no specific recommendations for advertisers. Our research does suggest, however, that two possibly conflicting forces may arise from attractiveness. First, there is reason to believe that attractiveness of models in advertisements may be positively related to affective judgments regarding the advertised products. Second, since most people are of "average" attractiveness, it may be that

this identification may positively affect their intentions to purchase. How these, and possibly other, effects arising from attractiveness may affect purchase would appear to be a potentially fruitful area for future research.

Finally, our research found no effects from suggestiveness on product class or brand name recall. Although this finding was expected, it was also noted that the suggestive condition was quite mild. What effects a strong suggestive advertisement might have is unknown. As a practical matter, however, it would seem that the advertiser is quite limited in the use of suggestive advertisement.

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1. See Sciglimpaglia, et. al. (1978) and Roberts and Korran (1978). These papers, along with an additional discussion by Strong (1978), were the basis for a session titled Sex in Advertising at the 1978 Association for Consumer Research meeting and provide a good introduction both to what is known and some of the questions which need to be researched regarding the effects of sexual advertising material.

PARENTAL ATTITUDES TOWARD CHILDREN'S ADVERTISING:
SOME PRELIMINARY FINDINGS

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Abstract

For a decade now the Federal Trade Commission has debated the pros and cons of children's advertising. The Federal Trade Commission has considered a ban of all advertising on children's programs, a ban of any commercials of highly sugared foods, and/or a disclosure of nutritional value of such products. Ironically, however, the FTC has announced that TV ads aimed at children are no longer a target of FTC restrictions (Wall Street Journal, 1981). These debates have prompted a tremendous amount of research concerning children's advertising. However, the majority of this research has focused on the advertisements themselves, the children's perceptions of the advertisements, or the effects of the ads on the children. The research underlying this paper is designed to analyze parental attitudes toward children's advertising. The results indicate that parents have a negative attitude toward children's advertising, and the advertising industry might want to analyze possibilities of self-regulation, even if the FTC has decided not to make restrictions.

Background of the Study

The battle over the possible bans by the Federal Trade Commission has two very strong opinions. Proponents of the restrictions argue that children, especially preschoolers, cannot tell the difference between program material, which may have educational value, and the advertising messages themselves. Opponents argue that parents exert stronger influence on children than television does, and therefore reducing or eliminating such ads would adversely affect children's programming.

Literature on Children's Advertising

The literature on children's advertising is both diverse and plentiful. It can be categorized into four broad areas: the effect of commercials on children; the content of children's advertisements; the public policy issue; and literature concerning the interpersonal relationships in the family and commercials. Because of the focus of this study, only selected literature on the effect of commercials on children and the effect of advertising on the interpersonal relationships in the family will be reviewed.

The Effect of Commercials on Children

A conceptual framework for considering the issues and a strategy for further research is provided by Feldman and Wolf (1974). They summarized this framework for studying the effect of advertising on children into eight general categories:

1. Commercials sometimes contain the assertion that a product costs "only" a given amount. This assertion, when the amount involved is in fact considerable, plays upon the child's lack of knowledge of relative quantities of money. Such claims are often used by the child as counter-evidence against parental assertions that cost of the product is too high.
2. Commercials sometimes seem to magnify the benefits of particular toys or the size of snack foods. This encourages false

expectations in the child. When these expectations are deflated, upon purchase and use of the toy or food, the child is frustrated.

3. Commercials sometimes portray fantasy situations in which the child using a particular toy or food product is endowed with marvelous powers. This practice not only makes the child susceptible to future frustrations, but it also encourages poor reasoning as the basis for choosing a product.
4. Commercials are designed to arouse desires that would not otherwise be salient. The child is made prisoner to external forces rather than made sensitive to his or her own needs or lack of these.
5. Commercials exploit children's suggestibility.
6. Commercials often depict vanity as a reason for choosing one product or another. Such depictions teach children poor values as well as poor bases for choosing products.
7. Commercials often contain misrepresentation, exaggeration, fantasy, and deceit. As the child discovers this, he or she develops a cynicism not only toward such ads, but also toward the free enterprise system, our society, and its institutions.
8. Commercials often suggest that food products can be bought for their sugar content or for the prizes or bonuses offered in conjunction with their purchase. This interferes with attempts to educate children about the nutritive content of foods and offers irrelevant criteria for product choice.

Feldman and Wolf conclude that attention-getting procedures and puffery understood by adult viewers, may not be understood as such by children; children generally lack the cognitive skills that make such techniques understandable and transparent.

Robertson (1976) found that children's behavioral responses to commercials correlated very well with their attitudinal responses. His study has particular significance because most researchers use cognitive or attitudinal dependent measures which may or may not lead to behavioral responses. The behavioral measure used by Robertson was the number of requests made to parents for toys and games after viewing. Results indicated that there is either increased cognitive defenses against commercial persuasion or decreased interest in toy and game products as the child grows older.

In a related study Robertson and Rossiter (1977) considered the effects of children's advertising as influenced by dispositional variables (i.e. age, parental education, etc.). They found that children with high television exposure requested proportionately more toys and games than low exposure children. There was a marked reduction in requests for toys and games with increasing age. Higher parental education

revealed lower number of requests from children. Also, the researchers found a high negative correlation between television exposure and parental education. While they found high exposure provided high behavioral responses, Rossiter (1979) in a later study found that exposure to advertising does not make children more cognitively or mentally susceptible to persuasion.

In a study of low income families Gorn and Goldberg (1977) found that the urban poor children: (a) spend twice as much time viewing TV; (b) like television more than the general population; and (c) trust television more than other media. This study has implications for parent/child dynamics. Two questions left unanswered but of particular significance need further research: Specifically; (a) does the buying of products that they can ill-afford create hostility in the parent(s)? (b) does the nonpurchase of requested products create guilt in the parents?

Interpersonal Relationships in the Family

Sheikh and Molseki (1977) examined the unpleasant consequences of parental refusal to yield to children's requests for advertised products. They found that the consequences decreased with age and differed with sex. The children tended to view the parent of the opposite sex to be more benevolent than the parent of the same sex.

Ward and Caron (1975) and Robertson (1977) suggest that four areas should be of particular significance to researchers. First, consumption requests by children may strain parent-child relations. Second, this strain is probably greatest among economically disadvantaged families. Thirdly, denial may be frustrating to both parent and child. Finally, children's requests may complicate family consumption priorities, leading to guilt and resentment.

In support of the above studies Reid (1979) found that behavior should only be interpreted in relation to the people (peers and parents), situations (type of viewing) and past experiences (amount of exposure) of the child. In particular, Reid found that chronological age was not the only important key to children's consumer learning processes.

Perhaps the most integrative article published to date is provided by Resnik, Stern and Alberty (1979). This article provided the following:

1. A schematic model of a child's processing of television advertising for organizing previous research;
2. A review of the major research in the area using the model for organization and integration;
3. Suggestions of issues and broad areas for future research using the model to indicate gaps in past research efforts.

In the area of further research the authors state that, "much of the children's television research has focused on the effects of advertising on processes and behavior preceding the child's formation of an intention to buy. Too little is known about family and peer influence," This statement reflects the purpose of the present study. Specifically, this research examines parental attitudes toward children's advertising.

Objectives

Because of the need for further research in advertising on the total family, the present research has two

objectives. The first objective is to identify parental attitudes toward advertising in general. The second objective is to analyze parental attitudes toward children's advertising.

Data Collection Considerations

Subjects

The population for this study included parents with at least one child under 2 years old attending a public school in Albemarle County, Virginia. Schools having grades one to seven were randomly selected from a list of all schools in the county. Sixty children from each grade in the chosen school were randomly selected yielding a total of 480 surveys that were distributed. The children were given a manila envelope containing a pre-tested questionnaire, cover letter and a stamped envelope. Students took these materials home, their parents completed the questionnaire, and mailed it back to the researcher. This method of data collection yielded a 50.2% response rate providing a sample of 241 respondents.

Questionnaire

The questionnaire was a seven-page structured questionnaire in booklet form. It was divided into three sections: television watching habits; attitudinal measures and classification data. The questionnaire was color coded to test for significant differences in either response rates or attitudes based on the school attended. Results of these tests did not suggest any significant differences in either response rate or attitude.

Attitudinal Measures

Two sets of eight Likert-type statements were generated. The first set was used to measure parents' attitudes toward advertising in general (adapted from Boyd, Westfall, and Stasch, 1977) while the second set was used to measure the parents' attitudes toward children's advertising (adapted from Feldman and Wolf, 1974). These measures were scaled on a five point scale from strongly disagree to strongly agree.

Analysis and Interpretation of Data

Classification Information

Table 1 contains a summary of the demographic information on the 241 respondents. The typical respondent was married, between 35 and 44 years old, had household income of over \$20,000 a year, was a college graduate, and had two children. The demographic profile of the sample matches very closely the profile of the population of Albemarle County.

The television viewing behavior of the sample is presented in **Table 2**. Most of the respondents, 88%, watched 20 hours or less of television per week. Only ten households watched no television at all. Also, presented in **Table 2** is the number of hours that respondents spent watching television with any of their children. Over 53% of the sample watched 1 to 5 hours of television with their children.

Attitudes Toward Television Advertising In General

Overall, respondents have a somewhat negative attitude toward television advertising. **Table 3** presents the statements that were used to measure the attitude toward advertising; as shown in the table, respondents indicated that commercials are not entertaining and are monotonous. These results suggest that advertisers are not very innovative in producing commercials. Responses by subjects indicated their most positive attitude to

the statement that sometimes they like TV commercials. This result appears consistent with the innovativeness objective.

TABLE 1
CHARACTERISTICS OF THE SAMPLE *

Marital Status	Number	%
Married/Remarried	200	83.0
Divorced/Separated	33	13.7
Widowed	1	.4
Never Married	6	2.5
Age		
Under 25	7	2.9
25 to 29	23	9.7
30 to 34	68	28.8
35 to 44	124	52.5
45 to 54	13	5.5
Over 54	1	.4
Household Income		
Below \$10,000	23	9.9
\$10,001 to \$20,000	59	25.4
20,001 to 30,000	73	31.5
30,001 to 40,000	37	15.9
40,001 to 50,000	20	8.6
Over 50,000	20	8.6
Educational Level		
Grade School	1	.4
High School	59	25.0
College	116	49.1
Graduate School	60	25.5
Race		
Caucasian	215	90.5
Black	18	7.5
Other	6	2.5
Number of Children		
One child	40	16.8
Two children	107	45.0
Three children	56	23.5
Four or more children	35	14.7

*Numbers do not add to 241 in all cases because of missing data.

TABLE 2
TELEVISION VIEWING

Respondents Television Viewing Per Week		
Amount	Number	%
0 hours	10	4.1
1 to 5 hours	76	31.5
6 to 10 hours	64	26.6
11 to 20 hours	62	25.7
More than 20 hours	29	11.9
Television Viewing With Children Per Week		
Amount	Number	%
0 hours	22	10.0
1 to 5 hours	127	52.7
6 to 10 hours	53	22.0
11 to 20 hours	27	11.2
More than 20 hours	10	4.1

TABLE 3

ATTITUDE STATEMENTS IN GENERAL *

Statement	Median
1) I like TV commercials sometimes ^a	.71
2) Most TV commercials are fairly interesting ^a	-.87
3) Most TV commercials help people select needed products ^a	-.95
4) TV commercials do not interfere with regular programming ^a	-.95
5) Most TV commercials are entertaining ^a	-1.37
6) Most TV commercials are a waste of time ^b	.25
7) TV commercials are monotonous ^b	.85
8) TV commercials should be regulated by law ^b	-.88

*+2 to -2 scale with +2 as strongly agree and -2 as strongly disagree

^aAgreement indicates a positive attitude

^bDisagreement indicates a positive attitude

Analysis of Table 3 indicates that respondents expressed a negative attitude toward commercials by their responses to six of the eight statements. This negative attitude toward advertising by the parent coupled with a child's request to purchase an advertised product is likely to produce conflict between the parent and child. In addition, the negative attitude toward advertising by a parent and this potential conflict might lead to an even more negative attitude toward children's advertising.

Attitudes Toward Children's Advertising

Parental attitudes toward children's advertising were more negative than toward other advertising in general. Respondents indicated a negative attitude toward all eight statements as show in Table 4. Ninety-three percent of the parents indicated that children's ads do not aid them in deciding which products to purchase. Over seventy-eight percent of parents indicated that children's ads cause their children to want products that they do not approve of. Also, parents feel that watching children's ads cause their children to become more materialistic.

The highly negative attitude toward children's ads by parents is likely to strain the interpersonal relationship between parent and child. This strain, when it exists, may cause the parent to have an even more negative attitude toward the ads which could, in the future, cause the child to have negative attitudes toward all advertising.

Implications

While the FTC is no longer investigating restrictions on children's ads, it is clear that the industry in general needs to recognize that some kind of self-regulation is needed. The potential conflict between parent and child over advertised products may shape future attitudes toward advertising.

Opponents of restrictions on advertising argue that parents exert stronger influence on children than advertising. However, results of this study indicate that parents are sometimes placed in an adversary role because of children's ads. It is this potential conflict that advertisers need to be concerned about.

Advertisers to children need to ask of their commercials: Does this commercial exploit a child's suggestibility and how might it affect the interpersonal relations between parent and child? Unless the industry begins to regulate itself, the overall negative attitudes of parents toward advertising may be passed on to their children and thus, cause future generations of parents to be even more negative toward children's advertising.

TABLE 4

ATTITUDE STATEMENTS FOR CHILDREN'S ADS*

Statement	Median
The experience of watching children's ads helps children become a better decision maker. ^a	-.97
Children's ads show toys in situations which <u>can</u> be duplicated at home. ^a	-.31
Children's ads help parents identify the products that their children want most. ^a	-.25
It would be difficult for parents to decide which products to buy for their children without children's ads. ^a	-1.34
Children's ads cause children to want products that their parents do not approve of. ^b	1.05
In general, children's ads cause children to want products that their family can't afford. ^b	.87
Children's ads for sugary products cause children to resist more nutritious foods (such as vegetables). ^b	.78
Exposure to children's ads cause children to become materialistic. ^b	.90

* +2 to -2 scale with +2 as strongly agree and -2 as strongly disagree

^a Agreement indicates a positive attitude

^b Disagreement indicates a positive attitude

Suggestions For Subsequent Research

The present study suggests a number of questions that need to be answered by further analysis. Subsequent papers will investigate the degree of positive or negative attitude along each of the attitude statements, as well as, relationships between the attitude statements. In addition, relationships between the demographic measures and the attitude statements will be investigated.

Further research is needed to answer other questions that were not analyzed in this study. Do children perceive a difference between public television programming and commercial programming? Shows such as Sesame Street are brought to you by "the number six and the letter k." Do children confuse this type of sponsorship with shows that are brought to you by "Kellogg's"? Do children feel that, commercially sold but not advertised, Ernie and Bert dolls sponsor programs such as Sesame Street in the same manner that Star Wars characters bring them Saturday morning commercial cartoon shows?

Do parents feel that sponsorship of any kind creates a more materialistic child? How do parents feel about the FTC's recent cancelling of the proceedings to regulate children's advertising? Will the negative attitude of present parents toward children's advertising

be passed to future parents? These are several of the many questions that researchers need to answer about children's advertising.

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ADVERTISING DECISIONS: A MATTER OF CONFIDENCE

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Abstract

A previously published communications model can be extended to show how buyer confidence can be utilized in making better advertising decisions. The extended model indicates how relationships between persuasibility and self-esteem, communication discrepancy, or source credibility may be altered in association with different buyer attitudes toward advertising content. It is proposed that buyers' confidence in their own ability to evaluate message content could be used as a guide to media and target market selection, plus the development of better content and format parameters.

Introduction

The advertising applications of a communications model published earlier by Maile can be extended by including considerations of buyers' confidence in their own ability to evaluate the content of promotional messages. The original model can be helpful in identifying the best audience, and selecting media, plus analyzing content and formal requirements.^{1,2} However, the original form may not be applicable to advertising decisions involving audiences where people are relatively confident in their own abilities to judge or compare product attributes. For example, the original form may not be applicable when message receivers are appropriately trained, experienced, and thoroughly interested in products being advertised. This would seem to preclude applications involving many consumer, and most industrial, audiences. There is clearly a need for extending the model to accommodate these additional types of advertising situations. Therefore, the purpose of this paper is to extend the original model to accommodate advertising situations involving audiences confident in their abilities for judging product attributes.

Multiple Model Formats

The original model format is illustrated in Figure 1. It indicates how a buyer's persuasibility is affected by his self-esteem, the degree to which he perceives a message source to be credible, and the content or format of a persuasive message or advertisement.

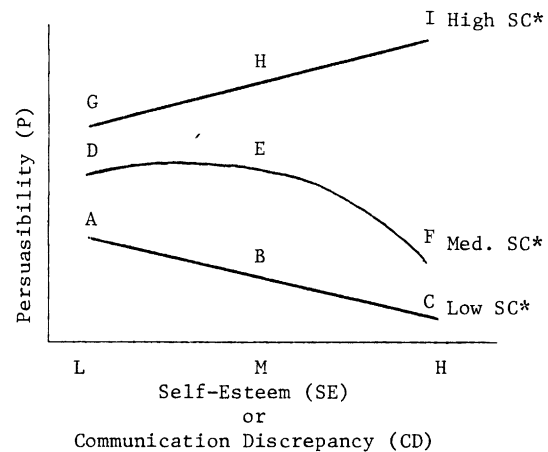
Definitions of each variable in the model are parallel to those appearing in the psychological literature. For example, persuasibility, the dependent variable, involves situations in which a communicator presents his position on an issue, and supports this position with rational or emotional argumentation.³

¹C. A. Maile and A. H. Kizilbash, "A Communications Model for Marketing Decisions," Journal of the Academy of Marketing Science, 5, (Winter, Spring 1977), 48-56.

²C. A. Maile, "Predicting Changes in Advertising Effectiveness," Michigan Business Review, 31, (July 1979), 18-22.

³W. J. McGuire, "Personality and Susceptibility to Social Influence," Handbook of Personality Theory and Research, ed. Edgar F. Borgatta and W. W. Lambert (Chicago: Rand McNally and Company, 1968), p. 1133.

FIGURE 1
ORIGINAL MODEL FORMAT



*Three Source Credibility levels.

Persuasibility is then equated to the degree of attitude change occurring between pre- and post-communication measurements. It is in turn affected by a receiver's customary sense of worthiness, or self-esteem as indicated by his attitudes toward his actual self. The dependent variable is also affected by source credibility: "the image held of a communicator at a given time by a receiver. . . ."⁴

Self-esteem/persuasibility relationships appearing in the initial model include linear, inverted U-shape, and positive linear forms. They are in turn related to the credibility of a message source. Low, medium, and high source credibility levels appear in association with negative linear, inverted U-shape, and positive linear shapes. The positive linear form, CHI, is generated by continually rising persuasibility in association with increasing self-esteem.⁵ The inverted U-shape curve, DEF, is generated by a respective rise and fall of persuasibility while self-esteem is continually increasing. The negative linear shape is caused by continually decreasing persuasibility in association with a steady rise in self-esteem.

There are three similar relationships between communication discrepancy and persuasibility as shown in the model. Communication discrepancy is the difference between a message receiver's pre-communication attitude and that advocated by a communication source.⁶

⁴K. A. Anderson and T. Clevenger, Jr., "A Summary of Experimental Research in Ethos," Speech Monographs, (30 June 1963), p. 59.

⁵An additional discussion of empirical evidence supporting these relationships appears in C. A. Maile, "The Apparent Lack of Self-Esteem and Persuasibility Relationships," Journal of Psychology, 96, (June 1977), pp. 123-129.

⁶C. A. Maile, *Ibid.*

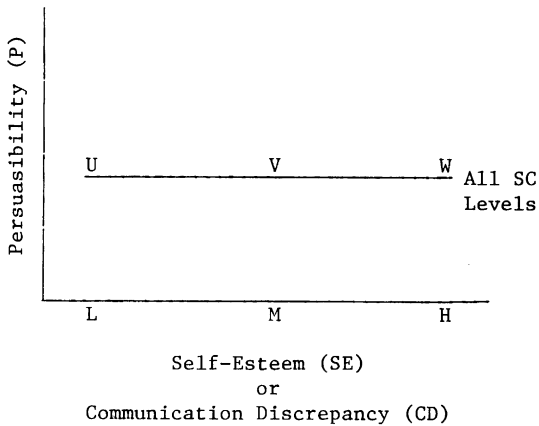
These relationships are indicated in the model after substituting communication discrepancy for the self-esteem variable noted earlier.

A two part extension of the original model is shown in Figure 2. Each part of the extended version includes the same variables as in the original model. In Part

FIGURE 2

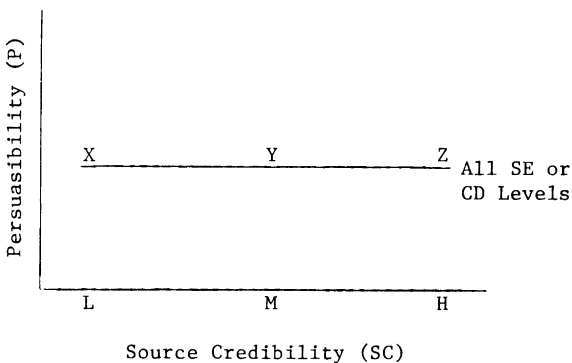
EXTENDED MODEL FORMAT
(PART A)

SELF-ESTEEM/PERSUASIBILITY RELATIONSHIP



(PART B)

SOURCE CREDIBILITY/PERSUASIBILITY RELATIONSHIP



A, three horizontal self-esteem/persuasibility and communication discrepancy/persuasibility relationships are superimposed in association with three source credibility levels. In Part B, a similar set of horizontal source credibility/persuasibility relations are associated with the three levels of self-esteem and communication discrepancy. There are actually no statistically significant relationships between it and any of the independent variables in this form of the model because persuasibility remains constant.

A Possible Explanation

The different sets of relationships could appear when communication receivers have varying levels of confidence in their ability to evaluate different variables. Receivers who have little confidence in their ability to evaluate message content should rely more heavily on their evaluation of personal and source characteristics like self-esteem and source credibility. During the process of developing post-communication attitudes about the content of a communication, these receivers

should react differently toward various levels of self-esteem, source credibility, and communication discrepancy. Three different self-esteem/persuasibility relationships should then appear as shown in Figure 1. However, if receivers are relatively confident in their ability to evaluate message content, they should rely most heavily on this evaluation during the process of attitude formation. Therefore, resulting attitudes or persuasibility should have no relationship to self-esteem, communication discrepancy, or source credibility levels as indicated in Figure 2.

Testing Proposed Relationships

Empirical support was obtained for the relationships in Figure 1 during an experimental study conducted by Maile.⁷ This preliminary experiment employed a 3 x 3 x 3 factorial design which enabled determination of simultaneous relationships between persuasibility and the three independent variables. A convenience sample of 346 student subjects of both sexes was used for gathering data. Subjects responded to questions about a pair of carpet samples. Their pre- and post-communication attitudes toward these carpet samples were measured by a version of the Janis and Field self-esteem scale. These attitudes were measured before and after subjects heard persuasive messages about the carpet samples. Differences between subjects' before and after attitudes were then used as a measure of persuasibility. A semantic-differential scale developed by McCroskey was used for measuring source credibility.⁸ Subjects' pre-communication judgements about the carpet samples were compared with the content of persuasive messages in the process of measuring communication discrepancy. The difference between subjects' judgements and those of the message source were considered as measures of the communication discrepancy variable. Results of this experiment were interpreted as supporting the self-esteem/persuasibility and communication discrepancy/persuasibility relationships appearing in Figure 1.

Another experiment was conducted to test relationships appearing in Figure 2. It was designed to determine the shapes of relationships between self-esteem, communication discrepancy, source credibility, and persuasibility appearing among subjects with varying levels of confidence about their initial evaluations of the carpet samples. Respondents' confidence in evaluating the carpet samples and other variables was measured by a five point semantic differential scale which appeared on the measuring instrument in association with scale items for measuring each of the other variables. After responding to items measuring initial attitudes toward the carpet samples, self-esteem, and source credibility, subjects were then asked to indicate their degree of confidence in each of the other responses.

Completed questionnaires were analyzed in two separate groups. The first and second groups were from respondents with comparatively low and high confidence in their abilities to evaluate the carpet samples. Mean persuasibility values were computed and plotted for each self-esteem/source credibility combination subjects. Results from the first group of subjects reflected relationships like those in Figure 1. However, results from the second group indicated a lack of significant relationships between pertinent variables as shown in Figure 2.

⁷C. A. Maile, *Ibid.*

⁸See James C. McCroskey, "Scales for the Measurement of Ethos," *Speech Monographs*, 23, (March 1966), pp. 665-74.

Substituting Advertising Variables

Advertising variables can be substituted for the communication variables in each model format. Advertising can be viewed as a process of persuading or changing buyer attitudes.⁹ Then advertisements are the communications under consideration when using the model. Buyers and suppliers are communication receivers with various levels of self-esteem, and communication sources with different levels of credibility. Relatively unknown suppliers or advertisers are associated with low credibility levels. However, their well known and comparatively long established counterparts are associated with higher levels of source credibility. Advertisers' attempts to influence buyer attitudes are then viewed as persuasive communications with varying degrees of communication discrepancy.¹⁰ Any changes in buyer attitudes should be indicated by corresponding changes in sales volume.¹¹ Therefore, changes in sales volume may also be considered as indicators of advertising effectiveness.

Making Advertising Decisions

Relationships appearing in the initial model and extended form appearing in Figures 1 and 2 should provide a helpful basis for some types of advertising decisions. Some examples will serve to illustrate how the SC-SE-P and SC-CD-P portions of the model can be used together or as individual decision aids.

The SC-SE-P portions of each model form should be useful in selecting target markets. According to SC-SE-P relationships appearing in Figure 1, different advertisers should be able to maximize sales by emphasizing different target markets. In markets where people are comparatively uncertain of their abilities to evaluate product attributes, low and high credibility advertisers can achieve their greatest effectiveness in persuading and high self-esteem segments respectively. However, in markets where people are relatively confident of their own product evaluations, the SC-SE-P portion of Figure 2 indicates that all segments should be reached with equal effectiveness by suppliers and advertisers at all credibility levels.

People who are likely to be comparatively confident in their facility for making product evaluations may have several distinguishing characteristics. They may have training, experience, and interest patterns which have led them to become familiar with the technical aspects of products being advertised. They may also be especially accustomed to purchasing high technology products in the industrial or consumer markets. The technological nature of these items requires buyers to be familiar with adequate evaluative criteria in order to make wise product selections.

⁹The proposed model is not intended to include all elements of an advertising situation, nor is it intended to be used alone as the only tool for making advertising decisions. It is anticipated that the model would be used in conjunction with other decision tools and considerations of surrounding circumstances when shaping final advertising decisions.

¹⁰Advertisements about less familiar products may be associated with higher levels of communication discrepancy because their capacity for need satisfaction is considered relatively low.

¹¹The relationship between attitude change and sales volume is intentionally over simplified for purposes of this discussion.

Advertisers of high technology items or other products which are very familiar to prospective customers should realize equal effectiveness in reaching markets at various self-esteem levels as indicated in Figure 2. A relatively new, inexperienced, or little known firm should be able to reach and sell to these markets just as effectively as its better known or high credibility counterparts. Therefore the little known or low credibility firm should direct its advertising toward these types of target markets. However, its high credibility counterpart can achieve its greatest advantage in advertising to markets with little product familiarity, and where prospective customers should rely more heavily on their own self-esteem and supplier characteristics in making purchase decisions.

The SC-SE-P relationships appearing in both model forms should also be helpful in selecting advertising media. When attempting to reach market segments with people who are comparatively uncertain of their initial product evaluations, Figure 1 indicates that little known and long established media which are associated with low and high source credibility levels could be most effective in reaching low and high self-esteem markets respectively. For example, The Wall Street Journal and The National Enquirer may be considered respectively as high and low credibility publications in the eyes of potential buyers for California vacation real estate. These differences in source credibility levels could be important in determining which medium might be most effective in reaching market segments with readers who are comparatively uncertain of their initial product evaluations. Among these readers, The Wall Street Journal could be effective in reaching high self-esteem individuals, while The Enquirer may be most effective in reaching low self-esteem markets. However, using relationships indicated in Figure 2, an advertising manager might judge these media to be equally effective in reaching all market segments where people are relatively confident in their initial evaluations of product attributes.

The SC-CD-P portion of both model forms could be used to determine which suppliers could most effectively advertise various products, channel members, and price levels. For example, the SC-CD-P relationships in Figure 1 model form could be especially useful in deciding which products should be advertised to people who have little confidence in their abilities to evaluate the characteristics of items mentioned in the copy. The decision about whether to advertise a particular product would depend on the amount of communication discrepancy associated with it. Unfamiliar products and better known items would be the subjects of advertisements with respectively high and low communication discrepancy levels. An established high credibility supplier should realize his greatest advantage in advertising new products which are highly discrepant from those anticipated by prospective purchasers. Similarly, the little known or low credibility supplier should achieve his greatest advantage in advertising long established items which customers may readily associate with high need satisfaction. Because these products are similar to those anticipated by the audience, they would be the objects of persuasive messages with low communication discrepancy levels.

The SC-CD-P relationships in Figure 2 model form should be useful when advertising to markets where people are confident in their ability in making product selections. Communication discrepancy and source credibility should have little influence on their final perceptions. Whether purchasing new or long established products, these people should be equally willing to buy from low and high credibility suppliers. Therefore, when selling to this market, a low credibility supplier can advertise new or highly discrepant products as effectively as his high credibility counterparts.

Similar reasoning can be used in the selection of distribution channel members to be mentioned in advertising copy. Producers or manufacturers could use this reasoning when using advertising to encourage prospective consumers to purchase their products from selected retailers. In markets where buyers have little confidence regarding their ability to evaluate retail outlets, the SC-CD-P component of **Figure 1** would indicate that traditional and unique retailers could be the objects of respectively low- and high-discrepancy communications. Little known or low credibility manufacturers could sell most effectively through traditional middlemen, whereas long established or high credibility producers could realize their greatest advantage in distributing through new or novel types of channel members. For example, a newly established manufacturer of fishing rods could best sell his products through sporting-goods stores and other conventional outlets. However, a long established or well known producer of fishing rods should be able to sell more of his products through grocery stores or other unconventional outlets.

In selling to markets where people have a high degree of confidence in their evaluations of different retailing forms, **Figure 2** indicates that suppliers at all credibility levels could be equally effective in persuading buyers to purchase from either unique or conventional types of outlets. In this situation, all manufacturers should have more flexibility in selecting from available channel members. Whatever types of channel members are available to a newly established or little known manufacturer, he should be as effective as long established and highly respected counterparts in persuading consumers to buy from retailers offering his products.

When selling to markets where buyers are comparatively uncertain of their own price evaluations, the SC-CD-P portion of **Figure 1** could also be used to determine which suppliers could best introduce and most effectively advertise new price levels. Because new or higher price levels are customarily associated with higher communication discrepancy, they can be introduced most effectively by long established or high credibility suppliers. For example, if retail service stations are to introduce higher price levels, Exxon and other long established or high credibility suppliers could most effectively initiate these price increases. However, little known and low credibility suppliers would achieve their greatest effectiveness when advertising conventional price levels.

When target markets are comprised of individuals who are very confident in their own price evaluations, **Figure 2** indicates that suppliers at all credibility levels should be equally effective in advertising new price levels. Once again, this equality arises from a lack of corresponding relationships between message discrepancy, supplier credibility, and buyer persuasibility in this type of market. Therefore, in times of high inflation or other circumstances when prices must be raised, the low credibility supplier can advertise new price levels without suffering any more reduction in sales than his well known or high credibility competitors.

Conclusions and Implications

An approach to advertising decisions suggested in the proposed model involves selected considerations of supplier, audience, message, and media characteristics. Sample applications are suggested here to show how advertising decisions might be altered in accordance with varying degrees of buyers' confidence in their initial evaluations of media, products, channel members, and

prices featured in promotional copy. Where buyers have relatively little confidence in their own abilities to evaluate these potential contents of advertising messages, little known and long established suppliers would realize their greatest advantage in directing their promotional messages to low and high self-esteem audiences as indicated in the original form of the proposed model. However, when prospective purchasers are comparatively confident in their abilities to evaluate prospective message contents, suppliers at all credibility levels may be able to disregard buyer self-esteem and reach most audiences with equal effectiveness as indicated in the extended model format.

Even though the proposed model has been expanded to suggest a more comprehensive framework for advertising decisions, it is not intended for developing precise answers to all advertising problems. In its present form, the model is intended to provide some general guidelines for analyzing selected advertising problems and arriving at improved managerial solutions. However, it is hoped that further empirical testing might lead to additional refinements enabling more precise applications at some future time.

EXPERIMENTAL RESULTS CONCERNING THE AFFECT
OF THE FEMALE MODEL IN TELEVISION COMMERCIALS
ON PRODUCT AND BRAND RECALL

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ABSTRACT

This paper investigates the role of the female model in television commercials through a random factorial designed experiment. The paper is organized first to review the literature on attention and the research on sexual appeals in advertising; second, to suggest from the review several hypotheses for testing; and third, to detail the experimental research procedures. Last, the results are presented and implications suggested for advertising strategy.

The marketer is increasingly facing a cluttered media environment to get across its advertising message as competition for the consumer's dollar intensifies from both domestic and foreign firms. A major objective for any advertisement is to "grab" the market's attention through the selection of an appropriate appeal executed in innovative ways through the standard elements of headline, illustration and/or body copy in print media or through audio and/or video effects in broadcast media. The sexual appeal in selling goods and services has taken on more explicit dimensions in its execution by some advertisers to capture the attention of their target markets.

LITERATURE REVIEW

Marketers agree that the consumer is bombarded each day with commercial stimuli, all vying for the limited time of the consumer. Yet, the marketer cannot expect to inform or persuade the consumer through advertising unless the consumer's attention is captured, regardless of how fleetingly. McGuire [1969] has suggested in an advertising communication's model that attention is necessary before retention of the advertising stimuli can be expected, and Howard and Sheth [1969] in their buyer behavior model hypothesize that brand comprehension or knowledge on the evoked set of alternatives follow attention to stimuli. The marketer can resort to novelty to attempt to attract the target market's attention and to achieve brand comprehension and retention. Although the use of sexual appeals in advertising is not novel per se, the explicitness of the sexual appeal by some advertisers is novel to certain market segments and for certain product categories because the sexual stimuli has not been frequently seen, recently encountered, or sufficiently similar to the stimuli that the market segment has encountered [Berlyne, 1960]. Furthermore, sexual explicitness involving female models in various poses and undress in advertising is anticipated to increase [Kerin, Lundstrom, and Sciglimpaglia, 1979].

Research on the Sexual Appeal in Advertising

The advertiser, after deciding on the sexual appeal, can manipulate the message and pair the product to it by three major ways--belief claims, visual content, and audio content [Rossiter and Percy, 1980]. Most research on the sexual appeal in advertising has centered on visual content by including or excluding an attractive model, by varying the attractiveness of the model, or by varying the explicitness of the

model's pose. Smith and Engle [1968] studied the effects from including and excluding an erotic female model in print advertisements for automobiles. Their findings indicated that the subjects' perceptions of the car from the advertisement with the model relative to the ad without the model included better designed, faster, more lively, and more appealing. Chestnut and Lachance [1977] found that the inclusion of a decorative but functionless female model in a print advertisement resulted in better recognition of the advertisement but not better recognition of the brand name when compared to an advertisement without the model.

The physical attractiveness of a model, male or female, in an advertisement also affects the evaluation of the advertisement. Baker and Churchill [1977] found for the affective attitudinal component that subjects rated the print advertisements with more physically attractive models higher than the ads with less attractive models. These results, however, did not extend to the cognitive and conative components of attitude.

Several researchers have investigated the sexual explicitness of the model in advertising and its affect on brand recall. Steadman [1969] tested with male respondents for differences in brand recall among six neutral ads and six ads varying in the degree of female model undress and "overt sexual suggestiveness." When the subjects were tested one hour after completion of exposure to the print advertisements, no differences were found. However, seven days later in a retest, the brand recall for the ads with neutral content was significantly higher than for the ads with sexual content. Also, he found a positive relationship between attitudes toward sex in advertising and brand recall for ads with sexual content. Weller, Roberts, and Neuhaus [1979] found that as sexual explicitness in print advertisements increased, the brand recall decreased when the subjects were tested shortly after ad exposure, and this relationship held over time even though a decay effect was apparent for all ads.

Alexander and Judd [1978] replicated Steadman's study with some changes to overcome the methodological questions which were raised with the original study. Similar to Steadman's retest and the Weller *et al.* study, the results suggested that the nonsexual print advertisement produced higher brand recall than the four ads varying by female model sexual explicitness. Nevertheless, in contrast to previous research, the brand recall over the four sexually oriented ads did not decline as expected when the ads became more explicit. Alexander [1978] found similar results: the brand recall remained constant across levels of female model nudity.

Peterson and Kerin [1977] tested for perceptions on advertising appeal, product quality, and company reputation. They found the print advertisement with the highest level of female nudity resulted in perceptions of less ad appeal, lower product quality, and less reputable company than for the other three ads, varying

from just the product advertised to the inclusion of a seductive female model.

At this time, the results on sexual explicitness and brand recall are inconclusive since two studies found an inverse relationship and two studies found no differences across levels of sexual explicitness. The one study on sexual explicitness and perceptions of product quality, advertising appeal, and company reputation suggest an inverse relationship when the most explicit ad is compared to less explicit and nonsexual ads.

Research on the Sexual Appeal and Sex of Respondent

The major segmenting variable studied by researchers has been sex of the respondent. Three studies examined differences in perceptions, attitudes, or evaluations based on the responding group's sex, and one study incorporated age, family income, education, and race along with sex as potentially useful for market segmentation.

Morrison and Sherman [1972] tested sexual appeals in advertising based on male and female student responses to the ads over six major product-content variables--inherent connotation of the product, nudity, realism, romanticism, suggestive copy, and sexual arousal. Five different groups of males and five different groups of females were identified based on their responses on the product-content variables. The nudity variable was an important discriminator for both males and females. Baker and Churchill [1977] found for the attitudinal component only that male respondents rated ads with female models higher than ads with male models, and female respondents rated ads with male models higher than ads with female models. Furthermore, for just the male respondents, the nature of the product influenced their evaluations of the ads on whether an attractive or unattractive female model scored higher. Peterson and Kerin [1977] in the aforementioned study on sexual explicitness found that males had more favorable attitudes toward the advertisements, the products, and companies than did females.

Wise, King, and Merenski [1974] investigated attitudes toward sex in advertising by college students and their parents and examined differences in attitudes by sex of respondent, age, education, and family income. The only discriminating variables were sex and age. They found that agreement to the statement that "there was too much sex in advertising" was greater for older women than older males, for older males than younger males, and for older females than younger females. Also, there was a greater difference in agreement levels between older females and their sons than older males and their daughters.

The research on sexual appeals in advertising and the market segment differentiated by sex has indicated that differences exist between males and females on their responses to product-content variables, on whether a male or female model is used for advertising, and on evaluations toward products, advertisements, and companies. Furthermore, the research on age-sex differences suggests major differences in attitudes toward sex in advertising. The research evidence strongly suggests that sex of the respondent is a potentially important segmenting variable for those advertisers considering the sexual appeal for their products.

In summary, the research evidence on sexual appeals in advertising clearly shows a model effect (inclusion or exclusion, male or female, attractive or unattractive) and an audience effect (male versus female). The impact of sexual explicitness on subjects' retention or eval-

uations suggested either an inverse or no relationship for print advertising. Researchers have not addressed the significance of the model's pose relative to stages of undress even though poses vary on sexual suggestiveness. This variable appears to be potentially valuable in conjunction with the nudity variable. Furthermore, the research on sexual explicitness in advertising has centered on visual content in print media. Whether the findings on print media can be generalized to broadcast media is a question which needs answering in marketing. Building on the cited studies, this research investigates the effects of the model, the degree of nudity, the pose of the model, and the sex of the audience on product and brand recall from simulated television commercials for a personal care product. The review of the literature suggests the present study is the first to address audio-visual stimuli (television) and female sexual explicitness in television advertisements.

HYPOTHESES

The above discussion provided the rationale for four general hypotheses and three specific hypotheses for testing and to aid in reporting the results.

General Hypotheses

- H₁ Differences in appearance of models will have a differential effect on recall of product and brand.
- H₂ Differences in degree of nudity will have a differential effect on recall of product and brand.
- H₃ Differences in pose of the models will have a differential effect on recall of product and brand.
- H₄ There will be no difference in ability to recall product or brand between males and females.

Specific Hypotheses

- H₁ Difference in appearance of the models will not have a differential effect on recall of product and brand between males and females.
- H₂ Differences in degree of nudity of the models will not have a differential effect on recall of product and brand between males and females.
- H₃ Differences in pose of the models will not have a differential effect on recall of product and brand between males and females.

RESEARCH METHODOLOGY

Experimental Design

A completely random factorial design was employed where:

- A = 3 levels of models
- B = 3 levels of nudity
- C = 3 levels of poses
- D = 2 levels of subjects
- n = 3 subjects per cell

Three models of differing size, build, hair style, and general appearance were employed. The three levels of nudity included long dress, lingerie only, and topless. The three poses employed included a standing position, seated in an armchair, and reclining on a couch. The poses are listed in rank order of increasing sexual suggestiveness. The two treatment levels for subjects were male and female.

Three subjects per call were used which is above the normal minimum number of subjects prescribed by Kirk [1968]. The total sample size of 162 was equally divided between male and female. The sample was drawn from several marketing classes at a Midwestern university. The use of college students in studying sexual explicitness in advertising is appropriate (see for example, Baker and Churchill, 1977; Alexander and Judd, 1978; Steadman, 1969; Morrison and Sherman, 1972; Wise, *et al.*, 1974) due to the nature of the subject.

Apparatus

The television commercials were videotaped against a neutral background showing only the model, a personal care product (Zest soap), and the furniture required for each level of treatment. The 30-second commercials began with background music as the model displayed the product, the music was subdued, and a male announcer gave a 20-second pitch for the product, using claims for the product similar to those found in magazine advertisements for the brand. The model held the pose for five more seconds after the announcer had finished while the volume of the music increased slightly.

Each test commercial was intermingled with four other personal care product commercials from commercial television. The order of presentation of the five commercials was held constant for all levels of the treatment.

In addition to the initial viewing of the commercial, pose, and degree of nudity, subjects were exposed to a reminder television message two days later showing the appropriate model without the product and using music without the announcer's pitch. Following the reminder exposure, subjects were asked to complete a questionnaire asking for brand and product identity from the first television commercial.

Statistical Analysis

Correct responses to the questions regarding the identity of the product or the brand were scored with a value of 2, and incorrect responses were scored 1. The data were analyzed by analysis of variance using a 3 x 3 x 3 x 2 model since ANOVA can be applied to nominal data [Lunney, 1970].

RESULTS

Table 1 indicates that recall of product showed significant differences for the main effects of both appearance of the models and degree of nudity. Other main effects did not display differences. The ABCD (model, nudity, pose, respondent sex) interaction showed significant effects. All other interactions showed no significant differences.

Data from **Table 2** indicate significant differences in recall of brand existed for the main effect of degree of nudity. Interaction effects for ABD (model, nudity, sex of respondent) were also significant. All other interactions showed no significant differences.

Figure 1 combines main effects for varying models and levels of nudity on product recall. Variations in appearances of the model displayed dramatic shifts in brand recall. Model one and three produced similar recall patterns while model two had markedly lower rate of recall. Degree of nudity had a major effect on recall rates. Recall was lowest for those models fully clothed then rose greatly when the models wore lingerie. There was a minor shift upward in ability to recall on the respondents when the models were top-

less. Level of undress had a major effect on product recall rates taken as a whole.

TABLE 1
ANALYSIS OF VARIANCE TABLE FOR PRODUCT RECALL

Source		S.S.	d.f.	M.S.	F
Model	(A)	0.44445	2	0.22225	3.000 *
Nudity	(B)	0.70371	2	0.35186	4.750 *
Pose	(C)	0.25926	2	0.12963	1.750
Respondent	(D)	0.15432	1	0.15432	2.083
	AXB	0.07407	4	0.01852	0.250
	AXC	0.29629	4	0.07407	1.000
	AXD	0.04938	2	0.02469	0.333
	BXC	0.14815	4	0.03704	0.500
	BXD	0.08642	2	0.04321	0.583
	CXD	0.08642	2	0.04321	0.583
	AXBXC	0.51852	8	0.06482	0.875
	AXBXD	0.54321	4	0.13580	1.833
	AXCXD	0.32100	4	0.08025	1.083
	BXCXD	0.39506	4	0.09877	1.333
	AXBXCXD	1.53086	8	0.19136	2.583 *
	W/in Cell	8.00000	108	0.07407	
	Total	13.6112	161		

*.05

TABLE 2
ANALYSIS OF VARIANCE TABLE FOR BRAND RECALL

Source		S.S.	d.f.	M.S.	F
Model	(A)	0.11420	2	0.05710	0.446
Nudity	(B)	1.00309	2	0.50154	3.916 *
Pose	(C)	0.00308	2	0.00154	0.012
Respondent	(D)	0.01389	1	0.01389	0.108
	AXB	0.39506	4	0.098765	0.771
	AXC	1.00617	4	0.25154	1.964
	AXD	0.25000	2	0.12500	0.976
	BXC	0.89507	4	0.22377	1.747
	BXD	0.36111	2	0.18056	1.410
	CXD	0.36111	2	0.18056	1.410
	AXBXC	0.95679	8	0.11960	0.934
	AXBXD	1.33333	4	0.33333	2.602 *
	AXCXD	0.83334	4	0.20834	1.627
	BXCXD	0.27777	4	0.06944	0.542
	AXBXCXD	0.94438	8	0.11805	0.922
	W/in Cell	13.83340	108	0.128087	
	Total	22.58179	161		

*.05

Interaction effects for model, nudity, pose and sex of the respondents for product recall are illustrated in **Figure 2**. Analysis of this figure discloses a strong effect by sex of respondents, level of dress and pose of the model. Females generally had a higher consistent degree of recall across poses and level of undress. Males, on the other hand, showed more variability in recall depending on pose and level of nudity. Physical appearance of the model, with the exception of model number 2, had little impact as an interaction variable.

The data in **Figure 3** show the major effect of nudity on brand recall. The major differences in this figure is when the models changed from fully clothed to lingerie the recall rate increased. There was a less pronounced shift in recall between lingerie and topless in the same direction. Over the entire range, as the models increased nudity, recall rates also increased.

Figure 4 diagrams the interaction effects for model and nudity levels by sex of the respondents for brand recall. The figure shows sex of the respondent in interaction with nudity accounted for the most dramatic effects. As males and females viewed advertisements with varying levels of nudity, across models, recall ability shifted. Males were generally able to recall

FIGURE 1
Main Effects for Model and Nudity Levels
On Product Recall

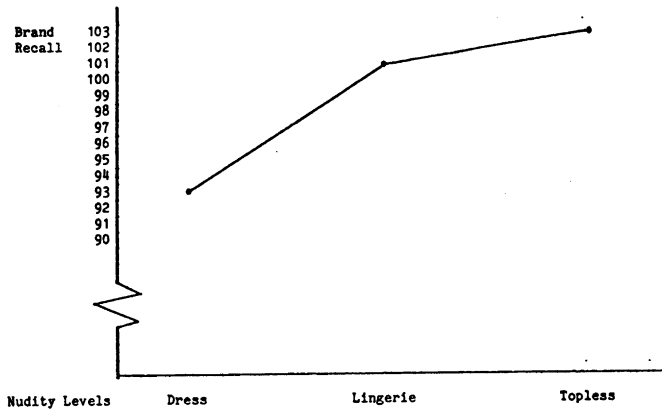


FIGURE 4
Interaction Effects for Model and
Nudity Levels by Sex of Respondent for Brand Recall

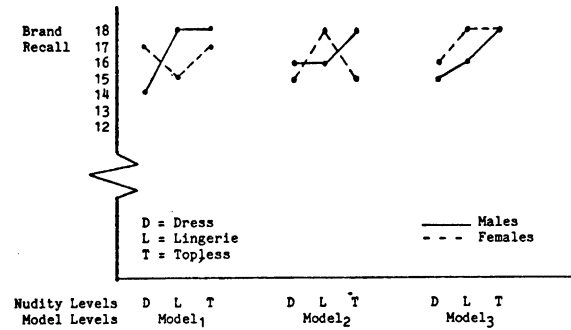


FIGURE 2
Interaction Effects for Model, Nudity and Pose Levels by Sex of Respondent for Product Recall

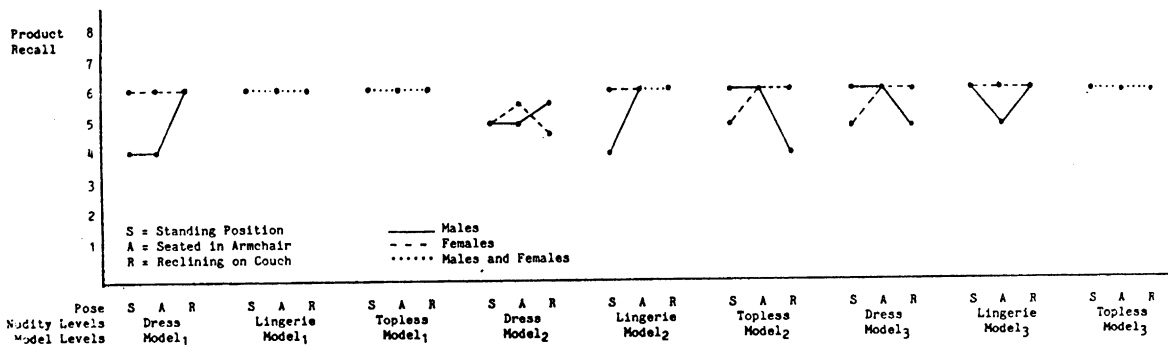
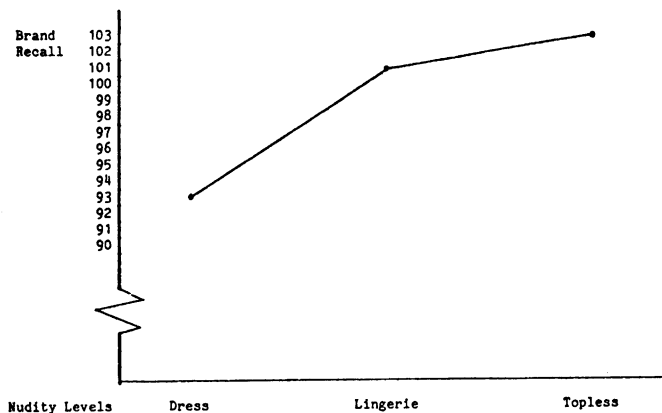


FIGURE 3
Main Effects of Nudity Levels on Brand Recall



better as nudity increased across models while females had a more differential pattern. However, when all three models are considered, females increased recall as level of nudity increased. Model effect was negligible except for females and models 1 and 2.

Hypothesis one was partially supported. Differences for the category of product recall were significant. Respondents differed in their ability to recall the product due to variations in the appearance of the model. Hypothesis two was supported. Degree of nudity had a significant differential effect on respondents' ability to recall both product and brand. Hypotheses four through seven were partially supported. Males and females did not differ in their ability to recall product or brand across treatment levels of appearance, nudity, and pose but differed in recall ability between treatment levels of appearance, nudity and pose for product recall and between treatment levels of appearance and nudity for brand recall.

CONCLUSIONS

The results of the main effects for this study would seem to generally support the findings of researchers

for print media. Sexual explicitness appears to affect brand recall although the directionality of this effect is inconclusive. The present study supports those researchers for print media who found the more sexually explicit the advertisement, the greater the brand recall. The research also indicates a similar relationship between sexual explicitness and product recall. The more explicit the advertisement, the higher the degree of product recall. These two findings for television advertisements, in addition to research of others on print media, may lend credence to the notion advanced by many that "sex sells." Physical appearance differences among models was shown to affect product recall.

Of the interactions investigated, sex of the respondents appear to be a strong explanatory variable. This finding also generally supports those research studies investigating sex of respondent evaluating the sexual appeal in print advertisements. Clearly, for brand recall, the more explicit the model, the higher the rate of recall on the part of males. Females did not display such a pattern.

Product recall showed a differential pattern between males and females. Highest levels of nudity produced the greatest recall for both males and females; however, females were more consistent across pose and somewhat more consistent over levels of undress.

Generally, the results of those interactions analyzed showed that males and females react in a somewhat different manner measured by brand and product recall depending on the pose of the model and degree of nudity. The evidence from this study and those on print media would seem to indicate some commonality of the communication effectiveness of perceived sexiness used in advertising across various media, but it needs a great deal of additional research before generalizations can be made.

IMPLICATIONS

The advertiser has three basic message variables under its control--belief claims, audio content, and visual content. In both print and broadcast advertisements the visual content plays a crucial role in attracting the attention of the intended audience. One visual tactic to attract attention is the inclusion of a model, male and/or female, in the advertisement. This experiment investigated the influence of the female model, her pose and her nudity level, on product and brand recall by males and females for a personal care product in television commercials.

Based on the experiment's results, an advertiser with a personal care product which is unisex in use might want to consider partial nudity of a female model to gain attention and to increase brand recall. In this study for both males and females, the highest level of undress (i.e., topless) had consistently the highest brand recall (five of the six possible cases). For males, the consistently lowest level of recall was found for the lowest level of nudity (i.e., full dress). However, for females the results for lowest recall were mixed. Regardless of dress, the choice of models did affect the evaluations, particularly by females, indicating the need for advertisers to pretest consumers' perceptions of models before the inclusion of a specific model in an advertisement.

In summary, the use of a partial nude female model in broadcast commercials appears not to be detrimental in all cases, but, in fact, may increase the product and brand recall for appropriate products. Further testing by advertisers is certainly warranted since other variables measuring an advertisement's effectiveness.

(e.g., attitude toward the brand) were not tested in this experiment.

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INVESTIGATION OF CONSUMER MOTIVATIONS
FOR CONSERVING ENERGY

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Abstract

The purpose of this research is to compare motivations for conserving energy across levels of the following demographic variables: 1) income, 2) education, 3) age, 4) occupation, and 5) sex. Using a representative sample of Florida homeowners (n=734), it was found that motivations to conserve energy differed across levels of all demographic variables tested with the exception of sex. The results indicate that certain segmentation strategies would be appropriate in making energy conservation appeals to various demographic segments.

Introduction

Within the past eighteen months, articles have appeared in numerous publications, both scholarly and news, suggesting that a calm has settled over the tumultuous energy environment and that supplies are ample (Healey, 1980; Business Week, 1980; Stone, 1980). Some press attention has focused on the temporary oil glut and its favorable impact on OPEC pricing policy. Despite this cautious optimism, energy and political experts concerned about long range energy strategy, have made grave predictions concerning the next few years (Vital Speeches, 1980; Time, 1980; Newsweek, 1980). More than a few of these experts predict major supply disruptions during the next several years. Now that President Sadat of Egypt has been assassinated, a major stabilizing force in the Middle East has been removed. Continued fundamentalist religious fervor and political instability in that region of the world should serve as chilling reminders to all industrial nations that the energy crisis is not over, but a continuing problem about which concern and efforts must ceaselessly be focused.

Marketing academicians have attempted to contribute to solving energy problems by examining energy related attitudes, intentions to act, and actual behavior. Much of this research has attempted to profile energy efficient individuals. Cunningham and Lopreato present an excellent summary of studies conducted prior to 1976, while Downs and Freiden include a more recent compilation of those studies impacting the area of energy consumption (Cunningham, 1977; Downs, 1981). While life-style, personality, and attitudinal variables have been utilized to explain energy-related behavior, demographic variables have received heavy examination primarily because of their practicality. Segmentation strategies based on demographic variables can be easily implemented, whereas life-style, personality, and attitudinal variables are more difficult to both operationalize and implement effectively in terms of energy strategy and policy. Because of this managerial usefulness, further understanding of the relationships between select demographic variables and energy consumption motivations are examined through this study. Rather than using these variables to profile energy efficient individuals or to predict energy conservation behavior, the purpose of this study is to explore differences that might exist across various demographic characteristics in determining consumer motivations to conserve energy.

Literature Review

A prodigious number of articles have been written since 1973 regarding the energy crisis. Interested readers should examine reviews of the literature provided by Cunningham and Lopreato and Downs and Freiden (Cunningham, 1977; Downs, 1981). Yet, within this research stream, surprisingly few studies have examined motivations for conserving energy (Doner, 1975; Gottlieb, 1976; Parkinson, 1976; Perlman, 1975). Perlman and Warren interviewed over fourteen hundred individuals in three disparate metropolitan areas; Hartford, Connecticut; Mobile, Alabama; and Salem, Oregon. (Perlman, 1975). Thirty-five percent of the motorist and sixty-one percent of the householders cited price as the most important reason for conserving energy. Doner completed nine hundred and twenty-five telephone interviews with Michigan residents and concluded that "saving money" was the main motivator for conservation measures. In examining two-hundred and ninety-three Delaware homeowners via a telephone survey, Parkinson found cost to be the primary reason for cutting down on energy use (Doner, 1975; Parkinson, 1976). From a sample of nine hundred and thirty-eight hand delivered questionnaires in Texas, Gottlieb and Matre concluded again that cost was the main motivator for those concerned with conserving energy (Gottlieb, 1976). Finally, in 1977 Cunningham and Lopreato provided further support for these findings when they found price to be the major motivation among consumers living in the southwestern part of the United States (Cunningham, 1977). Additionally, these researchers reported middle income consumers to be most sensitive to price increases, while lower income consumers exhibited the lowest absolute energy reduction following a price increase.

Although these studies report consistent findings, only Cunningham and Lopreato examined motivations as related to demographic characteristics. Based on their study, one would predict price to be a more highly motivating factor for middle income consumers. But, what about motivational differences across levels of sex, age, occupation, and education? Since no previous empirical evidence was found to guide in hypothesis generation, the following null hypothesis was tested:

H₀: No differences exist in motivations for conserving energy across levels of age, sex, income, occupation, and education.

Method

Questionnaires were sent to a statewide sample of Florida homeowners. County tax rolls were used as the sampling frame, with households being randomly selected in proportion to each county's percentage of the total number of households in the state. After pretesting the research instrument on 200 households, 1,975 households were mailed the final questionnaire. A follow-up mailing was conducted six weeks after the initial mailing. In total, 734 completed questionnaires were returned, resulting in a 37% response rate. No significant differences in substantive responses were found between the first and second waves of the sample.

Research Instrument

The questionnaire contained major sections on conservation attitudes and behavior, personality variables, motivations for conserving energy, and demographic items. A complete explanation of the questionnaire can be found in Downs and Freiden (Downs, 1981). For the purposes of this study, only the motivational and demographic items were used.

The set of motivations for conserving energy was developed by examining relevant literature and through discussions with utility company personnel, government-employees involved with energy programs, and consultants specializing in energy efficiency. The motivations included were:

- to help the economy of the nation
- because there are immediate energy shortages
- to save money
- because it is my responsibility
- because I don't like to be wasteful
- to save energy for future generations
- other reasons

Respondents were asked to indicate their primary reason for saving energy by checking one of the above motivations.

Results

Table 1 shows the percentages of respondents selecting different motivations for conserving energy. As expected, and in keeping with previous findings, saving money was the primary consideration.

TABLE 1

MOTIVATIONS FOR CONSERVING ENERGY

Motivations	Percentage Responding
To help the economy of the nation	15.2%
Because there are immediate energy shortages	8.2
To save money	58.1
Because it is my responsibility	4.4
Because I don't like to be wasteful	11.2
To save energy for future generations	2.9
	100.0%

Table 2 presents motivation percentages broken down by levels of demographic characteristics. Chi-square analyses were performed to see if motivations for conserving energy varied across levels of the demographic variables. The results are shown in Table 2. The null hypothesis of no differences was rejected for all demographic variables except sex. High significant chi-square values ($p < .001$) were derived for all other variables. The percentages of subjects selecting various motivations broken down by levels of demographic variables are also presented in Table 2.

Although saving money is the number one motivator in energy conservation, not all individuals are equally sensitive to this factor.¹ Young people are significantly more aroused by saving money than older

¹Statistical tests of pairwise differences in motivations to conserve by demographic level are shown in Table 3.

individuals (see Table 3). Paradoxically, more high and middle income individuals are stimulated to conserve energy by the saving money motivation than those with lower incomes. Rather than the non-monotonic relationship that Cunningham and Lopreato found between income and energy conservation motivated by cost considerations, a monotonically increasing relationship was found in this study. Those with the highest educational levels were also most stimulated by the saving money motivation. Surprisingly, retired individuals were less concerned with saving money than employed individuals.

TABLE 2

MOTIVATIONS FOR CONSERVING ENERGY BROKEN DOWN BY LEVELS OF DEMOGRAPHIC VARIABLES

Demographic Variables	MOTIVATIONS						χ ²	d.f.	Sign.
	To help the nation's economy	Because there are immediate shortages	To save money	Because it is my responsibility	Because I don't like to be wasteful	To save energy for future generations			
Income							49.35	10	.001
Over \$25,000	9.5	10.0	62.8	6.5	8.2	3.0			
\$15,000-\$24,999	8.1	6.7	62.2	3.8	16.3	2.9			
Under \$15,000	5.8	9.1	50.2	3.0	9.1	2.2			
Education							30.79	10	.001
College Graduate	5.8	10.6	63.5	3.8	11.5	4.8			
Some college	14.9	9.1	54.8	4.8	14.9	1.4			
High school grad.	20.4	5.8	58.5	4.2	8.5	2.7			
Age							50.49	10	.001
Over 65	28.2	11.3	40.1	4.9	12.0	3.5			
45-64	15.5	10.0	55.0	4.8	11.7	3.1			
Under 45	7.4	5.1	72.7	3.5	9.4	2.3			
Occupation							52.98	10	.001
Professional	8.9	7.8	64.8	5.2	10.0	3.3			
White collar	10.1	4.0	71.7	2.0	8.1	4.0			
Blue collar	9.8	7.8	66.7	2.0	11.8	2.0			
Retired	25.3	11.9	40.2	6.7	13.9	2.1			
Sex							3.45	5	N.S.
Male	13.8	6.9	59.0	4.8	12.3	3.3			
Female	16.5	9.4	57.3	4.0	10.3	2.6			

"To help the economy of the nation" was the second most frequently mentioned motivation to conserve energy. Older, lower educated, and retired individuals were more likely to indicate this as their primary reason for conserving. Middle income individuals and those with middle-level educations were more likely to conserve "because it is my responsibility." Older individuals and retired respondents were motivated to conserve somewhat more "because there are immediate shortages." Very few respondents (2.9%) were motivated to conserve in an effort "to save energy for future generations." This may be a result of the lack of immediacy of the return to the energy conservationist. Highly educated individuals tended to select this motivation more so than other individuals.

Implications and Conclusions

Demographic variables were selected for examination because of their pragmatic usefulness in implementing marketing strategies. The differences in motivations for conserving across levels of the demographic variables presented in Table 2 offer obvious suggestions for segmentation strategies.

For example, immediate cost savings should be emphasized in marketing energy conservation to the young, upper income, and highly educated markets. A wide selection of print and electronic media serves these target markets.

TABLE 3

PAIRWISE DIFFERENCES IN MOTIVATIONS TO CONSERVE
BY DEMOGRAPHIC LEVELS

Motivation	Demographic Variable	Levels of Significant Differences ^{a,b}
1. To help the economy	Education	1 vs. 2 1 vs. 3
2. To save money	Education	1 vs. 2
3. Don't like to waste energy	Education	2 vs. 3
4. To help economy	Occupation	1 vs. 4 2 vs. 4 3 vs. 4
5. Immediate shortages	Occupation	2 vs. 4
6. To save money	Occupation	1 vs. 2 1 vs. 4 2 vs. 3 2 vs. 4 3 vs. 4
7. To help the economy	Age	1 vs. 2 1 vs. 3 2 vs. 3
8. Immediate Shortages	Age	1 vs. 3 2 vs. 3
9. To save money	Age	1 vs. 2 1 vs. 3 2 vs. 3
10. To help the economy	Income	1 vs. 3 2 vs. 3
11. To save money	Income	1 vs. 3 2 vs. 3
12. Don't like to waste energy	Income	1 vs. 3 2 vs. 3

^aLevels of demographic variables are:

Education: 1 = college grad.	Occupation: 1 = professional
2 = some college	2 = white collar
3 = high school grad.	3 = blue collar
	4 = retired
Age: 1 = over 65	Income: 1 = over \$25,000
2 = 45-64	2 = \$15,000-\$24,999
3 = under 75	3 = under \$15,000

^bAll pairwise comparisons are significant at the p=.05 level, except numbers 3 and 5 which are significant at the p=.10 level

Other promotional themes that would be suited to various market segments include:

"Don't be wasteful - targeted to the middle class segment

"Energy conservation strengthens the the nation's economy" - aimed at the lower income and educational segments

"We face immediate shortages so now is the time to conserve" - targeted to older and retired individuals

"It's your responsibility to conserve" - directed toward the higher income and retired segments

In summary, motivations for conserving energy were examined for a large and representative sample of Florida homeowners. Significant differences in motivations were found across levels of income, age, occupation and education. Such information is useful to policy-makers faced with developing segmentation strategies aimed at reducing this nation's egregious use of energy. While many consumers and policy-makers have become complacent during this year of comparatively ample energy supplies, many energy and political experts are predicting severe energy supply disruption within the next few years. Marketers need to revive efforts to persuade individuals to conserve before this nation faces another crisis.

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DOES CORRECTIVE ADVERTISING AFFECT THE TRUE CLAIMS?:
AN EXPERIMENTAL EVALUATION

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Abstract

Many companies that are required to use corrective advertisements worry that the remedial messages designed to change the deceptive beliefs negatively may also affect the true claims of the company negatively. This study evaluated the effectiveness of a corrective advertisement by Listerine which contained several true claims as well as the FTC-ordered corrective statement, in an experimental setting. Findings indicate that the true claims were effective in substantially increasing the beliefs of the subjects about these claims although they appeared along with the corrective statement in the same remedial message.

Introduction

In the early 1970's, the Federal Trade Commission began using corrective advertising as a major weapon in its continuing crusade against deceptive advertising. Several firms whose advertisements were found to be deceptive have agreed to use corrective statements to erase residual misinformation caused by the ads. The increased use of corrective advertising has raised several issues concerning its purpose, effectiveness, and possible side effects.

One issue of concern to advertisers is the impact of corrective advertising on the true claims made by the company. If the remedial message designed to change the deceptive beliefs negatively also affects the true claims of the company negatively, then the advertiser is punished beyond its deceptive gains. One important aspect of the FTC's actions is that they cannot be punitive. The FTC's objectives in requiring corrective advertising are to correct consumer misimpressions and to restore competition, not to punish the advertisers by harming the effectiveness of their true claims.

Literature Review

Wilkie (1974, p. 192) was the first author who emphasized the precision requirement in the development of remedial messages. He stated that the corrective ads should be designed to dispel the residual deception caused by the deceptive ads but be precise enough to affect only these particular responses.

There are three empirical studies in the marketing literature that deal with the affects of corrective ads on other claims made by the company in its advertising. The main purpose of all three was to evaluate the effectiveness of the Listerine corrective advertising campaign. But they also investigated this important side-effects issue.

Mazis and Adkinson (1976) found that the corrective advertisement had a substantial influence on the brand belief it was intended to affect and on a related belief (i.e., kills germs) which was not the target of the communication. They indicate that for

the company the impact of corrective communication on other beliefs about the brand is equally important. They offer two possible explanations for this change:

(1) consumer's perception of the germicidal properties of a mouthwash brand may be highly correlated with a brand's effectiveness against colds or sore throats, and (2) consumers distorted the content of the corrective messages by broadening their scope.

Dyer and Khuel (1978) also found that corrective ads affect other attributes of the product category even though they were not addressed in the remedial message. They measured beliefs about eight mouthwash attributes but used only two of them (i.e., "prevents colds and sore throats" and "kills germs") for analysis and found a significant main affect for the "kills germs" dimension. They called this a "reverse halo effect" phenomenon and questioned corrective advertising's precision (i.e., the "surgical" removal of positive beliefs about a single attribute without affecting other attributes). However, they noted that "prevents colds" and "kill germs" may be very closely associated in the consumer's mind.

In contrast to the above results, Mizerski, Allison and Calvert (1980) found the corrective commercial to be effective in lowering target beliefs, yet precise enough to have no significant effect on any other dependent variables. They used four belief statements for Listerine: (1) Listerine is effective for killing germs, (2) Listerine leaves mouth feeling refreshed, (3) Listerine fights colds and sore throats, and (4) Listerine has long-lasting effects. Although they have also used the "kills germs" statement, neither this nor the other two non-target beliefs were significantly changed after the corrective commercial.

Purpose

The literature review showed that there is inconclusive evidence as to whether the corrective commercials affect the true claims made by the advertiser. Although all three studies (1) were about the first court ordered corrective advertising campaign (i.e., Listerine), (2) used similar versions of the FTC ordered corrective message as the independent variable and beliefs as their main dependent variable, and (3) were conducted on college campuses, they found conflicting results.

In order to generate more conclusive evidence about this important side effects issue of corrective advertising, this study was conducted to see if the claims made by Warner-Lamber Company (the producers of Listerine) were affected by the FTC-specified corrective message. In order to include both the FTC's corrective message and the claims Warner-Lambert Company was making about Listerine (as stated on the Listerine's label) a two-sided corrective message was filmed and used as the main independent variable in this study. In an effort to make this experiment comparable to the previous three

studies, the three conditions mentioned in the above paragraph were used.

Methodology

Experimental Procedure

The experimental procedure used in this study is summarized in [Table 1](#).

TABLE 1
EXPERIMENTAL PROCEDURE

Group	First treatment	Post-deception measure (M ₁)	Second treatment	Post-correction measure (M ₂)
1	Decep. ad	M ₁₁ ^a	Correct. ad (Co. source)	M ₂₁
2	Decep. ad	M ₁₂	Correct. ad (FTC source)	M ₂₂
3	Decep. ad	M ₁₃	Irrelevant	M ₂₃

^aM_{ij} refers to the ith measure for the jth group.

The sample consisted of 108 subjects randomly assigned to three groups. For each group, subjects were assembled in a laboratory setting and shown various combinations of 60-second filmed ads--deceptive and corrective ads for Listerine and irrelevant ads for other products. Sets of Salient Belief Technique¹ measures were taken at two points during the experiment. For the first treatment, Groups 1, 2, and 3 were exposed to a deceptive Listerine television commercial and to television commercials for irrelevant products (a food product and a finance company). Then the subjects completed a set of questions (M₁) for the purposes of establishing their post-deception levels of claim beliefs and saliences.

For the second treatment, Group 1 saw a company-source corrective ad for Listerine, along with ads for the other two products. Group 2 saw an FTC-source corrective ad along with the other two ads. Group 3 saw only irrelevant ads. Each subject then completed a second set of questions (M₂) the purpose of which was to determine the effects of the corrective ads for Listerine on claim beliefs and saliences. Group 3 served as a control for measuring the impact of the corrective ads.

The reaction of subjects to the experimenter and the experimental situation (reactivity effect) was not directly controlled in this experiment. Reactivity effects are impossible to eliminate or control in laboratory experiments. Reaction to the experimenter was reduced by using written, standardized instructions that were read by a neutral party. Reactions to the experimental situation might have been assessed by including a fourth group that was

¹Salient Belief Techniques measures salient belief scores (SBS). SBS is calculated for every claim by multiplying that claim's belief score by that claim's salience score.

exposed to a neutral (nondeceptive or noncorrective) Listerine ad. But, budget constraints plus the difficulty of identifying truly neutral Listerine ads (those with no deceptive claims or no possibility of evoking memories of other Listerine ads that did have deceptive claims) made this strategy untenable. Thus, the possibility of reactivity effects must be considered in evaluating the results of the study.

Subjects

The subjects were students enrolled at a large state university, who responded to solicitations for volunteers and a small monetary inducement for participation. A sample consisting of student and nonstudent subjects might have been more representative of relevant consumers. But students do represent a segment of relevant consumers (61 percent were using Listerine or had used it previously), and there may not be that much difference between student consumers and nonstudent consumers. The SBT results for the food product and finance company ads in this study were similar to the results of a previous study using the same ads, with a sample consisting of non student adults of a wide range of ages (Armstrong, Kendall, and Russ 1975).

The Deceptive and Corrective Ads

The deceptive Listerine television ad was chosen from a reel of 29 Listerine ads held by the FTC as evidence in the Warner-Lambert case. The particular film used was selected because it expressed or implied all three of the claims that the FTC had found to be deceptive: Listerine will (1) prevent, (2) ameliorate, and (3) cure colds and sore throats (Exhibit 1).

EXHIBIT 1 TEXT OF THE DECEPTIVE ADVERTISEMENT

[It is raining. Two mothers start talking. One mother has just escorted her children to the school bus, the other (Muriel) is checking the mailbox.]

1st Mother Muriel, where are Dave and Sue?
 2nd Mother Oh, down with a cold again.
 1st Mother Again?
 2nd Mother Oh, guess your family always seems fine
 1st Mother I got a theory.
 2nd Mother A theory? Nothing can prevent colds.
 1st Mother You can help. Let's get out of the rain.
 [They go inside the house.]
 1st Mother Muriel, I make sure they have plenty of rest, and I watch their diets.
 2nd Mother Uh-huh.
 1st Mother Then I have them gargle twice a day with Listerine
 2nd Mother Listerine antiseptic?
 1st Mother Uh-huh. I think we've cut down on colds and those we catch don't seem to last as long.
 2nd Mother Sure seems to work for your family.
 1st Mother Yes, it does.
 2nd Mother Well, I'll try it.
 Male Voice During the cold-catching season, for fewer colds, milder colds, more people gargle with Listerine than any other oral antiseptic. Listerine [Music]

The corrective ads used in this study were professionally filmed for this experiment. Two ads were produced --one with a company source and one with an FTC source. The scripts (read by an actor) were identical in both filmed ads, except for the

introductory sentences that identified the source of the message. To assure that subjects noted the source of the message, relevant props were used in the ads to identify the source visually throughout the message. The text of the corrective message is provided in Exhibit 2.

EXHIBIT 2

TEXT OF THE CORRECTIVE MESSAGE

Hello, I am Walter Hughes (fictitious name), representing the (FTC or Warner-Lambert Company).

Contrary to prior advertising of Listerine, Listerine will not prevent or cure colds or sore throats, and, Listerine will not be beneficial in the treatment of cold symptoms or sore throats.

Listerine is an antiseptic that kills germs on contact. It is effective for general oral hygiene, bad breath, minor cuts, scratches, insect bites, and infectious dandruff. But it is not effective against colds and cold symptoms, because colds are caused by viruses and Listerine does not kill virus.

The first paragraph of the message identifies the source. The second paragraph is from the final order of the FTC, and corrects previous impressions about the product. The first two sentences of the final paragraph state the benefits of Listerine as presented on the Listerine label. The final sentence explains the reasoning behind the corrective message.

In both ads, the message is presented in a straightforward narrative. The message is objective--the FTC has medical evidence to support the negative claims and Warner-Lambert has medical evidence to support the positive claims. The message is two-sided--three negative and six positive claims are made. The message was designed to fit the spirit of Senator Magnuson's (1972, p.4) suggestion that consumers have the right "to be given the facts needed to make an informed choice."

Questionnaires

The questionnaire began with a short cover letter that introduced the experiment and explained that it was part of a study designed to measure ad effectiveness. In all cases, sets of questions about Listerine were placed between sets of similar questions about the food product and the finance company. This allowed subjects to become familiar with the format of the questionnaire while answering "irrelevant" questions. After viewing the deceptive Listerine ad, subjects were first asked if they were familiar with the brand. They were then given ten claims about Listerine, and were asked to indicate the extent to which they believed each claim was true (definitely true, probably true, probably false, definitely false). They were then asked to indicate how important (very, moderately, slightly, not at all) each claim would be to their decision to buy the product, if the claim were true. Five of the claims used were mentioned in the deceptive ad (A,E,G, I, J) and eight were stated in the corrective ads (all but claims F and I). (See Table 2).

TABLE 2
CLAIMS ABOUT LISTERINE

- A. A person who uses Listerine will have fewer colds.
- B. Listerine is effective for minor cuts.
- C. Listerine prevents bad breath.
- D. Listerine is effective for insect bites.
- E. Colds do not last long if you use Listerine.
- F. Listerine has a pleasant taste.
- G. A person who uses Listerine will have milder colds.
- H. Listerine is effective for infectious dandruff.
- I. During winter, more people gargle with Listerine than any other oral antiseptic.
- J. Listerine is an antiseptic.

The second part of the questionnaire, completed after viewing the corrective messages, was similar to the first part except the product familiarity questions were deleted. In addition subjects were asked about their purchase behavior for products shown in the ads. Throughout the study, sets of questions pertaining to a particular and were completed immediately after that ad was viewed.

Analysis

The main dependent variable in this experiment was the "Salient Belief Score" (SBS). The total SBS was calculated for every claim by multiplying the "belief score" of every subject by that subject's "salience score" (the importance of that claim in affecting that subjects decision to buy the product) and summing the products. Then the mean SBS for a claim was found by dividing the total SBS by the number of subjects in that group.

The formula for mean SBS for each claim is as follows:

$$\text{Mean SBS} = \frac{\sum_{i=1}^n B_i I_i}{N} \quad (1)$$

- i = subject
- B_i = belief score of subject i
- I_i = importance (salience) score of subject i
- N = total number of subjects in the group

Two mean SBSs were calculated for the measurements M₁ and M₂ for each claim in each group. T-tests were used to analyze the significance of the change in mean SBS from M₁ to M₂ for each claim in each group.

Results

The findings of the study for the non-deceptive claims made by Listerine are shown in Table 3. (For the findings about the deceptive claims, see Armstrong, Gurol and Russ, 1979).

Group one was exposed to a corrective message from the company source which mentioned all but two claims ("pleasant taste" and "during winter more people gargle with Listerine than any other oral antiseptic") in Table 2. Among these eight claims, five were true claims, and the mean SBS of four of them increased significantly (P < .002 or less) (Table 3, Column 3, rows 1,2,3,5). The increase in the mean SBS of the remaining true claim "Listerine is an antiseptic" was close to being significant (P < .065). The reason why it did not have a substantial increase is probably because it

TABLE 3
MEAN SBS* FOR NON-DECEPTIVE LISTERINE CLAIMS

Group	Claim	Post-deception measure (M ₁)	Post-correction measure (M ₂)	T-value
Group I Company - Source Corrective Message (n = 36)	B. effective for minor cuts	5.743	9.111	-5.33 ^a
	C. prevents bad breath	9.429	11.056	-3.34 ^b
	D. effective for insect bites	5.314	8.556	-5.39 ^a
	F. has pleasant taste	4.714	4.629	-0.35
	H. effective for infectious dandruf	3.771	7.029	-4.68 ^a
	I. during winter, more people use it	4.857	4.629	0.95
J. is an antiseptic	10.750	12.000	-1.91	
Group II FTC-source Corrective Message (n = 39)	B. effective for minor cuts	5.974	9.216	-6.46 ^a
	C. prevents bad breath	9.359	11.297	-4.59 ^a
	D. effective for insect bites	5.000	8.270	-5.33 ^a
	F. has pleasant taste	4.816	4.622	1.09
	H. effective for infectious dandruf	3.447	5.189	-6.65 ^a
	I. during winter, more people use it	5.081	4.730	3.39 ^b
J. is an antiseptic	9.459	11.297	-3.49 ^a	
Group III Deceptive Message only (Control Group) (n = 33)	B. effective for minor cuts	5.545	5.419	.36
	C. prevents bad breath	8.394	8.387	.11
	D. effective for insect bites	4.364	4.968	-1.06
	F. has pleasant taste	3.727	4.355	-1.79
	H. effective for infectious dandruf	3.576	4.032	-3.10 ^b
	I. during winter, more people use it	6.970	6.226	1.38
J. is an antiseptic	10.576	10.290	.68	

^ap < .001

^bp < .01

*Mean Salient Belief Score could run from 1 to 16 because each of its two components (i.e., belief and salience scores) are scored 1 to 4.

already had the highest post-deception mean SBS (Table 3, Column 1, Row 7) and since 16 was the highest possible mean SBS, there was little to increase.

These results support the effectiveness of advertising in communicating its messages, especially under forced-exposure conditions. The true claims in the corrective message increased the mean SBSs of these true claims substantially. Also, there were no significant changes in the mean SBSs of the two claims that were not mentioned in the corrective ad. (Table 3, Rows 4 and 6).

It is interesting that these results are similar to the findings of the Federal Trade Commission's research about the real-world, \$10,000,000, Listerine corrective advertising campaign's effectiveness. A recent FTC News Summary reported that the Burke Marketing Research Inc., which conducted the study for the FTC, found that "Viewers apparently understood that the entire commercial's primary purpose was not to communicate the correction, but to promote the product. 'No significant change in the communication of commercial "sales messages" has been attributed to the addition of the corrective statement.'" (October 30, 1981, p. 2).

Group two was exposed to the same corrective message from the FTC-source. This time all five true claim mean SBSs increased highly significantly (p < .001). (Table 3, column 3, rows 8, 9, 10, 12, 14). There was no significant change in the mean SBS of the claim "has pleasant taste" which was not mentioned in either the deceptive or corrective ads. (Table 3, column 3, row 11). There was a significant (p < .002) decrease in the mean SBS of the "during winter, more people gargle with Listerine than any other oral antiseptic" claim although it was mentioned only in the deceptive ad and not in the corrective message. (Table 3, column 3, row 13). This claim implicitly makes a cold prevention claim. Therefore, the significant reduction in its mean SBS is probably due to the relative power of the FTC-source message over the company-source message in reducing cold-related claims.

Group three was exposed to the deceptive ad but not to the corrective message and its purpose was to serve as a control for the corrective ad. Six out of seven claims showed no significant changes as expected. (Table 3, column 3, rows 15, 16, 17, 18, 20, 21). Only the "effective for infectious dandruf" mean SBS changed significantly (P < .01). (Table 3, column 3, row 19). One possible explanation of this unexpected change could be that in all three groups,

this claim had the lowest post-deception mean SBS and even a relatively small change from this small base was statistically significant.

Conclusions and Implications

The main purpose of this study was to answer the question: "Does corrective advertising affect the true claims?" The findings indicate that the answer is "no, it does not", although two previous studies concluded that it did. The results support the effectiveness of advertising in communicating its messages, whether positive or negative, especially under forced-exposure conditions. In general, the true claims in the corrective advertisement increased the beliefs of the subjects about these claims and the unmentioned claims left the beliefs unchanged.

The two studies which found that corrective advertisements reduced the effectiveness of the true claims were dealing with the claim "kills germs" which seems highly correlated in the consumer's mind with the brand's effectiveness against "colds and sore throats." Therefore, the corrective message aiming to reduce the deceptive beliefs also reduced the "kills-germs" belief. This study used several true claims unrelated to the deceptive claims along with the corrective statement and found that the true claims increased the beliefs of the subjects in these true claims. In conclusion, the findings indicate that the corrective messages designed to reduce deceptive beliefs created by advertisers do not harm the effectiveness of the company's true claims, therefore, the FTC's corrective advertising orders are not punitive. This conclusion should be a relief for both the advertisers and the FTC.

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Abstract

This paper presents the results of a survey of 88 upper income drivers in Syracuse, New York to assess their views of cost/performance tradeoffs in viewing the purchase of an electric vehicle. Conjoint analysis is used to test part-utilities of different attributes of the car purchase decision. This survey of 88 upper income residents suggests that the current price range of marketed electric vehicles (\$10,000 and above) makes the price/options package offered by current technology unattractive to a group which might otherwise be considered early adopters. This group would not rule out buying a limited performance EV for special purposes (commuting or shopping) but the price must be attractive by comparison with subcompact IC cars. Fear of prospective gasoline shortages does not appear to raise the demand price of the EV against IC substitutes.

Introduction

Recent public policy decisions have shifted federal funding away from the subsidy of institutional purchases of EV's and toward loan guarantees for reputable manufacturers. To survive in the new market-oriented business climate, electric vehicle manufacturers must place greater reliance on marketing research and distribution channels. Such market research is hampered by several problems. First, a virtually unknown commodity is difficult to survey; respondents are unlikely to have full information about technological and economic tradeoffs. Second, the original production expectations on the part of manufacturers included an assumption that production costs would be partially covered by the hidden subsidies of a guaranteed institutional market. This factor should, other things being equal, have led to higher cost/higher priced technology packages rather than to attention to the cost/performance tradeoffs in the minds of consumers in an unsubsidized market. Third, the apparently insoluble problems of creating a high performance, low cost battery configuration leaves the electric car industry with an imperfect technological substitute for the compact or subcompact internal combustion engine car.

Thus, several crucial issues emerge in studying the potential market for electric cars:

1. Is there an economically significant subset of the buying public which has use for a limited performance vehicle, and has an interest in experimentation with electric power? The Department of Energy, in a report prepared for NASA,

¹Minicars, Inc., Goleta, Georgia. National Aeronautics and Space Administration, Washington, D.C., "Near Hybrid Passenger Vehicle Development Program, Phase 1, Appendices A and B. Mission Analysis and Specification Studies Report, Volume 1.

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simplistically answered this question in the affirmative without extensive empirical testing of the question, by noting that the majority of auto trips are journey to work commutes under 25 miles and assumed that either the commuter market or the shopping near trips to home would provide such a market. It is not clear, however, that the EV's can compete in price with the increasingly fuel efficient subcompacts, or whether other characteristics of the low power EV's would take them out of the running for the short trip market (lower cruising speed, slow acceleration on hills, or limited driving range).

2. Another assumption implicit in the early DOE investments in the development of electric cars was that dealers would sell those cars at prices which would make the cars competitive with other alternatives facing the buying public. Alternatively, it may have been felt that the economies of lower fuel costs per mile, lower maintenance costs, and slower depreciation would make the EC competitive when viewed from a life cycle costing standpoint. Has the industry examined the cost/performance tradeoffs in the minds of consumers and priced accordingly? What is the impact of the disappearance of federal subsidies?
3. Finally, is the buying public sufficiently aware of the technology/price options to make an informed judgment on these matters? Early termination of the EV demonstration programs may account for general buyer ignorance of alternatives.
4. What is the relative weight attached to low price versus high performance, as viewed by the group likely to be early adopters of the electric passenger car?

Previous EV Marketing Studies

Several previous studies have attempted to explore some of these questions, but narrowness of application limits the generalizations which may be drawn from the other studies. In 1979, Abt Associates put a Lectric Leopard (USElectricar) in the hands of 89 employees for test driving and concluded that "almost none of them would be willing to pay as much for an electric car as for an inexpensive IC car."²

This study had the advantage of informing the market research respondents by actual test driving. Its disadvantage is that the Lectric Leopard (a retrofitted Renault Le Car) is not the current state-of-the-art technology because of mechanical controls and absence of trunk space. The respondents did not consider a variety of price/technology options.

In 1976, Hargreaves, et al., reported on the use of a conjoint measurement techniques to enquire about the marketability of commercial applications of electric vehicles. This study noted that:

"Although 11% of the commercial applications were compatible in terms of the technical capabilities of electric vehicles, when additional attributes

were considered the product was not acceptable in its present form. That is, the negative attributes - reduced technical capabilities and premium price - more than offset the positive attributes - reduced pollution and lower operating costs. Thus, general commercial acceptance of electric vehicles will depend either on increased vehicle capabilities or on competitive prices."³

Unfortunately, it is difficult to generalize from this study, since the element of personal budgeting for private auto use was not considered. Nevertheless, the study demonstrates the potentiality of conjoint analysis for market studies in product innovation.

The Syracuse Study

To explore some of the yet unanswered questions, the transportation program at Syracuse University launched a survey among upper income residents of that city to find out the information level and attitudes toward buying electric cars among a market segment likely to be an early adoption group.⁴

It was argued that the upper income group would continue to buy cars despite the upward drift in all car purchase prices, and that income and willingness to be an early adopter might be correlated. Specifically, the study inquired about the cost/performance tradeoffs among several electric car alternatives and tested for general understanding among this market segment of the current state of EV technology.

The Sample Interviewed

The interview team selected four census tracts in the upper income Syracuse suburbs of DeWitt and Manlius, where property values average among the highest for the county.⁵ Eight housing areas with homes valued in excess of \$80,000 were identified within these census tracts through the assistance of a local real estate broker.⁶

A random sample was drawn from addresses in these areas and respondents were interviewed in person by students using a structured interview schedule. The schedule contained questions both about interviewee economic characteristics, driving needs, intentions to buy IC and electric vehicles, and a series of

²G.F. Vanderschmidt and Martin M. Stein, "Socio-Economic Evaluation of the Electric car: A Case Study of User Reaction and Characteristics," Paper presented at the Annual Meeting of the Transportation Research Board, Washington, D.C., January 1981.

³George Hargreaves, J.D. Claxton, and F.H. Siller, "New Product Evaluation: Electric Vehicles for Commercial Applications," Journal of Marketing, Vol. 40, January 1976), pp. 74-77.

⁴It was argued that the upper income group would continue to buy cars despite the upward drift in all car prices, and that income and willingness to be an early adopter might be correlated.

⁵Data from the 1970 census were used to select the sample site.

⁶Spencer Lovelace, et al., "A Market Research Study of the Syracuse University Electric Car Project," unpublished report, Franklin Program in Transportation and Distribution Management, Syracuse University, Syracuse, N.Y., 1981.

questions asking them to evaluate several performance/cost package options. Eighty-eight interviews were completed with sufficient detail to allow for the completion of the conjoint analysis. Twelve respondents either failed to be interviewed, or did not provide complete information to support further analysis.

Conjoint Questionnaire Design

The questionnaire was designed to analyze the tradeoffs consumers make between seven key characteristics of proposed electric vehicles. The characteristics (or factors) were (1) range, (2) cruising speed, (3) battery life, (4) battery recharge time, (5) passenger payload (maximum number of passengers), (6) cargo payload (maximum number of grocery bags), and (7) purchase cost. Three levels were chosen that represent possible values of each factor. The levels for each factor are summarized in **Table 1**.

These factors and levels were combined to describe proposed electric vehicles. To reduce the task of evaluating all possible vehicles which could result from all possible combinations of factors, a linear compensatory utility model was assumed and factors were combined in a block design consisting of two 4-factor blocks. Each block, in turn, was a Greco-Latin Square made up of the first and second three factors respectively, with purchase cost the fourth factor in each block.

Subjects were then asked to rate each proposed electric vehicle according to the likelihood they would purchase such a vehicle should it be made available. Additional questions were asked about current driving patterns, use of electric vehicles and user background.

Initial Data Analysis

The sample frame consisted of upper-middle income suburbanites near Syracuse, New York. The socio-demographics for the sample confirm this characterization. The median income for the group is above \$40,000, 78 percent of the respondents have completed college, 93 percent were married, most families have two children and most household heads commute 30 miles or more each day. Most respondents were also above 45 years of age.

Respondents still indicated heavy utilization of large automobiles despite recent increases in the price of fuel. For the first family car, only 36.4 percent indicated that it was a small (compact or subcompact) car. Most families owned two cars and for the second car, 35.1 percent indicated that it was small. As expected, husbands mainly used the first and wives mainly used the second car. Cars were primarily used for a combination of city and highway travel.

Attitudes Toward Electric Vehicles

Although most respondents indicated a lack of familiarity with electric vehicles, they were able to provide an overview of their expectations of its capabilities, once options were explained. Respondents were given performance/price "packages" to evaluate. They did not have to know the actual performance/price combinations available currently on the market. In fact, few were aware of such cars, or their specifications.

The major limitation of an electric vehicle is its range and the time it takes to recharge the battery. Thus, most persons would consider its use primarily to commute to work, to go shopping or to take other nearby trips. Keeping this in mind, 83 percent indicated

a desired capacity of four passengers or less, 75 percent indicated a willingness to pay between \$5,000 and \$8,000 for an electric vehicle and 59.1 percent expected the car to be styled like a compact or a subcompact. In other words, with the natural limitations of an electric vehicle, it is viewed primarily as a local commuter car or intown run-about for errands and shopping. It follows that a long recharge time of more than five hours was found acceptable to the majority of respondents as long as there was sufficient range to participate in a variety of desired local activities.

The obvious problem with maximum range before battery recharge is emphasized by the problem most frequently anticipated by respondents -- running out of power. Only a small number of respondents referred to other problems, such as a fear of service problems. Clearly, range is the critical factor. Despite this, 63.1 percent of the respondents indicated they would consider buying an electric vehicle.

Analysis of Part-Utilities

Part-utilities were analyzed under metric assumptions using information integration techniques suggested by Anderson (1978). Benjamin and Sen (1981) demonstrate that metric and non-metric techniques perform comparably as analytical and forecasting techniques.

Part-utilities provide information on the relative attractiveness of the various characteristics under consideration. The relative importances of various factors and levels are derived by examining the difference between part-utility values for levels of one factor and comparing them to the differences calculated for another factor. The overall importance on intended choice of a factor is indicated by its range.

Part-utilities are summarized in [Table 1](#). The factors with the largest range are cargo payload and battery life. Cargo payload is an indication of possible use as a shopping vehicle or for recreation. Battery life is related to the cost and convenience of using electric vehicles.

Of the remaining factors, vehicle range is most important. This is consistent with current design emphasis and the major shortcoming of electric vehicles -- limitations on range before a recharge is needed. On closer examination, it is clear that the average threshold for acceptable range is 50 miles. There is little increase in utility for 20 miles additional range (to 70 miles).

Cruising speed and purchase cost are next most important. Differences in possible cruising speed and the corresponding increase in part-utility are approximately proportionate. The flexibility of highway cruising speed enables the driver to use expressways that are utilized in the suburbs for even the most routine journeys. Within legal limits, the higher the cruising speed the more attractive the vehicle.

Examining purchase cost, there is virtually no increase in utility for a \$10,000 vehicle compared to a \$13,000 vehicle. Respondents indicated acceptance of vehicles only at the purchase cost which is comparable to other sub-compacts. Respondents show an inclination to pay only a limited amount for a vehicle with severe range limitations.

Battery recharge time and passenger payload play a smaller role in determining preferences which is consistent with the intended use of these cars as a

commuter vehicle.

The conjoint analysis is in general consistent with more detailed questions about specific factors. For example, the conjoint analysis shows a sharp decrease in utility for a purchase cost of \$10,000 and the detailed questions about acceptable costs indicated a willingness to pay between \$5,000 and \$8,000 for such a vehicle.

On the other hand, the conjoint analysis indicates a threshold vehicular range of 50 miles. This contrasts with median indicated range of 75 miles. Apparently these subjects would like a higher range but are unwilling to pay for it or trade off other factors for it.

A Comparison of Average Part-Utilities for Socio-Demographic Groups

Average part-utilities were calculated for different groups which were defined by socio-demographic variables and other measures related to current car ownership and driving habits. Using analysis of variance, it was found that, for the most part, average utilities did not differ significantly between groups defined in this way. Income, sex, family size, education, and current trip-making behavior were not associated with the relative evaluation of the factors of electric vehicles that were evaluation here.

A significant relationship was found between groups defined by current mileage driven and average part-utilities for electric vehicle range. As expected, those who travel a greater distance now indicated a higher utility for greater range in the electric vehicle. This critical element then reflects an estimate of whether an electric vehicle can accommodate current driving habits.

CONCLUSION

This survey of 88 upper income residents of Syracuse, New York suggests that the current price range of marketed electric vehicles (\$10,000 and above) makes the price/options package offered by current technology unattractive to a group which might otherwise be considered early adopters. This group would not rule out buying a limited performance EV for special purposes (commuting or shopping) but the price must be attractive by comparison with subcompact IC cars. Fear of prospective gasoline shortages does not appear to raise the demand price of the EV against IC substitutes.

TABLE 1
SUMMARY OF PART-UTILITIES FOR ELECTRIC VEHICLE
CHARACTERISTICS, ENTIRE SAMPLE

Factor	Level	Part-Utility	
		Average	Standard Deviation
Range (miles)	30	2.4	1.4
	50	4.2	2.4
	70	4.5	1.8
Cruising Speed (miles/hour)	30	2.8	1.9
	45	3.4	2.3
	55	4.5	1.9
Battery Life (Years)	1	1.8	1.1
	2	5.1	1.9
	4	3.9	2.2
Battery Recharge (Time in Hours)	2	4.7	2.1
	5	3.6	2.2
	8	3.2	2.1
Passenger Payload (People)	2	3.4	2.1
	4	3.9	2.6
	6	4.3	2.1
Cargo Payload (Number of Grocery Bags)	3	2.7	1.6
	6	7.4	3.5
	9	3.7	1.9
Purchase Cost (Dollars)	5,000	4.5	1.8
	10,000	3.0	1.7
	13,000	2.8	2.0

^a Rating scale varied from 1-never would purchase to 11-high likelihood of purchase; 6 was the neutral point.

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"...it is found that attitudes influence behavior but do so in an indirect manner only through their impact on intentions...Further, the attitude-intentions relationship is stronger when expectancy-value attitude measures are used as predictors than when semantic differential measures are employed... Similarly, past behavior tends to lessen the impact of intentions on behavior."

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THE NEED FOR A REALISTIC UNITED STATES
INTERNATIONAL AIRLINES POLICY: IS DEREGULATION THE ANSWER?

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Abstract

The U.S. international airlines system can continue to promote American growth by functioning as a vital international transportation mode. What is needed is a critical evaluation of the present deregulatory policy. This paper reviews American international regulatory history and suggests a specific approach that might satisfy both corporate and national objectives.

Introduction

Most Americans are aware of United States international airline systems. However, a majority of American business and academic researchers probably do not know that U.S. airlines compete with foreign airlines which generally are granted subsidies by their governments and often given special operating rights. Though the federal government is in the process of deregulating the domestic American airline industry, it does not appear appropriate at present for the foreign routes of U.S. airline corporations.

Deregulation Policy

No approach to trade between nations can be complete without consideration of logistics channels. This, in turn, demands that attention be directed to the vital role played by a nation's transportation modes in contributing to the growth of its foreign trade and the prosperity of its citizens.

A relatively new, but frustrating problem faced by United States air carriers flying international routes is that they must compete with numerous subsidized foreign airlines. American international trunk airlines lost 3.8% on sales in 1980, compared with a profit of 1.8% in 1979, and down from 6.9% profit in 1978 (Air Transport 1981), when the United States began its emphasis on the deregulation of airline fares.

While the profits of American international trunk air routes were actually eliminated in 1980, the operating results of the foreign carriers were equally unsatisfactory. International airlines incurred a \$2.1 billion loss in 1980 which the International Air Transportation Association has called "the worst year in air aviation history." IATA said that if prompt remedial action was not taken, the projected loss of scheduled international operations of all of its 93 members would total an estimated \$2.6 billion in 1981. American airlines do not participate in the IATA rate conference which can agree on fare increases, reduced services and requests for government assistance (Wall Street Journal 1981).

American airlines with overseas routes appear caught between the nation's current deregulatory policy and the practices of airlines of virtually every country. The deregulation policy of the United States has resulted in international air carriers of almost every nation facing operating losses. Though competitive lower rates may have assisted the traveler during the past several years, international fares are currently being increased.

Hopefully, such action will come in time to assist American international airlines. Pan American World Airways, Inc., reported a record loss of \$114 million in the first quarter of 1981 after incurring an operating loss of \$88 million in 1980. To some extent, Pan Am's problems stem from its status as the ex officio U.S. national flag carrier. But, it has been stripped of government protection by airline deregulation and America's international aviation policy. Competition means something quite different overseas, where most airlines are either owned or subsidized by their governments and are regarded as instruments of national prestige or as a means of attracting tourists. As a result, during the 1970 to 1980 decade, U.S. airlines share of international traffic has dropped from 28 percent of the market to under 20 percent (Chakravarty 1981).

The Maritime Experience

Parallels exist, to a considerable extent when comparing the life cycle of the U.S. merchant marine fleet with the American international airline industry. Since the end of World War II, when it was the paramount leader in terms of maritime tonnage, the U.S. has steadily experienced an eroding market share, until today U.S. ships transport only about 5 percent of its own foreign trade (Kanuk 1978).

Competitive disadvantages exist in the maritime industry because the Federal Maritime Commission, which regulates the U.S. maritime industry, lacks authority to require foreign carriers to comply with American laws. Further, there is a move in Washington that would place U.S. carriers at a further disadvantage by prohibiting their participation in carrier conferences prevalent in other parts of the world. This movement is compounded by attempts to apply U.S. antitrust laws to foreign flag carriers (Kanuk 1980).

In 1916, Congress enacted the U.S. Shipping Act, authorizing ocean carriers in American foreign trade to participate in approved rate making conferences. At the same time, Congress established the Federal Maritime Commission to supervise the concerted efforts of these conferences and police the antitrust exempt activities. The Merchant Marine Act of 1936 continued the exemptions of the Shipping Act of 1916 and was the cornerstone of the American maritime policy from 1936 until 1969 (Jantscher 1975).

In 1978, Robert J. Daschbach, Chairman of the Federal Maritime Commission, indicated an urgent need for revisions in U.S. shipping laws to grapple with the changing dynamics of the world shipping trade, along with the overdue creation of a modernized U.S. maritime policy (Daschbach 1978A). Similar to the international airlines industry, the U.S. maritime fleet is facing foreign subsidized competition, including carriers of Eastern Bloc nations, which operate government controlled vessels that undercut rates.

The penetration of foreign carriers is threatening to the U.S. ocean commerce system. Their growth potential is nurtured by such advantages as heavy government subsidization, lower labor costs, and the ability to establish rates without market restraints. This trend, with political rather than commercial motivation, is a dramatic example of how political considerations have gained importance in the world marketplace (Daschbach, 1978B).

The International Airline Industry

Dual Systems

Basically, the American airline industry operates two systems, that is, a U.S. domestic system and an international aviation system. The American government exercises absolute sovereignty over the domestic system. Competition may be expanded or restricted, the government can subsidize when market forces do not provide adequate service, and ultimately the domestic system can be shaped to meet that often illusive and changing criteria, the public convenience and necessity.

International air space is a vastly different environment, contingent on bilateral agreements between the United States and foreign governments. It is an environment in which specific operating rights are negotiated by the governments in an effort to achieve economic and political benefits. In that process, routes are prescribed, fares controlled subject to governmental approval, and frequently the capacity of the aircraft is regulated.

It is an environment in which American international carriers are subject to the control of another government when they transit or emplane or deplane passengers. The action of a foreign government and its political attitudes affects the costs of U.S. carriers, thus having a substantial impact on the ability of American carriers to market their product (O'Darnell 1977).

Historical Perspective

The Air Mail Act of 1925 and the Air Commerce Act of 1926 established scheduled air transportation within the United States on a commercial basis. In 1928, Congress through the Foreign Air Mail Act of 1928, authorized the Postmaster General to award contracts to the lowest bidders for carriers to transport mail between the United States and foreign countries (Public Law No. 107 1927). This enabled American carriers to begin international air service.

While service to Europe offered the best traffic prospects, it was not begun until experience gained on South American operations could be used to overcome obstacles to navigation. Foreign air services differ from domestic in that airlines proceed to cities and through intermediate points that are located in countries other than the point of origin. Since nations are sovereign in the air above their lands, carriers must obtain the right to land or to pass over. Prior to 1938 carriers negotiated their own landing rights. Since privately negotiated rights were frequently obtained on an exclusive basis, they often led to monopoly. Accordingly, in 1939, the U.S. Department of State began, under certain circumstances, negotiating landing rights and assigning them to such carriers as the Civil Aeronautics Authority designated. Governmental landing rights are usually obtained on a reciprocal basis (Goodman 1944).

Pan American Airways applied to the Civil Aeronautics Authority on February 13, 1939, for a certificate of convenience authorizing service to Europe. Proving the service to be in the public interest was not difficult, since transatlantic routes possessed many traffic possibilities. However, on May 9, 1939, American Export Lines applied to the Authority for a certificate of convenience which would also authorize service to Europe. Pan American, which was permitted to intervene in the case, contended that authorization of another service across the Atlantic would violate the spirit on which certificates of convenience are based. American Export, to the contrary, contended that the Civil Aeronautics Act specifically required that the CAA should regard

competition "to the extent necessary to assure the sound development of an air transport system properly adapted to the needs of the foreign and domestic commerce of the United States, of the postal service, and of the national defense" as in the public interest (Civil Aeronautics Authority 1939).

The major portion of the history of international airline organization and regulation can be said to start with the Chicago Air Conference of 1944 (Thornton 1970). Detailed regulation of the United States international air system began with the 1946 Bermuda agreement with Great Britain, which established the ground rules for commercial air traffic between the U.S. and most civil aviation partners (Air Transport 1980). The principles outlined in the 1946 Bermuda I agreement provided that fares were established by carrier agreement, subject to approval of governments. Landing rights at any city required government approval, but countries could authorize any number of carriers in markets in which it had landing rights, and carriers were free to determine schedules and choice of aircraft. The rights of multiple designations and freedom to establish schedules were critical dimensions of Bermuda I type agreements that created competitive pressures.

While Bermuda I agreement was a compromise in that routes and frequency would not be subject to prior government review, it permitted rates to be set by a cartel of international airlines, the International Air Transport Association (IATA), subject to government approval. This enforced price collusion required the international traveler to pay air fares substantially greater than those at a competitive market (Bruce and Trayham 1980).

The Chicago Air Conference of 1944 and the Bermuda I agreement existed from 1946 to 1977 without significant change, although major attempts at revision were made of a conference in Geneva in 1947 and for Europe at Stratsbourg in 1954 (Wheatcraft 1956).

Domestic Regulation versus International Regulation

During the period after World War II the Civil Aeronautics Board (CAB) controlled domestic competition over a specific route by limiting the number of airlines authorized to serve a route. If a route was not adequately served, another carrier would be authorized to intensify competition in the route. If a route would not support more service, the CAB would not permit additional carriers to offer flights.

While, in international service, the CAB has the power to block service through influence on bilateral agreements, it is largely a theoretical power. Practically, its effort to block a flight proposed by a foreign airline would provoke retaliatory action from the government of the involved foreign airline. The ability of the CAB to restrain any foreign airline from offering service to the United States depends not on the needs of traffic, but on the bargaining strength of the countries which might want to offer service.

Recent Deregulation Changes

With the arrival of the jumbo jet age of the 1970's, the combination of fare agreements with no control on the number of seats flown, lead to a saturation of many international routes. The United States - United Kingdom bilateral air agreement now generally referred to as Bermuda II, signed on July 23, 1977, was a significant departure from long established U.S. international aviation policy. The U.S. agreed that the fares would be set at the lowest level consistent with safety and adequate financial results. In return, British airlines would be permitted to fly to freely selected American cities in return for access of U.S. airlines to foreign

destinations.

The Civil Aeronautics Board abandoned its gradual approach to control. The Board, the U.S. Department of Transportation, and the State Department all agreed that the U.S. should strive for international agreements limiting the authority of governments to interfere in the international airline marketplace (U.S. Congress 1978).

Attempts by the State Department and Civil Aeronautics Board officials to urge global acceptance of American policy met with foreign rebuke. Nevertheless, many airline officials admitted that the industry was undergoing a definite change in marketing philosophy. One airline spokesman noted that 1979 could well be a limit between the established past and a new future (Doty 1979).

Charges were made by foreign air flag executives that the American policy of deregulation of international air transport is really economic imperialism. In 1979, Ron Stanton, deputy chairman and chief executive of British Airways, referred to deregulation as possibly being economic imperialism, that the U.S. was attempting to coerce other nations to follow its policy ("Deregulation: Aviation Imperialism?" 1979).

Is Deregulation the Answer?

The deregulation drive pushed by the U.S. appears to be providing the international airline industry with both good and bad effects. Alastin T. Pugh, managing director, British Caledonian Airways commented that acceptance of deregulatory policy outside of the United States has proved illusive. He added that it will continue so as long as there are suspicions that deregulation is some diabolic instrument of United States aviation imperialism (Otto 1980).

The philosophy of competition has generally been considered an optimal model for the United States economy. This philosophy is rooted in American culture and its politics. Presently, American international airlines compete with many subsidized foreign air carriers and in many instances with several U.S. carriers (Haefner 1977). However, between 1972 and 1980, Pan American reduced its employment by 23 percent and TWA cut employment by 12 percent. During the same period, Air France increased its staff by 15 percent, KLM (Netherlands) by 14 percent, Lufthansa by 30 percent. America is exporting tens of thousands of jobs to foreign airlines (Gallagher 1981).

In 1978, as the relaxed regulatory policy was being considered, U.S. airline officials noted that American carriers compete for passengers in a manner that does not exist in many other countries. In the U.S. a passenger arriving from Germany can make connections out of a gateway city such as New York on a number of connecting domestic airlines. In West Germany, to the contrary, the national controlled Lufthansa line is the only domestic carrier. Consequently, it is easier to fly Lufthansa on the overseas journey as well as on the domestic flight within Germany. In foreign countries where there is a tourist attraction remote from the capital city, the traveler must generally change to the domestic branch of the national airline ("Commentary" 1978).

Under the U.S. government policy of open skies, competition has increased sharply. The number of airlines flying the North Atlantic in 1981 has increased to 37, up from 31 in 1977. However, a number of problems exist due to the actions of foreign airlines. For example, Lufthansa, the West German national airline which serves New York, Miami, Atlanta, and San Juan, displays no U.S.

flag carrier schedules on its computer. Even interline tickets of tickets that do not involve Lufthansa in any manner are collected by its agents in Germany. Alitalia, the Italian national airline, has its own employees handling and checking baggage in Rome, while all other lines must use an airport staff employed by the city. TWA, which serves Rome is not permitted to use a computer to issue and assign tickets. Similarly, at the international airport at Narita, which serves Tokyo, Japan Airlines has its own terminal and is authorized to handle both inbound and outbound freight. Foreign airlines are assigned space in two buildings, but they are licensed by customs to handle only outbound freight. Inbound freight must be contracted to JAL and be handled by its computerized cargo terminal. Otherwise, its freight must be handled by a privately owned, public warehouse with less efficient equipment (Business Week 1981). Laker Airways, the British no-frills airline, is expanding its thrifty concept, hoping to build its \$500 million revenue line. It plans to introduce Globetrain, a round-the-world service that will fly London to Los Angeles to Honolulu to Tokyo to Hong Kong. It has been said that Globetrain could eliminate IATA and its fixed fares. However, Laker is battling interests more awesome than IATA. Laker requested, and was refused, 666 European routes when it applied to the British Civil Aviation Authority in 1980. Laker is suing the CAA and the British Department of Trade. The case is being appealed to Britain's High Court in October, based on the argument that the Treaty of Rome which established the European Common Market that provides for free competition, should apply to air transport. However, it is questionable if ten different European governments will eliminate their monopoly agreements (Ellis 1981).

Observations

The U.S. government cannot unilaterally impose its will on sovereign nations steeped in the tradition that tight capacity controls and pooling agreements are in the best interest of their international airlines. The American domestic airline system has been deregulated, but that is not generally the situation in most other countries.

U.S. international air carriers may be tending toward the same diminishing share of the market as its ocean maritime commerce. That is, American governmental officials may fail to perceive that it is not economically feasible for U.S. airlines to meet the competition of subsidized foreign airlines. Under current conditions, the national airlines of other airlines can offer service at rates below the actual cost of providing the service.

Conclusion

The United States government has forced its domestic airlines into a deregulatory posture since 1978. But trouble has begun due to its effort to export its open skies approach beyond its borders. American officials should recognize that the nation has two airlines systems, one being domestic, the other, international.

This nation cannot force its deregulatory policy on foreign airlines which are dedicated to the principles of capacity controls and pooling agreements. American overseas airlines are not competing on equal terms with other corporations. They are competing with airlines subsidized by foreign nations that generally have protective airline policies.

International air competition can be practical for U.S.

airlines only when there are agreements to eliminate governmental subsidization and favoritism. Since most other countries do not approve such an approach, American international airlines should be similarly supported by the U.S. government.

American international airlines are tending to follow the path of its maritime fleet, that is, to obtain a steadily decreasing market share. It should be recognized that commercial airpower is an instrument of national power and will be so as long as a vestige of nationalism remains in the world political power.

The governmental policy of the United States international air transport system should be one of enlightened self-interest, including subsidies and favoritism when appropriate.

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SUBJECTIVE VERSUS TIME SERIES FORECASTS AND THEIR COMBINATION

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Abstract

Forecasts of monthly product sales by a time series model are compared with subjective predictions made by marketing managers of a particular firm. For the two products considered, management's subjective forecasts are significantly more accurate, a finding not in keeping with the findings of the great majority of previous comparable studies.

The linear combination of the subjective forecast with the time series forecast into a composite forecast is discussed. Although it is shown that the time series forecast contributes significantly to the composite prediction, the improvement in forecast error reduction over the subjective model used alone is small in the relatively short holdout period.

Introduction

There has long been management interest in being able to generate accurate forecasts of future values of sales, earnings, and other variables of interest. The variety of forecasting methods available to the researcher has grown substantially in the last two decades. Naylor et al (1972), noting the current popularity of causal or regression models, labeled the 1960s as the "Age of the Large-Scale Econometric Model." The 1970s saw the emergence and widespread acceptance of time series methods, particularly the Box-Jenkins (B-J) methodology (1970). In particular, the univariate B-J modeling procedure proved to be a forecasting technique which generally would forecast as well as or better than the more complicated structural models, especially in short-term predictions (Newbold and Granger, 1974).

While there has been a good deal of interest in comparing the predictive ability of various structural and time series modeling techniques against each other, there has also been some interest in comparing these quantitative techniques' performance against that of techniques which are considerably more qualitative in nature, such as subjective predictions generated by management or by outside experts. The great majority of the latter category of studies in the business area have involved financial/accounting data such as quarterly earnings; very few studies have been done on product sales data.

The predominant finding reported throughout these studies is that the quantitative models' forecasts have been more accurate than the subjective predictions of experts, even though experts may have bits of information available to them which is not or cannot be incorporated into any mathematical model. In an extensive review, Hogarth and Makridakis (1981) cite numerous studies where forecasts of security analysts or forecasting services fail to do as well as forecasts of quantitative models, simple projections, or benchmarks such as an average of the market. Perhaps typical of some more recent investigations is one reported by Lorek et al (1976). Using a cross-section of 40 firms, the authors compared management earnings forecasts against univariate B-J forecasts with the result that overall the B-J forecasts had smaller prediction errors at the .01 level of significance. For firms where management forecasts were high in error the B-J forecasts were especially strong; when management was more accurate (less than 10

percent in error) the B-J forecasts were not significantly better.

A study with different results is reported by Brown and Rozeff (1978). They compared analysts' earnings forecasts against those of various time series models at several forecast horizons using data from a sample of 64 firms. The results strongly favored the use of the analyst (Value Line Investment Survey) forecasts of earnings over the B-J and other time series forecasts. Brown and Rozeff argue that analysts would not exist if their forecasts were not superior, but caution that their findings in favor of informed experts are not necessarily generalizable to other subjective "non-market" forecasts where the forecast is generated by an entity whose primary purpose is not to sell forecasts to others. Hogarth and Makridakis (1981) treat the Brown and Rozeff findings as an exception to the overall pattern.

While fewer studies exist using product sales rather than financial statement categories to compare management and time series forecasts, the existing articles mirror the majority of those reported above. For instance Mabert (1975) reported that quantitative forecasts of sales (B-J, a harmonic model, and exponential smoothing) were lower in mean percent absolute error than forecasts generated by company executives. In another study DeLurgio (1980) found that B-J models were superior to management forecasts as well as to other time series models in forecasting demand for a particular service.

In this study sales forecasts for two major products of a particular firm will be compared for forecast accuracy. One set of forecasts are generated by a time series model while the other set of forecasts are actual subjective predictions made by high-level marketing planners. This study will also examine the results of combining both sets of forecasts into one composite forecast.

Data

Monthly sales data (units ordered by dealers) were obtained for two different products of a well known manufacturing firm. Both products would be described as being relatively expensive consumer durables; one in the mature stage of the product life cycle while the other is still in the growth stage. The manufacturer supplying the data did not wish to have the specific product lines identified here. Six years' worth of data (1972 through 1977; 72 observations) are used to build the time series models discussed herein, and 42 observations are used as holdout points to compare the one-period-ahead management (subjective) forecasts with those of the time series models.

Subjective Versus Time Series Results

The first step of this section of the study was to determine the time series method that best forecast future values to compare against management's subjective forecasts. The firm routinely generates forecasts by exponential smoothing, extrapolating the trend curve, use of the Census Bureau X-11 program, and by using last month's seasonally adjusted annual rate. Although not used by the firm, B-J forecasts will also be considered.

TABLE 1. Time Series One-Period-Ahead Forecast Errors*

Forecasting Method	Growth x	Product s	Mature x	Product s
Exponential Smoothing	23.02	18.46	13.72	8.43
Trend Curve Extrapolation	36.20	25.70	15.01	11.71
X-11 Program	23.77	18.31	13.09	8.04
Seas.Adj. Annual Rate	27.09	20.02	14.40	9.46
Box-Jenkins**	16.71	13.11	10.34	6.87

* Forecast errors are expressed as average absolute % error

** Growth product model is (100)(011)₁₂; mature product model is (011)(011)₁₂

Table 1 shows the forecast results for the various time series models over the holdout period. It is clear that the B-J forecasts are superior to those of the other time series methods, a result similar to that reported in other studies. For both the growth and the mature product, the mean B-J forecast error is lower than the best alternative's mean at the .01 level of significance, using a matched sample t-test. Accordingly, the B-J model forecasts are compared to those generated by management (see Table 2). In all cases the B-J model's

TABLE 2. Subjective Versus B-J Forecast Errors

Product	B-J x	Subjective x	t-value	p-value
Growth	16.71	13.12	3.16	<.001
Mature	10.34	5.67	5.46	<.001

parameters were re-estimated as each new observation became available, as recommended by McKeown and Lorek (1978). As Table 2 clearly indicates, management forecasts were significantly better than the B-J forecasts, especially for the more mature product sales series. This result, like that reported by Brown and Rozeff (1978) on earnings data, is definitely an exception to the generally observed pattern. It does appear that management is able to subjectively evaluate certain bits of information to make a better projection than the B-J can, although the difference was less pronounced for the growth product. Since the mature product's sales pattern is more stable, it was anticipated that the time series model would be more competitive with management judgment on that product, but such was not the case. The growth product is the one for which management is much more likely to plan a short-term price action or special sales promotion; knowledge of an upcoming market event such as this would influence and presumably improve management's forecasts, but on the other hand the competitor's actions are less predictable here than for the mature product.

Composite Forecast Results

Although management's subjective forecasts appear to be quite superior when compared to those of the B-J model, it does not necessarily follow that the subjective forecast should be used by itself. As Nelson (1973) and Granger and Newbold (1977) argue, each alternative (B-J and subjective) is very likely to contain a unique component of information that can be taken advantage of by combining the two forecasts into one composite forecast. Specifically, the two sets of forecasts can be combined by a linear model:

$$CF_t = \beta_1(\text{Subj})_t + \beta_2(\text{B-J})_t + \xi_t \quad (1)$$

where CF_t = the composite forecast for period t, and the other terms are standard regression symbols. If both the subjective and the B-J forecasts are unbiased, then $\beta_1 + \beta_2$ will equal 1, and Equation (1) can be written as:

$$CF_t = \beta(\text{Subj})_t + (1-\beta)(\text{B-J})_t + \xi_t \quad (2)$$

and the least squares estimate of β can be shown to be:

$$\beta = \frac{\hat{\sigma}^2(\text{B-J}) - \hat{\sigma}(\text{B-J}, \text{Subj})}{\hat{\sigma}^2(\text{Subj}) + \hat{\sigma}^2(\text{B-J}) - 2\hat{\sigma}(\text{B-J}, \text{Subj})} \quad (3)$$

where the variances and covariances shown refer to fitting errors (actual value - forecast value) under the two alternate methods. Having a set covariance in Equation (3) would show that the larger the B-J error variance, the closer β would become to 1, thus giving more weight to the subjective forecast.

Since management forecasts were available for only the 42 most recent observations, the regression model for the composite forecasts was estimated using 24 observations, saving the other 18 for holdout points. The regression parameters were re-estimated as each successive holdout point was observed; thus a total of 18 regression equations were generated based on sample sizes ranging from 24 through 41. The sum of the regression coefficients (β_1 and β_2) in Equation (1) ranged from .972 to 1.021 in the 18 regressions, indicating that the two sets of forecasts had little bias. While regression programs do exist which will constrain the coefficients to sum to 1, it was felt that the unconstrained regressions would be satisfactory since the departures from summing to 1 were so slight. Table 3 shows the composite forecasting results for one-period-ahead predictions. As expected, the larger weight (β coefficient) is associated with the subjective forecast component, but

TABLE 3. Composite Forecast Results, Periods 24-41

Product	Range of b_1 in Eq. (1)	Range of b_2 in Eq. (1)	Subj.* Error	Comp.* Error
Growth	.64 to .71	.29 to .38	13.39	12.59
Mature	.71 to .81	.20 to .31	6.04	5.75

* Mean absolute percent deviation

the weight for the B-J forecast is also significant since the standard error for β_2 is typically about .10. The composite forecast in a given period is obtained by treating the B-J and the management forecasts as independent variables in Equation (1). As Table 3 shows, the composite forecasts are lower in error than the subjective forecasts, although in neither case was the difference statistically significant at the .05 level. This portion of the analysis was done with a relatively small sample size for both model building and forecast evaluation; perhaps with more data points available the results would more strongly favor the composite approach.

Summary

This study offers evidence that subjective forecasts of future sales generated by managers in a marketing research function for two consumer durables were significantly lower in forecast error than were forecast produced by the best available time series method, a find-

ing contrary to that in most previous studies of a similar nature.

Theory suggests that one should not always use one prediction method to the exclusion of another, since a combined forecast should generally outperform the better individual forecast. A linear composite forecasting model was estimated, yielding significant coefficients for both the management and the time series predictions. The composite prediction errors over the holdout period were lower than the subjective model errors although not significantly so, possibly due to the small sample size available.

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INPUT-OUTPUT TABLES AND MARKETING PURPOSES:
THE BELGIAN CASE

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Abstract

Standardized input-output tables of a country are useful in providing information to marketers. For marketing purposes, the input-output tables in the present form must be refined, include more sectors, and have to be ventilated both for industries and commodities. To assist the marketing activities, Chase Econometrics of Belgium started recently an extensive input-output program. Time only will tell whether the new approach can be of any help to marketers.

Introduction

Input-output analysis concerns the empirical application for a certain territory of the theory of general interdependence as revealed through the interrelations between production factors, products and components of final demand. [Leontief, 1941, p.3]. The starting point is a transaction matrix [shown in **Table 1**, Appendix]. The example given is only a didactic exercise composed of the producing sectors--agriculture, industry and services. As an illustration of disaggregation the services are broken down into all kinds of transportation systems and into other services. In order to be operational for a small country such as Belgium, however, at least fifty sectors have to be considered.

Vertically, each column shows the production function of a sector, on the one side through the inputs in that sector from the other sectors (both from national or foreign origin), on the other through its value added in market prices (gross wages, profits, interests, depreciation and indirect taxes). Total resources available are composed of national production and of similar imports. The marketing researcher knows in that way the suppliers of a sector. The Japanese table counts 554 supplying sectors [Wakiyama, p.5].

Horizontally, the outputs are broken down on the one hand in intermediate demand i.e. the demand of the sectors, on the other in final demand i.e. private and public consumption, gross investment, exports and inventory changes. The marketing researcher knows in that way the customers of each sector.

Through the computation of the inputs for one unit of production per sector a column of coefficients is obtained, usually indicated as technical coefficients. It is less usual to calculate such coefficients by row, which in that case could be called delivery coefficients.

Technical and delivery coefficients give a better insight than the transaction matrix into the demand - delivery position of a sector. Consider e.g. the energy-inputs into the transport sectors in Belgium.*

*The BREIN-project is an interuniversity project between the universities of Antwerp (RUCA) and Leuven concerning the setting up of Belgian interregional input-output tables. All figures in this report are taken from this research.

It is clear that **table 2** (Appendix) concerns the consumption of energy through 1 BF of production of a certain transport sector and not any measurement of efficiency or effectiveness. In this way, the power of dispersion of a means of transportation on energy is measured. If transport increases, energy consumption will increase: transport exercises a power of dispersion on energy consumption. There is also a sensitivity of dispersion. Certain sectors are extremely sensitive to the outputs of other sectors. The sensitivity of dispersion is observed in the delivery coefficients. Energy as well as transportation are highly sensitive to the outputs of nearly all other sectors.

The Updating of Input-Output Tables

It would be interesting to look at any regularity over time in the behavior of the technical coefficients. Unhappily, statistical information on the technical coefficients is too limited to set up time series for a sufficiently long time.

According to Leontief, "Anybody familiar with the economies of industry and agriculture knows that most of the major technological developments are well discernible far in advance of their actual culmination, while minor innovations are frequently planned by leading enterprises well ahead of their general adoption" [Leontief, 1951, p. 152]. His experiences on the 1919-29 period and his postdiction from 1929 to 1939 are well known. Cameron cited a stability for the technical coefficients for five to ten years [Cameron, pp. 62-69]. Such a long period of stability is unacceptable for Western Europe after the Second world War. Indeed, Western Europe had to catch up with the industrial development of the United States. It was found out that the first Belgian input-output table was out of date in 1958 [Brauers, 1965, pp. 11-40]. Therefore, in 1958 a national table was set up [Brauers, 1964, pp. 115-136]. The fact that the European Economic Commission asks the member-countries to elaborate an input-output table for approximately each five years (1959, 1965, 1970 and 1975) shows the necessity for this updating for all the member countries. Moreover, the period 1973-75 may be considered as a trend break period. On the one side, since the energy crisis of 1973-74, the energy inputs in the input-output sectors were disturbed and essentially changed. On the other side, for the first time since the Second World War significant negative growth rates were observed in the United States, Japan and Great-Britain in 1974 and in the United States, Italy and Belgium in 1975, while West Germany had a zero growth rate in 1975. Since then, nearly all the countries of the industrialized world show tremendous high inflation and interest rates. It is quite clear that technical coefficients (including also sectoral value and importcoefficients) are seriously altered since 1973-1975. For that reason the actual validity of input-output figures from years prior to 1975 is doubtful.

Once the stability of technical coefficients accepted, it is not difficult to explain the inverse models. Indeed, if the technical coefficients are given in this way, from given sectoral productions, final demand per sector - considered as unknown - is derived; inversely, from a given final demand per sector, sectoral

productions--considered as unknown - are derived. This inverse model is very often used for prediction and planning of production starting from a desired or possible final demand. These considerations are also extremely useful for marketing management.

The Disaggregation by Regions

For marketing purposes a regional breakdown of the national tables is a must but also the consideration of interregional flows between the regions. However, neither customs officers nor an electronic eye count the interregional flows. In most countries, moreover, the destination of products is not asked for in production statistics. Even worse, recently a famous firm of cocktail drinks in Belgium had to ask an independent consulting firm about the geographical distribution of sales of its beverages. Therefore, interregional flows are in general to be estimated in an indirect way, either in a theoretical way or by finding practical solutions through the consideration of transport flows or the use of Bayesian methods [Brauers, 1981, pp.16-22]. Interregional flows have to be comparable to the sectoral international flows. The importance of interregional sectoral flows is inversely linked to the importance of the region in the nation, and of the nation in world (Table 3, Appendix).

Wakiyama maintains that the regional table has to have more sectors than the national one:

"for example, let us imagine that in region A bauxite is made into alumina, which is then traded to region B for processing into aluminium. In the National Table they are both treated as a single sector aluminium. In a regional table, however, they are treated as separate sectors, alumina and aluminium" [Wakiyama, p.2].

Indeed, the Japanese national table for 1975 has 554 rows but each regional table (9 regions) has 567 rows. It means that the regional breakdown of the national economy gives $576 \times 9 = 5184$ rows, while the production values of about 5,000 goods and services are estimated region by region.

Essentially more sectors for a regional table than for a national one signifies that the national table considers, for certain sectors, more internal deliveries inside the sectors than the regional ones. In fact, a certain subsector such as "alumina" may be very important on the regional level, but relatively unimportant on the national level, so that it is not conceivable that "alumina" is a separate sector on the national level. It is desirable, however, that the sectors in the regional and in the national tables are comparable. A necessary condition would be that the sectors of the regional tables are sectors or sub-sectors of the national tables.

The interregional flows in Japan are only given for (43 x 43) sectors. Aggregation, however, to these 43 sectors is certainly possible for the regional and for the national tables.

The Disaggregation into Sectors

An important point for the marketing researcher is to know the contents of each sector, which could be either an industry or a group of products or services. System of National Accounts (SNA) suggests to give both [U.N.]. This method is followed in Canada, where on the one side commodities are delivered as inputs to industries (use matrix) and on the other side industries produce commodities (make matrix) in such a way that two separate rectangular input-output tables are obtained [Lal]. The Canadian system is composed of 191 industries, 595 commodities and 136 categories of final demand. There

are seven categories of primary inputs--wages and salaries, supplementary labor income, net income of unincorporated business, other operating surplus, uncommodity indirect taxes, other indirect taxes and subsidies. At this level of aggregation, however, some of the entries are already confidential under the Statistics Act. Therefore, the tables are only published on a --43 industries, 100 commodities and primary inputs, and 14 final demand categories basis. The last available table in Canada is for the year 1977. Such an aggregation level may not be satisfactory for the market researcher. Indeed, the chemical industry in Belgium counts more than 10,000 different products. Statistical laws in most countries forbid an extensive disaggregation in the Walrasian sense. Even in the Soviet Union the disaggregation is limited on the one side as the regional planning does not form a coherent system with the national one and on the other side as the number of the various material balances is limited to some fifteen thousand [Krylov].

The Belgian Case

Some very general conclusions are drawn here from the Belgian tables, without considering cell by cell of each input-output table. First of all we analyse the share of each Belgian region in the value added of each sector (Table 4, Appendix).

Traditionally the economic activity is divided into three main sectors--the primary sector composed of agriculture, forestry and fishing; the secondary sector consisting of the industrial activity, energy, water resources and construction; and finally the tertiary sector with the distributive activity in the largest sense and the services.

TABLE 1
IMPORTANCE OF THE MAIN ACTIVITIES AS A
PERCENTAGE OF THE GROSS GEOGRAPHICAL PRODUCT, 1976

	Flan- ders	Wal- lonia	Brus- sels	Bel- gium
Primary sector	3.3	3.8	0.0	2.9
Secondary sector	42.3	40.4	26.1	39.2
Tertiary sector	54.4	55.8	73.9	57.9
Gross geographical product	100.0	100.0	100.0	100.0

The activities per region are then divided as follows:

TABLE 2
IMPORTANCE OF THE MAIN ACTIVITIES OF THE
REGIONS AS A PERCENTAGE OF NATIONAL ACTIVITY, 1976

	Flan- ders	Wal- lonia	Brus- sels	Bel- gium
Primary sector	64.8	35.2	0.0	100
Secondary Sector	61.1	28.3	10.6	100
Tertiary sector	53.3	26.4	20.3	100
Gross geographical product	57.1	27.3	15.6	100

The secondary sector is especially important in Flanders and Wallonia. If we define the coefficient of activity for a sector in a region as the percentage of the part of the region in the national activity

of the sector divided by the percentage of the gross geographical product of that region, then we find a coefficient of activity for the secondary sector of 1.07 in Flanders and 1.04 in Wallonia. The secondary sector is much less important in Brussels with a coefficient of activity of 0.68. Brussels supplies less localization possibilities for secondary activities due to the fact that it is only a city-region, excluding large scale establishments. Going more into detail, it seems that Wallonia is more directed towards sectors at the basis of the production process, capital-intensive but using low value raw materials and sometimes out-dated (iron and steel: 72.4% of the national activity; glass: 67.2%; non-metallic minerals: 63.8%). Flanders is more active in sectors which immediately produce for final use, transforming high value raw materials and characterized as labor-intensive (food products 70%; automobiles 83.6%; textile products 81.2%; clothing 68.1%). In Brussels industrial activity consists of light industries such as tobacco (53.9% of national activity), paper, printing and publishing (25.5%), gas production and distribution (34.9%) etc.

In all the regions and ipso facto in Belgium the tertiary sector represents more than 50% of the total economic activity. In Brussels, the percentage continuously increased till 73.9% in 1976. Inside the tertiary sector, Brussels is an important center for distribution and consumption. The central government does not only exercise its activities mainly in Brussels, but it is by definition a consuming body localized in Brussels. The economic activities of the direct government services in Brussels amounted to 71,608 mln F in 1976 but the total expenditures in Brussels by the same government amounted to 93,192 mln. F in that year. There is also the expenditure pattern of international organizations such as NATO and EEC and of their personnel residing in Brussels. Brussels is also a pole of attraction for Flemish and Walloon visitors in the field of retail trade, services and recreational facilities. For these tertiary activities, Flemish visitors spent around 50 billion F and Wallon visitors more than 49 billion F.

TABLE 3
TERTIARY ACTIVITIES IN BRUSSELS AS A
PERCENTAGE OF NATIONAL ACTIVITY,
1976

	(Percent)
Trade	21.4
Rail transport	23.4
Communications (P.T.T.)	20.8
Banking and insurance	53.9
Public services	29.8
Cfr. Gross geographical product	15.6

Specific consequences are deducible from this structure and from the geographical central position of Brussels in Belgium. In the first place, on a purely rational basis, it is important, beside the French language, to give more importance to the Dutch language, the language of the Flemish, and to English the most current language of the foreigners. In the second place, it would be wrong to complain about the fact that Brussels is no more the main industrial center of the country. Indeed in 1958 this was still the case, compared for instance with Antwerp, the world port of Belgium [Van Waterschoot, *et.al.*]. It was a good illustration of the over-concentration in a country (cfr. "Paris et le désert français"). It was not understandable that a world port such as Antwerp had a smaller industrial vocation than Brussels. Since 1970, however,

Antwerp became the first industrial center of the country due to several reasons namely: the worldwide recognition of the industrial vocation of seaports; the lesser confidence in a purely commercial seaport; the support of regional expansion laws since 1959 and finally the birth in Antwerp of a petro-chemical industry on world level due to the opening of large petrol refineries since 1958. Industrial activity is limited in Brussels by local shortcomings such as the danger of pollution in a city with more than one million inhabitants and the shortage in certain components of the labor force. Industrial possibilities remain in Brussels such as the production of precision instruments in the industrial zoning around the airport and in these sectors where Brussels possesses a tradition such as food products, tobacco and printing. In the third place, Brussels has to develop even more its comparative advantages in the tertiary sector. Brussels has to try that a large part of the income of the daily commuters is left in Brussels by making its shops even more attractive. Indeed in 1977, there were 265,515 commuters in Brussels, mostly Flemish (188,779). Brussels may also become a main center for quaternary activities such as research and development, universities, hospitals, etc.

Brussels is also the first financial center of the country. The large companies have their headquarters mainly in Brussels. Their liquidities and non-distributed profits are canalized to the Brussels financial institutions (see Table 3). In this way Brussels is not only the first commercial center in Belgium, but also the first economic center for its total activity (both industrial and commercial) with 16 percent of the economic activity of the country.

In fact much more information is given in the Belgian input-output tables. Indeed, the rows are composed as follows: 50 sectors for each of the three regions, 50 sectors for the foreign imports and three rows for value added and indirect taxation or in total 203 rows. Concerning about the columns, there are fifty columns per region and 7 columns for final demand per region or a total of 171 columns. Altogether 203 x 171 = 34,713 cells are filled in.

Information furnished in this paper may look rather of limited use for the market researcher. In fact, it forms the more elementary source for market research. This is certainly the case for foreign firms as a primary information on the Belgian market. If standardized, input-output tables of a country may form the first information a foreign market researcher has to consult. It is clear, however, that for market research the input-output tables have to be refined, that they have to include more sectors, that they have to be ventilated both for industries and commodities. For information at the firm level, market research in particular, Chase Econometrics, Belgium, started recently with an extensive input-output program. After five or six months an evaluation would be possible of this new contribution.

Appendix

TABLE 1
 DIDACTIC EXAMPLE OF A TRANSACTION MATRIX FOR BELGIUM, 1976
 BELGIUM
 INTERMEDIATE DEMAND (1976, IN MLN. F.)

	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]
<u>DOMESTIC SUPPLY</u>										
1 AGRICULTURE	16422	108849	1907	0	0	0	0	0	0	127177
2 INDUSTRY	66523	489474	202837	3662	4840	720	2267	1851	1444	773619
3 SERVICES	8673	135084	233090	836	6576	452	2733	1711	1675	390829
4 RAILWAY TRANSPORT	55	3489	3186	2	3	11	27	30	2	6805
5 ROAD TRANSPORT	1257	30872	5652	154	144	23	145	102	0	38349
6 INLAND NAVIGATION	76	1413	267	6	19	0	13	8	0	1802
7 SEA TRANSPORT	0	0	233	0	0	0	0	0	0	233
8 AIR TRANSPORT	0	2559	3364	0	0	0	42	0	0	5965
9 TRANSP. ALLIED ACTIVITIES	1538	29231	1366	12	899	35	1639	763	0	35484
<u>FOREIGN INPUTS</u>										
1 AGRICULTURE	5006	81855	5740	0	0	0	0	0	0	92601
2 INDUSTRY	6564	826916	105760	3686	4679	160	2274	2059	762	952861
3 SERVICES	73	38261	27817	47	685	61	552	286	198	67980
4 RAILWAY TRANSPORT	0	0	450	193	0	0	0	0	0	643
5 ROAD TRANSPORT	55	1361	259	7	8	0	7	4	0	1702
6 INLAND NAVIGATION	45	849	163	3	11	3	8	5	0	1087
7 SEA TRANSPORT	0	0	31	0	0	0	0	0	0	31
8 AIR TRANSPORT	0	491	840	0	0	0	8	0	0	1339
9 TRANSP. ALLIED ACTIVITIES	0	0	0	0	0	0	3219	1645	0	4863
TOTALS OF SECONDARY INPUTS	106287	1750705	592963	8608	17864	1465	12934	8464	4082	2503371
<u>PRIMARY INPUTS</u>										
- VALUE ADDED IN M.P.	72344	971868	1162400	18158	50703	6766	6963	5749	83783	2378735
- TRANSFERS	6118	8846	2728	0	0	0	0	0	0	0
NATIONAL PRODUCTION	172513	2731419	1752636	26767	68567	8231	19896	14214	87864	4882107
SIMILAR IMPORTS	122271	1387596	68673	643	3978	2878	67	1443	7334	1594882
TOTAL RESOURCES AVAILABLE	294784	4119015	1821309	27409	72545	11109	19963	15657	95198	6476989

BELGIUM
 MATRIX OF MEANS AND EXPENDITURES (1976, IN MLN. F.)

	INTERM. DEMAND	PRIVATE CONS.	PUBLIC CONS.	GROSS INV.	INVENT. CHANGES	FOREIGN EXPORTS	FINAL DEMAND	TOTAL OUTPUTS
<u>DOMESTIC SUPPLY</u>								
1 AGRICULTURE	127177	20624	0	0	263	24449	45336	172513
2 INDUSTRY	773619	421535	0	437755	7309	1091199	1957799	2731418
3 SERVICES	390829	814703	422232	3449	275	121148	1361806	1752635
4 RAILWAY TRANSPORT	6805	13333	0	119	0	6510	19962	26767
5 ROAD TRANSPORT	38349	19169	0	795	0	10253	30218	68567
6 INLAND NAVIGATION	1802	883	0	1	0	5544	6429	8231
7 SEA TRANSPORT	233	453	0	0	0	19210	19663	19897
8 AIR TRANSPORT	5965	557	0	0	0	7691	8248	14213
9 TRANSP. ALLIED ACTIVITIES	35484	4178	0	246	0	47955	52380	87864
<u>FOREIGN INPUTS</u>								
1 AGRICULTURE	92601	18390	0	0	665	10615	29669	122271
2 INDUSTRY	952861	247875	0	118948	265	67646	434735	1387596
3 SERVICES	67980	275	0	115	302	2	693	68673
4 RAILWAY TRANSPORT	643	0	0	0	0	0	0	643
5 ROAD TRANSPORT	1702	521	0	33	0	1722	2276	3978
6 INLAND NAVIGATION	1087	541	0	0	0	1250	1791	2878
7 SEA TRANSPORT	31	1	0	0	0	36	36	67
8 AIR TRANSPORT	1339	105	0	0	0	0	105	1443
9 TRANSP. ALLIED ACTIVITIES	4863	0	0	0	0	2470	2470	7334
TOTALS	2503371	1563144	422232	561462	9079	1417700	3973617	6476988

TABLE 2
BELGIAN TECHNICAL COEFFICIENTS FOR ENERGY FOR 1976

1	2 38	3 39	4 40	5 41	6 42	7 43	8 44
1 P	0.0017	0.0001	0.0000	0.0000	0.0000	0.0000	0.0002
2 M	0.0001	0.0000	0.0000	0.0000	0.0000	0.0000	0.0005
3 P	0.0001	0.0000	0.0000	0.0000	0.0000	0.0000	0.0007
4 M	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5 P	0.0327	0.0571	0.0263	0.0605	0.0419	0.0009	0.0021
6 M	0.0108	0.0328	0.0191	0.0956	0.0613	0.0003	0.0006
7 P	0.0491	0.0033	0.0000	0.0002	0.0003	0.0071	0.0063
8 M	0.0094	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
9 P	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
10 M	0.0000	0.0001	0.0000	0.0000	0.0000	0.0000	0.0001
11 TP	0.0836	0.0605	0.0263	0.0607	0.0422	0.0080	0.0093
12 TM	0.0203	0.0329	0.0191	0.0956	0.0613	0.0003	0.0012
13 GT	0.1039	0.0934	0.0454	0.1563	0.1035	0.0083	0.0105

Columns

1. Denomination
2. Sector 38 : Railway transport
3. Sector 39 : Road transport
4. Sector 40 : Inland shipping
5. Sector 41 : Sea and coast transport
6. Sector 42 : Air transport
7. Sector 43 : Transport allied activities
8. Sector 44 : Communications

Rows

1. Coal internal production P
2. Coal imports M
3. Coke : Production
4. Coke : Imports
5. Petroleum production
6. Petroleum imports
7. Electricity production
8. Electricity imports
9. Gas production
10. Gas imports
11. Total production
12. Total imports
13. General total (= 11 + 12).

N.B.

Total of Row 11 = 0.2906 : 7 = 0.0415
Total of Row 12 = 0.2307 : 7 = 0.0330

Average for transportation sectors 0.5213 : 7 = 0.0745

TABLE 3
INTERREGIONAL AND INTERNATIONAL DEPENDENCY OF THE BELGIAN REGIONS (1976)

	Population	Interregional Imports as a % of Total Imports	Interreg. Exportation as a % of Total Exportation	Interregional and Internat. Importation as a % of Final Demand (a)	Interregional and Internat. Exportation as a % of Final Demand (a)
Belgium	100 %	-	-	40 %	36 %
Flanders	56 %	20 %	25 %	49 %	49 %
Wallonia	33 %	41 %	33 %	52 %	40 %
Brussels (b)	11 %	49 %	68 %	44 %	42 %
cfr. County of Antwerp (b) (1958)	9 %	44 %	54 %	46 %	51 %

(a) With final demand is meant the total of private and public consumption, of investments, of inventory changes and of exports. Imports are here inclusive of indirect taxes in order to be comparable with final demand. In the regional balances of payments however, foreign imports are given at CIF-prices.

(b) Due to the world importance of the port of Antwerp, the Antwerp county is more internationally orientated than the Brussels region.

Source : BREIN, Antwerp and Leuven.

TABLE 4
THE SHARE OF EACH REGION IN THE GROSS GEOGRAPHICAL PRODUCT OF BELGIUM IN 1976 (IN %)

Sectors	Flanders	Wallonia	Brussels	Belgium
1. Agriculture, forestry and fishing	64.8	35.2	0	100
2. Coal	84.6	15.4	0	100
3. Coke	22.8	68.6	8.6	100
4. Petroleum products	90.1	9.9	0	100
5. Electricity and steam	64.1	33.3	2.6	100
6. Gas	38.2	26.9	34.9	100
7. Water distribution	57.5	28.5	14.0	100
8. Iron and steel	27.6	72.4	0	100
9. Non-ferrous metals	72.7	24.2	3.1	100
10. Glass	28.2	67.2	4.6	100
11. Cement, construction materials	53.2	44.1	2.7	100
12. Other non-metallic minerals	35.7	63.8	0.5	100
13. Chemical products	77.6	16.6	5.8	100
14. Metal products (excl. machines)	51.0	40.9	8.1	100
15. Agricult. and industr. machines	58.5	30.6	10.9	100
16. Office, medical equipment	38.9	43.7	17.4	100
17. Electric and electronic equipment	65.2	23.0	11.8	100
18. Automobiles	83.6	8.3	8.1	100
19. Ships, locomotives and cycles	73.0	22.1	4.9	100
20. Meat processing	57.0	32.0	11.0	100
21. Milk and dairy products	65.6	30.3	4.1	100
22. Other food products	70.0	21.4	8.6	100
23. Beverages	72.5	19.8	7.7	100
24. Tobacco	37.3	8.8	53.9	100
25. Clothing	68.2	15.9	15.9	100
26. Other textile products	81.2	17.4	1.4	100
27. Leather, footwear	74.8	14.1	11.1	100
28. Wood and furniture	78.6	15.0	6.4	100
29. Paper, printing and publishing	47.3	27.2	25.5	100
30. Rubber products	54.5	44.6	0.9	100
31. Plastics	83.1	14.4	2.5	100
32. Other industrial products	85.2	4.6	10.2	100
33. Construction	51.8	31.7	16.5	100
34. Garages	55.0	31.9	13.1	100
35. Scrap and misc. repair	50.4	39.6	10.0	100
36. Trade	51.9	26.7	21.4	100
37. Hotels and restaurants	52.8	27.3	19.9	100
38. Rail transportation	39.2	37.4	23.4	100
39. Land transportation	52.3	29.3	18.4	100
40. Canal navigation	76.0	22.6	1.4	100
41. Sea transportation	100.0	0	0	100
42. Air transportation	100.0	0	0	100
43. Other transport activities	93.7	4.4	1.9	100
44. Communications	47.7	31.5	20.8	100
45. Banking and insurances	32.6	13.5	53.9	100
46. Other private services	51.3	30.6	18.1	100
47. Real estate	59.7	23.3	17.0	100
48. Health care	55.0	33.5	11.5	100
49. Government service	43.1	27.1	29.8	100
50. Education and research	53.2	34.4	12.4	100
Gross geographical product	57.1	27.3	15.6	100

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ATTITUDES TOWARDS AUTO MAINTENANCE AND
THE EXTENT OF DO-IT-YOURSELF ACTIVITY

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Abstract

This paper provides an empirical examination of consumer attitudes towards auto maintenance, interrelationships among various maintenance tasks, and distinguishing characteristics of do-it-yourselfers. Data drawn from a national probability survey of motor vehicle owners are used to study the choice between do-it-yourself maintenance and a paid-mechanic alternative. A principal components analysis suggests that prevailing attitudes can be represented by three underlying dimensions. Several variables are also identified for profiling do-it-yourselfers.

Background

The automotive aftermarket (i.e. the market for replacement parts, accessories, maintenance equipment, etc) has experienced a rapid rate of growth especially in the last six years. In fact, the growth rate of the aftermarket has surpassed the growth rate of the automobile market. Contributing to this growth has been the growing segment of do-it-yourselfers. More and more consumers are performing certain repair/maintenance tasks on their motor vehicles for a variety of reasons. These include potential savings, self-expression, disenchantment with garages and dealers, and a general desire to hold on to the vehicles longer.

A number of independent studies point out the importance of the do-it-yourself market. A recent survey by Management Horizons found that over one-third of the respondents were doing more do-it-yourself auto repairs in 1980 as compared to 1979 (Rodgers 1980). This finding applied to all respondents, regardless of income category. A research study conducted by Hardware Age (1978) concluded that about 62 percent of the respondents had purchased auto supplies during the three-month survey period. More importantly, 81 percent of the respondents--albeit not a representative group of motor vehicle owners--considered themselves as do-it-yourselfers. Research by Ford Motor Company suggests that as many as 40 million Americans are engaged in do-it-yourself activity and that number is expected to grow by 10 percent annually (Automotive News 1980). Even women are getting their hands dirty. Firestone, Goodyear and other producers and resellers in the automotive aftermarket are now holding free nationwide car-care clinics at their auto service centers, designed primarily for women motorists. The car-care clinics stress the importance of routine and preventive automobile maintenance. Mechanics explain the basic working parts of a car and show women how to perform such maintenance chores as checking oil, belts, hoses, fluids, tires and tune-ups. Feeling comfortable under the hoods of their cars minimizes the women's chances of a costly breakdown and hours lost at a repair shop.

OBJECTIVES

Based on a national survey of motor vehicle owners, this paper attempts to identify attitudinal, behavioral and demographic characteristics of do-it-yourselfers--those consumers who are engaged in self-maintenance activity. More specifically, the paper fulfills the following objectives: (1) delineating consumer attitudes toward self-maintenance and understanding what motivates motor vehicle owners to do repair/maintenance work; (2) examining interrelationships among a large number of maintenance tasks which may be

performed by do-it-yourselfers; and (3) discriminating between do-it-yourselfers and other consumers on the basis of demographic and motivational characteristics. It is hoped that the findings provided by this analysis will result in a better understanding of do-it-yourself activity and the consumers who may be engaged in such activity. Armed with this information, automotive aftermarketers will be able to define this market segment more precisely and develop meaningful strategies to exploit it.

METHOD

Sample

The data that was used in the statistical analyses came from a mail survey of a large sample of motor vehicle owners in the United States. Motor vehicle registration lists were obtained from 50 states. A random sample of 2,000 names were systematically selected from the total registrations. Each state is represented in the sample in proportion with the magnitude of its motor vehicle population.

A four-page questionnaire and a cover letter were sent to each of the 2,000 motor vehicle owners on the list. A business reply envelope and a coin incentive were also enclosed. This produced a response rate of 37.3 percent. Three weeks after the first mailing, a duplicate questionnaire with a new cover letter and a business reply envelope was sent to those in the sample who had not replied to the first letter. This follow-up mailing brought the net usable returns to 43.3 percent. A total of 331 mailings were undeliverable.

Measures

Vehicle owners in the study responded to 14 statements which dealt with attitudes towards self-maintenance versus garage alternative. These statements appear in [Table 1](#). Consumers were asked to indicate the extent of their agreement to each statement on a five-point ordinal scale which ranged between "Strongly Agree" and "Strongly Disagree." Intentions to engage in a variety of repair/maintenance tasks (see [Table 2](#) for the complete list) were obtained in response to the question: "If the opportunity arises, your likelihood of performing (the task) on your vehicle in the future by yourself or with the help of a friend would be (the response)." The three original response categories were "Very Likely," "Likely" and "Not Likely."

Respondents in the study also indicated the relevance of various evaluative criteria in making a decision between getting their vehicles serviced at a garage or doing it themselves. These criteria were identified as a result of exploratory interviews with 200 vehicle owners and included: costs involved; quality of work done; convenience and time saved; reliability of the results; personal satisfaction derived; safety while working; and social recognition. Owners indicated the importance of each criterion in deciding between the two alternatives on a five-point ordinal scale which ranged between "Very Important" and "Very Unimportant."

Finally, four demographic characteristics were included in the present study as potential discriminators of do-it-yourselfers. The first three--age, education and income--were measured on an ordinal scale, but for analysis purposes, we assumed they were interval.

Primary occupation of the respondent was measured dichotomously, using the "mechanically inclined/others" distinction. Thus, factory workers, service workers, foremen, craftsmen, and farmers were placed in the first category. The "other" category included: sales/clerical; professional; manager/administrator; and other occupations.

Data Analysis

For the purpose of reducing the fourteen attitude statements to a smaller set of underlying dimensions, principal components analysis was used. A varimax rotated principal components analysis yielded three factors. Loadings of the 14 statements on the three factors are shown in Table 1.

To understand if the list of twenty repair/maintenance tasks could be expressed in a few dimensions, based on interrelationships, a principal components analysis was also performed on the tasks. The results are presented in Table 2. Both of the resulting factors have eigen values in excess of one.

TABLE 1
ATTITUDINAL STATEMENTS: VARIMAX
ROTATED FACTOR MATRIX

STATEMENTS	FACTOR ONE	FACTOR TWO	FACTOR THREE
I feel a sense of accomplishment by performing certain repair tasks myself.	.76	.03	.15
I believe I can save a lot of money by doing some work on my vehicle myself.	.68	.22	.09
When I service my vehicle, I am confident that the job is done right.	.65	.35	.18
Leaving my vehicle at the garage for servicing is a much more efficient use of my time than working on it myself.	.49	.43	.29
I gain respect from my friends because I know how to work on vehicles.	.47	.34	-.11
My time is too valuable to spend it working on my vehicle.	.44	.21	.31
Most people I know take their vehicles to a garage.	.05	.18	.07
I feel safer driving my vehicle because I did the work myself.	.56	.61	-.01
I would not feel safe doing some of the repair jobs myself.	.08	.55	.16
Maintenance at a garage takes too long; it is often more convenient for me to do the job.	.53	.51	.02
I can rely on the work done on my vehicle when I take it to a garage to be serviced.	.28	.43	.15
I would rather not be seen working on my vehicle.	.25	.08	.67
It bothers me to get dirty and greasy while working on my vehicle.	.15	.08	.49
The opinions of my friends are important to me in deciding whether or not to work on my vehicle.	-.11	.13	.36
Sum of Squares	4.37	0.85	0.53
Percent of Variance	76.00	14.70	9.30

TABLE 2
FUTURE INTENTIONS TO ENGAGE IN SELF-MAINTENANCE:
VARIMAX ROTATED FACTOR MATRIX

MAINTENANCE TASKS	FACTOR ONE	FACTOR TWO
Replacing wiper blades	.84	.28
Installing air filter	.81	.35
Adding brake/transmission fluid	.79	.38
Changing anti-freeze/coolant	.78	.33
Changing fuses	.73	.39
Replacing hoses, belts, clamps	.72	.52
Replacing/jumping batteries	.72	.37
Replacing headlights	.68	.45
Waxing	.67	.19
Changing engine oil/filter	.67	.45
Flushing cooling/heating system	.62	.50
Changing tires	.62	.29
Replacing alternator, starter, regulator	.36	.79
Replacing exhaust system	.20	.78
Replacing brake pads/shoes	.29	.78
Replacing ignition wire sets	.41	.75
Tune-up	.39	.74
Chassis lubrication	.33	.71
Installing CB/Stereo Unit	.41	.57
Minor paint work	.36	.45
Sum of Squares	11.70	1.34
Percent of Variance	89.70	10.30

To deal with the objective of discriminating between those vehicle owners who can be classified as do-it-yourselfers and those who tend to patronize garages/service stations for this purpose, a discriminant analysis was employed using demographic characteristics and evaluative criteria as predictors. For the dependent variable, a maintenance task was chosen which is popular among do-it-yourselfers and typical of other more complex tasks--tune-up activity. Those individuals who indicated that their likelihood of performing a tune-up on their vehicle was "Very Likely" or "Likely" were classified as do-it-yourselfers. Those owners who indicated "Not Likely" were classified as "Others." The results of the discriminant analysis are shown in Table 3 and Table 4.

TABLE 3
CHARACTERISTICS DIFFERENTIATING DO-IT-YOURSELFERS
FROM OTHER VEHICLE OWNERS: UNIVARIATE TESTS OF
SIGNIFICANCE

	GROUP MEANS		P
	DIY's	Others	
Centroids	-0.37	0.54	.000 ^a
<u>Respondent Characteristics:</u>			
Age	4.26	5.08	.000 ^b
Education	4.59	5.11	.002
Occupation	0.41	0.22	.000
Income	4.89	4.80	.555
<u>Importance Attached To:</u>			
Costs involved	1.50	1.76	.000
Quality of the work done	1.27	1.19	.079
Convenience and time saved	2.02	1.82	.011
Reliability of the results	1.32	1.25	.074
Personal satisfaction derived	1.90	2.09	.051
Safety while working	1.78	1.80	.779
Social recognition	3.69	3.78	.410

^aThe test for the equality of group centroids is a generalized chi-square.

^bThe tests for the discriminating variables are univariate F-ratios.

TABLE 4
STANDARDIZED DISCRIMINANT FUNCTION COEFFICIENTS

DISCRIMINATING CHARACTERISTICS	COEFFICIENTS
Age	.68
Education	.41
Importance attached to costs	.41
Importance attached to convenience and time saved	-.31
Importance attached to quality of the work done	-.28
Income	-.26
Occupation	-.22
Importance attached to satisfaction derived	.17

FINDINGS

Attitudinal Dimensions

Two of the three factors in **Table 1** reflect a do-it-yourself orientation, and the third represents a paid-mechanic orientation. The two do-it-yourself dimensions are both favorable to self-maintenance, but for different reasons. The first factor underlies a "personal satisfaction/savings motivated" attitude. An individual possessing such an attitude would be one who is favorably disposed towards DIY activity because of the sense of accomplishment derived from this activity and potential savings. Note that such an individual possesses a certain amount of necessary skills (high loading on the third statement). Social recognition obtained from friends is more of an inducement for this type of owner than the other types (fifth statement).

The second DIY orientation reflects a safety-conscious attitude. This type of owner places a high importance on safety; therefore, works on his vehicle whenever he

feels more competent than a paid mechanic. As in the first case, convenience is an additional motivation. Believing that maintenance at a garage takes too long, he performs the work himself. Note also that this owner is not bothered by "getting dirty and greasy" or "being seen by others while working on his vehicle." In contrast to the first orientation, personal satisfaction or money savings are not significant inducements.

The third factor reflects a negative orientation towards DIY activity, presumably because of the lack of skills and confidence and also because the owner is socially conscious. Being seen by others while working on vehicles may perhaps represent a social risk for some owners. Tendency to be influenced by others in the maintenance decision is also relatively high (last statement). It is also interesting to note the negative loading on the fifth statement; an incentive in the form of respect from friends is nonexistent. Vehicle owners who share such an attitude tend not to share the belief that money can be saved through self-maintenance.

Dimensions of Maintenance Tasks

Interrelationships among future intentions to perform various maintenance/repair tasks produced two factors as shown in **Table 2**. Factor One appears to identify relatively simpler and routine tasks, while Factor Two identifies relatively more complicated and less frequent tasks. Replacing wiper blades, installing air filter, and adding fluids are examples of the former. Replacing alternator, starter, exhaust system, or brake pads are examples of the latter factor. Tune-up is also a part of this dimension, suggesting that it is perceived as a relatively more complex task by the respondents.

A Profile of Do-It-Yourselfers

In addition to learning about the attitudinal dimensions of motor vehicle owners and understanding interrelationships among various maintenance tasks, it was desirable to profile those who could be considered do-it-yourselfers. Since tune-up activity was found to be popular and also considered to be a relatively complex task, it was used as the dependent variable. Thus, motor vehicle owners who intended to engage in tune-up activity in the future were considered to be do-it-yourselfers. Demographic characteristics and evaluative criteria were used to profile do-it-yourselfers.

Univariate tests of significance in **Table 3** suggest that age, education and occupation significantly differentiate do-it-yourselfers and other owners, while there are no significant differences between the two groups in terms of income. Do-it-yourselfers are found to be younger, possessing less formal education, and more likely to come from mechanically-inclined occupations referred to earlier.

In terms of the importance attached to various considerations in the maintenance decision, five out of seven criteria reveal significant differences beyond 0.10 level. Do-it-yourselfers appear to place more importance on costs involved and personal satisfaction in the maintenance decision than other owners. Lesser importance, on the other hand, is attached by them to quality, convenience and time saved, and reliability.

Table 4 presents the standardized discriminant function coefficients. Age, education and the importance attached to costs are the most significant discriminators of do-it-yourselfers. Using these

variables, the following profile can be prepared for do-it-yourselfers. They tend to: be within 35-44 years of age; have high school education; regard costs as an important criterion while deemphasizing the importance of convenience and time saved in the maintenance decision. The discriminant function in **Table 4** resulted in a classification accuracy of 69 percent with a hold-out sample of vehicle owners. This is slightly higher than the proportional chance criterion of 52 percent.

CONCLUSIONS

There is little doubt among manufacturers and resellers in the automotive aftermarket that, as the costs of auto maintenance continue to spiral, consumers will be increasingly opening up their hoods to repair their vehicles. Auto supplies are readily available, and the savings realized in labor alone may be well worth engaging in self-maintenance.

Understanding of attitudes towards self-maintenance and interrelationships among various maintenance tasks, as well as the distinguishing characteristics of do-it-yourselfers can be very valuable for the automotive aftermarket firms in planning their offerings and communications strategies. This study offered some insights into these issues. It is interesting to find, for example, that not all do-it-yourselfers could be motivated by potential savings associated with self-maintenance. Safety may be an overriding consideration for these individuals to engage in do-it-yourself activity. It is hoped that the findings provided by this investigation will shed additional light into the nature of automotive do-it-yourself activity.

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STRUCTURAL EQUATION ANALYSIS OF THREE METHODS
FOR EVALUATING CONJOINT MEASUREMENT RESULTS

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Abstract

This paper applies a structural equation methodology (LISREL) to the evaluation of the results obtained from conjoint measurement. Contrary to previous work, the results indicated that stress, sign, and prediction give consistent evaluations of the results of conjoint measurement. The solution given by the LISREL analysis was criticized; however, following a Spearman factor analysis, the same conclusion was drawn: stress, sign, and prediction appear to be measuring the same construct.

Introduction

Obviously the best evaluation of conjoint analysis results is the degree to which they are predictive of actual choice behavior. Such an evaluation, however, is not always practical; therefore users of conjoint analysis frequently rely on other methods--such as Kruskal's (1965) stress, counting the number of sign violations (Parker and Srinivasan 1976); Scott and Wright 1976), or rank prediction; i.e., the degree to which judgments are predicted in a holdout profile from part-worth functions obtained in an estimation sample (Acito and Jain 1980; Green 1974; Jain, Acito, Malhotra, and Mahajan 1979). Indeed, the above mentioned evaluation methods are not exhaustive; but, nevertheless they are the emphasis of this paper. The purpose of this paper is to assess the degree to which sign, stress, and rank prediction give consistent evaluation of the results of conjoint analysis.

Prior Research

Recent research by Acito and Jain (1980) was designed to compare the above mentioned evaluation methods: Kruskal's (1965) stress, sign violations, and a modified prediction method proposed by Green (1974). Hereafter, we will refer to these three evaluation methods as "stress", "sign", and "prediction". In their study 249 heads of household were given three conjoint tasks (identified as parts A, B, and C) related to health maintenance organization's HMO's. For each person on each task, the three evaluation measures were obtained. In Task A, respondents were presented 27 profiles that contained various combinations of convenience attributes related to health maintenance organizations. In Task B, respondents were presented 16 profiles that contained combinations of insurance coverage attributes; Task C presented 16 profiles that contained convenience, coverage, cost, types of facility, and attributes related to selecting physicians. During each task, each respondent was required to sort the profiles into three piles according to preference; then to rank order the profiles from least to most preferred. Additionally, the three tasks were presented sequentially--A, B, with C last. The "average" respondent took 10-15 minutes to complete one task, and the three tasks were part of a larger data collection.

Acito and Jain (1980, p. 106) argued that, "Comparison of the (three) methods is important because one needs to know whether one evaluation method will lead to the same

conclusion as another. If the correlations among the evaluation measures are high, the researcher can pick any convenient method. If the correlations are low, the researcher can use more than one method, or use different methods in different circumstances."

The results of their research revealed very low correlations among the three methods; hence, they concluded that stress, sign, and prediction ought to be used for different purposes. This conclusion implies that the three evaluation methods evaluate unrelated aspects of conjoint results; this conclusion, however, should be held with reservation; for, we do not know why the observed correlations were low. One reason for a low correlation between two measures is that they, indeed, do measure two unrelated attributes. However, one may also obtain a low correlation between two measures that measure highly related attributes if the measures are highly contaminated with measurement error. Had Acito and Jain (1980) obtained reliability coefficients for their measures, one could "correct for attenuation"; i.e., one could estimate the correlations between the evaluation methods in the absence of measurement error.¹ The purpose of this paper is to report a new analysis of this research; the results of this analysis suggest that stress, sign, and prediction may be highly correlated when measurement error is removed. This conclusion stems from a structural equation analysis of the correlation matrix reported in [Table 1](#).

A Structural Equation Analysis

The ideal measurement is one which captures true differences in the attribute one desires to measure. Frequently, however, the observed measure may be "contaminated" by both systematic and random error, (cf., Churchill 1979, p. 254; Nunnally 1967, p. 206). Systematic error may derive from a stable but biased measuring instrument or in other stable characteristics of the person. It is a constant source of error. Random measurement error, however, is neither stable nor constant. It may derive from transient influences from both the person being measured as well as the measuring instrument itself. The correlations reported in [Table 1](#) were obtained from observed measurements, hence, the reported correlations may be attenuated by both systematic and random error.² We show below that one source of systematic error is related with the conjoint tasks.

As noted above, each person responded to three different conjoint tasks; hence is it possible that the task

¹Measurement error tends to obscure or "attenuate" the true correlation between two attributes. If the reliability of measures are known, however, then observed correlations may be "corrected" to estimate the true correlation (Nunnally 1976, p. 203-5).

²Although sign and prediction were logarithmically transformed, they are still observed measures; i.e., they may still contain both systematic and random error (see [Table 1](#)).

TABLE 1

Correlation Matrix For Sign, Stress, and Prediction For Three Conjoint Tasks^a

		A			B			C		
		Stress	Sign	Prediction	Stress	Sign	Prediction	Stress	Sign	Prediction
A	Stress	1.00								
	Sign ^b	.15	1.00							
	Prediction ^c	.22	.20	1.00						
B	Stress	.11	.23	.03	1.00					
	Sign	.05	-.01	-.08	.45	1.00				
	Prediction	.08	.08	.08	.25	.07	1.00			
C	Stress	.11	.12	.11	.21	.01	.00	1.00		
	Sign	.00	.07	-.01	.33	.16	.11	.30	1.00	
	Prediction	.14	.20	.02	.29	.05	.07	.29	.35	1.00

^aCorrelation matrix adopted from Actio and Jain (1980, p. 109).

^b"Sign" is the number of total sign violations; each total was transformed $y = \ln(1+x)$ before correlations were computed; maximum number of sign violations for task A = 8, task B = 6, and task C = 5.

^c"Prediction" is the absolute value of predicted minus actual rank; each difference score was transformed $y = \ln(1+x)$ before correlations were computed.

differences had some influence upon the observed measures of stress, sign, and prediction. Further, stress, sign, and prediction may be measuring different but related attributes. An observed measure of, say, stress may be influenced by a factor that is general to stress measurements; by a factor that is general to the conjoint task; and by random measurement error. These hypotheses may be tested by the following measurement model.

$$\begin{aligned}
 k_1 &= \lambda_1 K + \lambda_2 A + \epsilon_{k_1} \\
 k_2 &= \lambda_3 K + \lambda_4 B + \epsilon_{k_2} \\
 k_3 &= \lambda_5 K + \lambda_6 C + \epsilon_{k_3} \\
 s_1 &= \lambda_7 S + \lambda_8 A + \epsilon_{s_1} \\
 s_2 &= \lambda_9 S + \lambda_{10} B + \epsilon_{s_2} \\
 s_3 &= \lambda_{11} S + \lambda_{12} C + \epsilon_{s_3} \\
 p_1 &= \lambda_{13} P + \lambda_{14} A + \epsilon_{p_1} \\
 p_2 &= \lambda_{15} P + \lambda_{16} B + \epsilon_{p_2} \\
 p_3 &= \lambda_{17} P + \lambda_{18} C + \epsilon_{p_3}
 \end{aligned}
 \tag{1}$$

For this model, let k denote the observed stress score, s denote the observed sign score, and p denote the observed prediction score. Further, let K denote the general stress factor, S the general sign factor, and P the general prediction factor. Epsilon, ϵ , denotes random errors of measurement. The matrix structure of this model is as follows:

$$\begin{bmatrix} k_1 \\ k_2 \\ k_3 \\ s_1 \\ s_2 \\ s_3 \\ p_1 \\ p_2 \\ p_3 \end{bmatrix} = \begin{bmatrix} \lambda_1 & 0 & 0 & \lambda_2 & 0 & 0 \\ \lambda_3 & 0 & 0 & 0 & \lambda_4 & 0 \\ \lambda_5 & 0 & 0 & 0 & 0 & \lambda_6 \\ 0 & \lambda_7 & 0 & \lambda_8 & 0 & 0 \\ 0 & \lambda_9 & 0 & 0 & \lambda_{10} & 0 \\ 0 & \lambda_{11} & 0 & 0 & 0 & \lambda_{12} \\ 0 & 0 & \lambda_{13} & \lambda_{14} & 0 & 0 \\ 0 & 0 & \lambda_{15} & 0 & \lambda_{16} & 0 \\ 0 & 0 & \lambda_{17} & 0 & 0 & \lambda_{18} \end{bmatrix} \begin{bmatrix} K \\ S \\ P \\ A \\ B \\ C \end{bmatrix} + \begin{bmatrix} \epsilon_{k_1} \\ \epsilon_{k_2} \\ \epsilon_{k_3} \\ \epsilon_{s_1} \\ \epsilon_{s_2} \\ \epsilon_{s_3} \\ \epsilon_{p_1} \\ \epsilon_{p_2} \\ \epsilon_{p_3} \end{bmatrix} \tag{2}$$

Following the notation set forth by Jöreskog (1966, 1967, 1969, 1973, 1977, and Jöreskog and Sörbom, 1978), we may write Equation 2 as the following:

$$\underline{y} = \underline{\Lambda}_y \underline{\eta} + \underline{\epsilon} \tag{3}$$

where $\underline{y}' = (k_1, k_2, k_3, s_1, \dots, p_3) = (y_1, y_2, \dots, y_9)$ is the vector of observed measures; the matrix $\underline{\Lambda}_y$ is the (9x6) measurement parameter matrix; $\underline{\eta}' = (K, S, P, A, B, C) = (\eta_1, \eta_2, \dots, \eta_6)$ is the vector of factors; i.e., unobserved or latent variables; $\underline{\epsilon}' = (\epsilon_{k_1}, \epsilon_{k_2}, \epsilon_{k_3}, \epsilon_{s_1}, \dots, \epsilon_{p_3}) = (\epsilon_1, \epsilon_2, \dots, \epsilon_9)$ is the vector of random measurement errors. Furthermore, it is assumed that $E(\eta) = 0$ and that the random errors of measurement, ϵ , are uncorrelated with η . It is also assumed that the observed measures, y , are expressed as deviations from their means so their expectations are also equal to zero.

Model Specification

Of particular concern in this analysis are the correlations among the following three factors: stress (K),

³Bagozzi (1980) presents an excellent discussion of structural equation (causal) models. An abundance of marketing examples is also given.

sign (S), and prediction (P). To estimate the measurement parameters as well as the correlations between the three factors, we employed Jöreskog and Sörbom's (1978) analysis of linear structural equations by the method of maximum likelihood (LISREL). The general LISREL model is written as:

$$B \eta = \Gamma \xi + \zeta, \quad (4)$$

where B and Γ are coefficient matrices, η is the vector of factors, as defined above; ξ is a vector of factors that act as independent or exogenous latent variables, and ζ' = (ζ₁, ζ₂, ... ζ₆) is random vector of residuals; i.e., errors of equation. The vectors η and ξ are not observed; but rather, are derived from the observed measurements. For example, as noted above:

$$y = \Lambda_y \eta + \epsilon.$$

The model we propose does not contain exogeneous latent variables, ξ; hence Equation 4 reduces to:

$$B \eta = \zeta \quad (5)$$

Further, since a causal structure among the η factors is not specified, the coefficient matrix, B, may be set to the identity matrix; thus:

$$\eta = \zeta \quad (6)$$

The correlations between the η factors are then equal to the correlations among the ζ variables. The matrix of ζ correlations is called the Ψ matrix. Additionally, since our model states that η = ζ, Equation 3 may be written as:

$$y = \Lambda_y \zeta + \epsilon, \quad (7)$$

with the following covariance matrix (Jöreskog and Sörbom 1978, p. 40-43):

$$\Sigma_{yy} = \Lambda_y \Psi \Lambda_y' + \Theta_{\epsilon}. \quad (8)$$

The matrix Ψ is the correlation matrix of factors and Θ_ε is the diagonal matrix of unique measurement error variances. Jöreskog and Sörbom (1978, p. 40-43) have termed the above structural equation model a "confirmatory (restricted) factor analysis."

Parameter Estimation

The parameters of Equations 3 and 7 as well as the correlations between stress (K), sign (S), and prediction (P) may be defined in the following three matrices: Λ_y, Ψ, and Θ_ε. The structure of Λ_y is given above in Equation 2; the structure of symmetric Ψ is given below:

$$\Psi = \begin{matrix} & \begin{matrix} K & S & P & A & B & C \end{matrix} \\ \begin{matrix} K \\ S \\ P \\ A \\ B \\ C \end{matrix} & \begin{bmatrix} 1 & \Psi_{12} & \Psi_{13} & 0 & 0 & 0 \\ \Psi_{21} & 1 & \Psi_{23} & 0 & 0 & 0 \\ \Psi_{31} & \Psi_{32} & 1 & 0 & 0 & 0 \\ 0 & 0 & 0 & 1 & 0 & 0 \\ 0 & 0 & 0 & 0 & 1 & 0 \\ 0 & 0 & 0 & 0 & 0 & 1 \end{bmatrix} \end{matrix}$$

The Θ_ε diagonal matrix contains the random measurement error variances.

Results

The correlations between factors as well as the obtained measurement parameters are presented in Figure 1. The correlation between the stress and sign factors is .99; between the sign and prediction factors is .94; between the stress and prediction factors is .62. These results suggest that stress, sign, and prediction correlate highly when systematic and random measurement error is removed.

Model Evaluation

One method of testing how well a structural equation model fits the observed correlation (or variance-covariance) matrix, is to compare the correlation (or variance-covariance) matrix generated from the model with the observed correlation (or variance-covariance) matrix. The test of the model is obtained by assessing whether the reproduced correlation (or variance-covariance) matrix is different from the observed correlation (or variance-covariance) matrix. A chi-square goodness-of-fit test is used; for the current model: χ² = 30.6, df = 21, p = .08. A significant chi-square (p < .05) is sufficient to reject the model. A non-significant chi-square (p > .05) indicates the model cannot be rejected (Jöreskog and Sörbom 1978, p. 37). The rationale and mathematics of the chi-square test is given in Jöreskog and Sörbom (1978, p. 13-15). Another indication of goodness of fit is the inspection of the residual matrix obtained from the difference between the observed correlation matrix and the reproduced correlation matrix.⁴ Most all of the residual correlations are near zero in magnitude; the residual matrix is given in Table 2. An additional measure of fit is given by Tucker and Lewis (1973). Their measure, p, is simply the amount of covariation explained by the model divided by the amount of possible covariation to be explained; the coefficient p = .72. The coefficient p is similar to an unadjusted R²; however, the sampling distribution of p is unknown, it is best treated as a descriptive rather than a test statistic (Burt 1973).

Conclusions and Implications for Conjoint Measurement

When systematic and random error are removed, this study demonstrated that stress, sign, and prediction are

⁴ Visual examination of the residual matrix may enable the researcher to determine those observed variables the structural equation model was unable to accurately predict. However, Costner and Schonenberg (1973) have demonstrated that the clues given by the residual matrix may be misleading in certain cases.

FIGURE 1

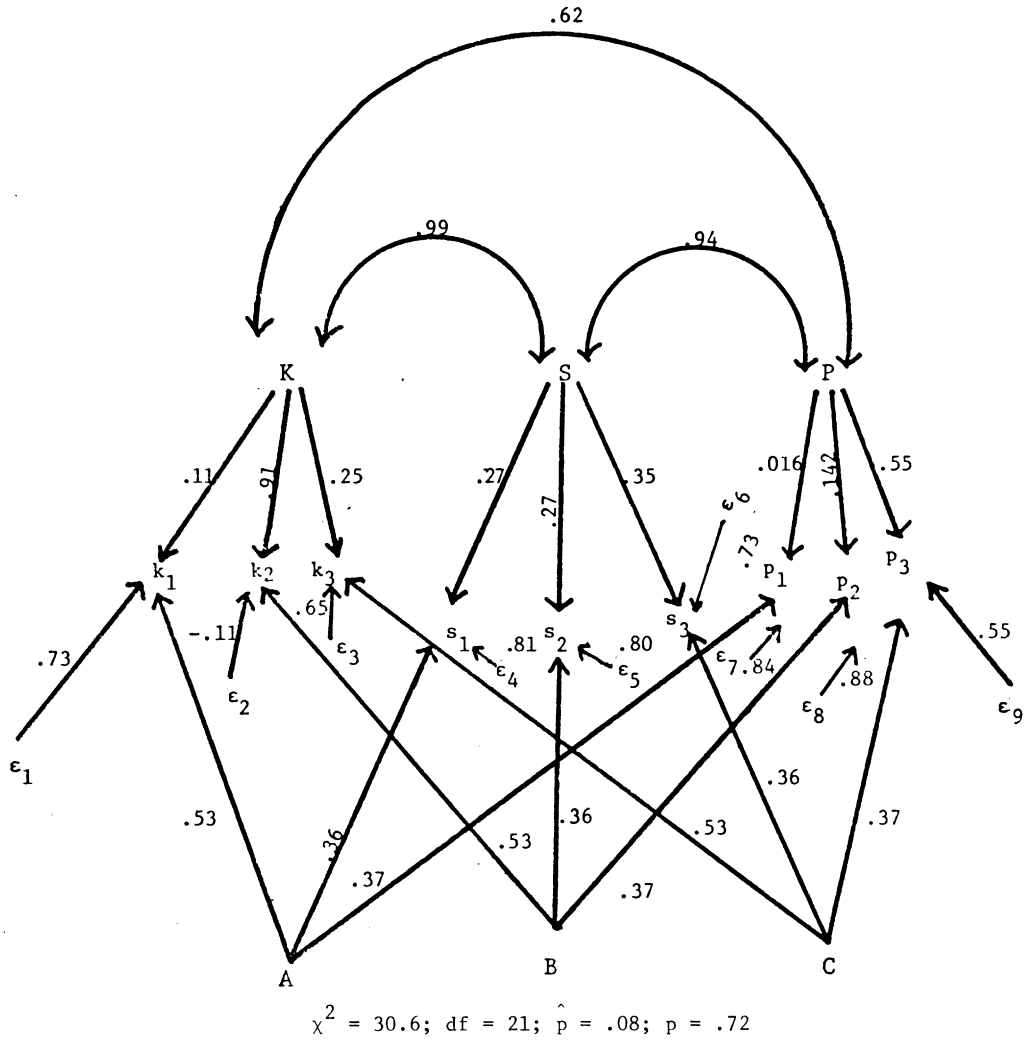


TABLE 2
RESIDUAL CORRELATION MATRIX^a

		A			B			C		
		Stress	Sign	Prediction	Stress	Sign	Prediction	Stress	Sign	Prediction
A	Stress	-.025								
	Sign	-.072	-.012							
	Prediction	.021	.062	.022						
B	Stress	.015	-.016	.021	.003					
	Sign	.022	-.083	-.084	.012	.000				
	Prediction	.071	.044	.078	-.027	-.100	-.034			
C	Stress	.084	.052	.107	-.017	-.058	-.022	.007		
	Sign	-.037	-.025	-.015	.010	.066	.063	.018	.014	
	Prediction	.104	.060	.011	-.020	-.089	-.008	.006	.034	.009

^aThe residual matrix is the difference between the observed matrix and the correlation matrix reproduced by the structural equation model.

highly correlated. Thus, it can be concluded that the low observed correlations given in Table 1 were obscured or "attenuated" by measurement error. Moreover, the original conclusion that stress, sign, and prediction evaluate unrelated aspects of conjoint results must be held with reservation. If the correlations between the stress, sign, and prediction factors, in Figure 1, were near zero--then one could conclude that stress, sign, and prediction were, indeed, measuring unrelated aspects of conjoint results. However, this was not the case.

More importantly, the new analysis presented in this study calls for a greater effort to minimize measurement error in the collection of conjoint data--this is especially important if the results serve as input into managerial decisions. Although measurement error can probably never be totally removed, Nunnally (1967, pp. 222-3) gives insight as to how it may be reduced:

Of course, doing everything feasible to prevent measurement error from occurring is far better than assessing the effects of measurement error after it has occurred. Measurement error is reduced by writing items clearly, making test instructions easily understood, and adhering closely to the prescribed conditions for administering an instrument. Measurement error because of subjectivity of scoring can be reduced by making the rules for scoring as explicit as possible and by training scorers to do their jobs.

Discussion of Results and Additional Comments

This discussion was written some time after the text reported above was written. Since then, we have learned to treat LISREL results with extreme caution. The above discussion of conclusions and implications assumed that the LISREL model was valid; however, this may not be the case. Despite the "good" chi-square result ($\chi^2 = 30.6$, $df = 21$, $p = .08$), a close inspection of the measurement parameters indicate an over-all weakness of the solution.

First of all, note the factor loadings for stress (K), sign (S), and prediction (P). Not only are they inconsistent (vary), but in general, they are not large: $K = .11, .91, .25$, $S = .27, .35$, and $P = .016, .142$, and $.55$. Second, note the negative error variance for $\epsilon_2 (= -.11)$. What is the meaning of a negative error variance? It is true that the square root of a negative variance gives an imaginary standard deviation; but, as far as we know, imaginary standard deviations are unacceptable to statisticians.

With these reservations in mind, the authors sought a "better" solution by modeling alternate structural models: First, we permitted the task factors (A, B, and C) to be correlated; then we relaxed the equality constraints for the task factor loading. Other alternate models were also tried; all produced the same startling result: The chi-square test indicated a near "perfect" fit; but the correlations between that factors (S, K, and P) were all greater than one! Some as high as twenty-five!

What can one conclude from this? First of all, sole reliance on the chi-square test appears to be insufficient when using LISREL for structural equation modeling. This fact has recently been illustrated by Fornell and Larcker (1981). Second, alternate tests of the solution should be pursued. Toward this end, we know of three attempts: One by Fornell and Larcker (1981; see Bagozzi 1981 for criticisms), a new computer package by Schonenberg, (1981) Multiple Indicator Linear Structural Models and a new version of LISREL, LISREL V by Jöreskog

and Sörbom.⁵ The validity of these approaches, however, remains to be demonstrated.

Evaluating The Results of Conjoint Measurement: Another Try

Our dissatisfaction with the outcome of the LISREL analysis prompted us to do a simple Spearman factor analysis (Hunter, 1980). To simplify the analysis, the correlation matrix presented in Table 1 was pooled over the three tasks: A, B, and C. Table 3 presents the pooled (average) correlations; from Table 3, we see that there is a consistent, but moderate, relationship between stress, sign, and prediction. Moreover, if

TABLE 3

Pooled Correlation Matrix and Factor Loadings For Stress, Sign, and Prediction

Measure	Measure			Factor Loading
	Stress	Sign	Prediction	
Stress	(.36)*	.30	.25	.60
Sign	.30	(.25)	.21	.50
Prediction	.25	.21	(.18)	.42

*Diagonal elements in parentheses are the indicator reliability coefficients.

there is a factor common to the three measures, then the following is true:

$$\begin{aligned}
 r_{sk} &= r_s^F r_k^F \\
 r_{sp} &= r_s^F r_p^F \\
 r_{kp} &= r_k^F r_p^F
 \end{aligned} \tag{9}$$

That is, the observed correlations may be decomposed as the product of their factor loadings, where r_s^F is the factor loading for stress, and F is the common factor. Equation 9 has a simple solution; the factor loadings may be obtained as:

$$r_k^F = \sqrt{\frac{r_{ks} r_{kp}}{r_{sp}}} = .60$$

$$r_s^F = \sqrt{\frac{r_{ks} r_{sp}}{r_{kp}}} = .50$$

$$r_p^F = \sqrt{\frac{r_{kp} r_{sp}}{r_{ks}}} = .42$$

⁵As of this writing we have learned that LISREL V has been recalled by National Educational Resources, Inc. due to "errors in the program."

We see, therefore, that stress, sign, and prediction are, to some extent, measuring the same thing. The reliability of measurement, however, is somewhat poor. The reliabilities of each measure are reported in the diagonal of [Table 3](#); the reliability for each measure was obtained following Hunter (1980):

$$\text{reliability of stress} = r_{kk} = r_k^F r_k^F = r_k^2 = .36$$

$$\text{reliability of sign} = r_{ss} = r_s^F r_s^F = r_s^2 = .25$$

$$\text{reliability of prediction} = r_{pp} = r_p^F r_p^F = r_p^2 = .18$$

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USE OF QUANTITATIVE TECHNIQUES BY MARKETING PRACTITIONERS

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Abstract

Marketing practitioners were surveyed to determine how frequently they used twenty-six quantitative techniques in making marketing decisions. The results revealed that the most frequently used techniques were statistical and/or financial, a finding consistent with previous research. In contrast to previous work, the current study found several highly sophisticated techniques to also be ranked high in usage. This finding should be encouraging to those who advocate greater use of the more complex techniques.

Introduction and Purpose

Much has been written concerning the potential use of quantitative techniques by business firms. However, the literature on the actual use of these techniques by marketing practitioners is relatively sparse. One of the first major actual use surveys, that of Hovey and Wagner (1958), was conducted 24 years ago. Since then, only a few studies have focused on quantitative technique use in solving marketing problems. Examples of these studies are those by Schumacher and Smith (1965), Fabozzi and Valente (1976), Greenberg, et. al. (1977), Capella and Jain (1978), and Thomas and DeCosta (1979). Studies of this type are important for marketing managers, since they must be aware of current trends in quantitative technique usage if they are to make optimum use of the techniques.

This paper reports on a 1980 survey of marketing practitioners who had used quantitative techniques as aids in making marketing decisions. The first section describes the survey methodology. Next, the study results are presented. Included are (1) a respondent profile, (2) a description of quantitative technique usage, (3) an analysis of responses by type of industry and annual revenue, and (4) a discussion of how the techniques were applied. The final section of the paper summarizes the survey conclusions.

Methodology

A mail survey was conducted in early 1980 to collect the data needed for this study. A random sample of 400 individuals was chosen from the 1979 American Marketing Association Service Organizations and Membership Roster. The membership roster was selected for several reasons: (1) it provides a readily accessible and up-to-date sampling frame; (2) it includes firms of all sizes and all industries; (3) it lists individual names and addresses of marketing personnel; and (4) it includes firms located over the entire United States. Persons not directly involved in the marketing function, such as secretaries and college professors, were excluded from the study. Also excluded were employees of firms located outside the United States.

Two weeks after mailing the questionnaires, postcard followups were sent to the prospective respondents. These cards requested that they complete and return the questionnaires as soon as possible. Also, the potential respondents were told that a new questionnaire would be mailed if they had misplaced the original. Two indicated that they would like a new questionnaire. A total

of one hundred and nine (109) usable responses (27%) were received. This return rate is consistent with previous studies of this nature.

To test sample validity, wave analyses were performed on the following variables: type of industry, annual revenue, and technique use. Chi-square tests failed to reveal any significant differences across the waves of responses by industry and annual revenue. Analysis of variance tests also failed to find significant differences across the waves for technique use. These tests were made at the .05 level of significance.

The respondents were asked to respond to demographic questions on industrial classification and annual revenue of the firm. They were then asked to indicate the extent to which their company used each of 26 quantitative techniques in making marketing decisions. Technique use was rated on a scale from 1 (no use) to 5 (extensive use). In addition, the respondents were asked to indicate the marketing mix areas in which they had applied the techniques.

There are several limitations of this study. First, it is possible that the quantitative techniques list excluded some techniques used by business firms. A second limitation concerns use of the American Marketing Association (AMA) roster. While this roster provides certain desirable features, several potential dangers exist. For example, it is possible that more than one employee from the same company was included in the sample. Also, it is possible that some of the respondents may have had insufficient knowledge or inclination to provide accurate information. Although none of these considerations seriously detract from the main purpose of the study, they should be considered when the results are reviewed.

Results and Discussion

Profile of Respondents

Table 1 provides a profile of respondents by industry and annual revenue of the firm. It shows that the respondents were distributed evenly by industrial classification. Note that "Marketing Research/Consulting" is listed as a separate category. This enabled the researchers to determine if quantitative techniques were used more extensively by these firms than other firms. **Table 1** also indicates that the respondents were not as evenly distributed if annual revenue of the firm is considered. The majority of firms in the sample earned less than \$500 million annually. One respondent declined to answer the revenue question, citing company policy.

TABLE 1

PROFILE OF RESPONDENTS (n = 109)	
INDUSTRY	RESPONDENTS (#)
Consumer Goods	31
Industrial Goods	24
Services	33
Marketing Research/Consulting	11
	<hr/> 109
ANNUAL REVENUE OF FIRM (millions)	
Less than 25	28
25 to 99.9	16
100 to 499.9	32
500 to 999.9	14
1,000 and over	18
No response	1
	<hr/> 109

Quantitative Use Frequencies

Table 2 shows the response frequencies, means, and ranks for quantitative techniques used by marketing practitioners. The most frequently used techniques were statistical and financial such as sampling, correlation analysis, break-even analysis, regression analysis, discounted cash flow, analysis of variance, and hypothesis testing. This finding is consistent with previous studies which show that simple techniques tend to be most widely used.

Of interest to the authors is the ranking of eight by factor analysis, the ranking of tenth by simulation, and the ranking of eleventh by cluster analysis. These rankings are somewhat different from previous studies which noted that the use of quantitative techniques diminishes as the techniques become more sophisticated. Since factor analysis, simulation, and cluster analysis can be considered highly sophisticated, this result should be encouraging to those who advocate greater use of higher-level techniques.

A finding that is consistent with previous reports is the low use of mathematical programming techniques such as heuristic, integer, and dynamic programming models. On the other hand, the relatively low use of transportation and markov models may be surprising, since these two techniques appear quite frequently in the marketing literature.

TABLE 2
RESPONSE FREQUENCIES, MEANS, AND RANKS OF QUANTITATIVE
TECHNIQUES (n = 109)

Technique	# Responses n	Technique Use					Mean	Rank
		Low 1	2	3	4	High 5		
Sampling	99	6	9	23	30	31	3.72	1
Correlation Analysis	93	15	21	24	20	13	2.95	2
Break-Even Analysis	89	27	11	15	22	14	2.83	3
Regression Analysis	94	18	20	27	24	5	2.77	4
Discounted Cash-Flow	79	25	11	14	17	12	2.75	5
Analysis of Variance	90	25	20	24	12	9	2.56	6
Hypothesis Testing	91	31	20	11	21	8	2.51	7
Factor Analysis	92	29	23	20	14	6	2.40	8
PERT/CPM	83	30	19	15	11	8	2.37	9
Simulation	81	33	18	16	12	2	2.16	10
Cluster Analysis	92	35	26	18	8	3	2.15	11
EOI/Inventory Models	66	34	12	6	7	7	2.11	12
Econometric Models	90	43	23	9	12	3	1.99	13
Linear Programming	86	50	15	10	9	2	1.81	14
Delphi Methods	72	38	20	8	5	1	1.75	15
Bayesian Statistics	77	46	18	9	2	2	1.65	16
Input-Output Models	86	52	22	7	4	1	1.60	17
Non-linear Programming	72	50	12	9	1	0	1.46	18
Goal Programming	68	53	7	3	3	2	1.44	19
Markov Processes	67	46	14	6	1	0	1.43	20
Game Theory	79	57	13	8	1	0	1.41	21
Transportation Models	68	51	10	5	2	0	1.38	22
Heuristic Programming	50	44	11	5	0	0	1.35	23
Queuing Models	72	55	12	3	2	0	1.33	24
Integer Programming	71	57	9	4	0	1	1.30	25
Dynamic Programming	56	48	6	1	1	0	1.20	26

Analysis of Responses by Type of Industry and Annual Revenue

Table 3 shows the mean use of quantitative techniques by industrial classification and annual revenue. It should be noted that the means refer to the number of techniques that were used moderately or better (a ranking from 3 to 5).

As can be seen from the mean use scores, marketing research/consulting firms had the highest usage, with a score of 7.6. This indicates that, on the average, these firms used about eight of the techniques. This is not surprising, given the specialized nature of the marketing research/consulting firms. Consumer goods firms and industrial goods firms ranked second and third in usage, with scores of 6.0 and 5.7, respectively. This suggests that the two major marketing organizations are keeping pace in their use of quantitative techniques to solve marketing problems. Services ranked last in usage, with a mean score of 4.8. This also

is not surprising, since the marketing of services has only recently received major attention by the marketing community.

Considering firm revenue, the firms most frequently using quantitative techniques also had the largest annual revenue. There was one important exception to this pattern; firms with annual revenue of under \$24.9 million used quantitative techniques more frequently than did firms with annual revenue of \$25 to \$99.9 million. This can partially be explained by the fact that most of the marketing research/consulting firms included in this study were small, but used quantitative techniques routinely in their operations.

TABLE 3

USE OF QUANTITATIVE TECHNIQUES BY
INDUSTRY AND ANNUAL REVENUE (n = 109)

INDUSTRY	MEAN USE	RANK
Marketing Research/Consulting	7.6	1
Consumer Goods	6.0	2
Industrial Goods	5.7	3
Services	4.8	4

ANNUAL REVENUE OF FIRM (millions)

1,000 and over	7.2	1
100 to 999.9	6.5	2
Under 25	5.1	3
25 to 99.9	4.4	4

Application of Quantitative Techniques

Table 4 shows the marketing-mix decision areas in which the respondents used quantitative techniques. Thirty-five percent of all applications were in the production area, 25% were in the promotion area, 23% were in the pricing area, and 17% were in the distribution area. Thus, this study indicates that quantitative techniques do have a wide range of applicability in marketing, a claim disputed by some business firms.

Table 4 also shows a similar profile across all four areas of the marketing mix. That is, the most frequently used techniques (e.g., sampling, correlation analysis, analysis of variance, etc.), also were most frequently used in each of the decision areas. Likewise, the least frequently used techniques (e.g., integer programming, dynamic programming, heuristic programming, etc.), were least frequently used across the marketing mix areas.

TABLE 4
NUMBER OF RESPONDENTS APPLYING QUANTITATIVE TECHNIQUES TO
MARKETING MIX DECISIONS (n = 109)

Technique	Areas of Application				Total	Rank
	Product	Promotion	Pricing	Distribution		
Sampling	66	34	37	36	191	1
Correlation Analysis	38	26	25	14	103	2
Analysis of Variance	33	29	23	14	99	3
Regression Analysis	38	20	22	13	93	4
Break-Even Analysis	24	17	36	8	85	5
Hypothesis Testing	24	31	17	7	79	6
Factor Analysis	37	20	12	9	78	7
PERT/CPM	28	17	9	14	68	8
Cluster Analysis	29	19	7	8	63	9
Discounted Cash-Flow	22	9	21	8	60	10
Simulation	18	16	14	11	59	11
Econometric Models	12	10	23	6	51	12
Delphi Methods	15	6	10	8	39	13
ZOR/Inventory Models	9	4	6	13	32	14
Linear Programming	8	5	7	7	27	15
Input-Output Models	8	5	5	6	24	16.5
Bayesian Statistics	5	10	5	4	24	16.5
Goal Programming	9	6	2	4	21	18
Game Theory	5	7	2	4	18	19
Transportation Models	3	2	1	9	15	20
Non-linear Programming	3	3	3	3	12	21.5
Markov Processes	4	2	4	2	12	21.5
Queuing Models	4	0	1	5	10	23.5
Heuristic Programming	4	2	3	1	10	23.5
Dynamic Programming	2	3	1	1	7	25
Integer Programming	2	1	1	1	5	26
Total	448	324	297	216	1285	

Conclusions

This paper extends the thrust of previous research by examining the current level of quantitative-technique usage by marketing practitioners. A summary of the major findings follows:

. The most frequently used techniques were statistical and financial. This finding is consistent with previous studies which indicate that simple techniques are the most widely used.

. Some highly-sophisticated techniques were ranked high in usage by the business firms. For example, factor analysis ranked eighth of the 26 techniques studied, while simulation and cluster analysis were ranked tenth and eleventh, respectively. This should be encouraging to those who advocate greater use of the more complex techniques.

. Transportation models and markov processes were ranked relatively low in usage. This surprised the authors since these two techniques appear quite frequently in the marketing literature.

. The low use of mathematical programming techniques such as heuristic, integer, and dynamic programming models was also in line with previous studies.

. Marketing research/consulting firms made the greatest use of quantitative techniques. This is not surprising, given the nature of these firms.

. Consumer goods firms and industrial goods firms reported about equal use of quantitative techniques. This suggests that the two major marketing firms are keeping pace in their use of the techniques to solve marketing problems.

. Service organizations ranked last in usage. This is not surprising, since the marketing of services has only recently received major attention by the marketing community.

. The firms most frequently using quantitative techniques also had the largest annual revenue. There was one important exception to this pattern; firms with annual revenue of under \$24.9 million used quantitative techniques more frequently than firms with annual revenue of \$25 to \$99.9 million. This can be partially

explained by the fact that most of the marketing research/consulting firms included in this study were small, but used quantitative techniques routinely in their operations.

. Thirty-five percent of all applications were in the production area, 25% were in the promotion area, 23% were in the pricing area, and 17% were in the distribution area. Thus, this study indicates that quantitative techniques do have a wide range of applicability in marketing, a claim disputed by some business firms.

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THE KENO PLAYER AS CONSUMER

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Abstract

In this paper, the gambler is viewed as a consumer having one of several basic, defineable preferences. A Keno bet is treated as a potential purchase, using a decision-theoretic approach. Various optimization criteria and the sensitivity of the strategies to different consumer utility functions are examined.

Introduction

In the game of Keno, the "board" consists of the numerals 1 through 80. The player selects between one and twelve numerals and marks them on a Keno ticket, which he submits with a 70¢ bet. Twenty numbers are then randomly selected (by the casino)¹ and displayed. Depending upon how many of his "spots" (selected numerals) have been "caught" (match one of the twenty displayed numerals), he wins anywhere from nothing to \$25,000, according to the payoff schedule in **Table I**.

TABLE I
 KENO PAYOFFS

Catch	Payoff	Catch	Payoff	Catch	Payoff
1 of 1	2.10	6 of 7	260	9 of 10	3150
2 of 2	8.50	7 of 7	6000	10 of 10	13300
2 of 3	.70	5 of 8	6.30	6 of 11	7
3 of 3	30	6 of 8	63	7 of 11	52.50
2 of 4	.70	7 of 8	1155	8 of 11	266
3 of 4	3	8 of 8	12600	9 of 11	1400
4 of 4	75	5 of 9	2.10	10 of 11	8750
3 of 5	.70	6 of 9	31.50	11 of 11	13650
4 of 5	6.50	7 of 9	234.50	6 of 12	4
5 of 5	580	8 of 9	3290	7 of 12	20
3 of 6	.40	9 of 9	12950	8 of 12	160
4 of 6	2.50	5 of 10	1.40	9 of 12	700
5 of 6	70	6 of 10	14	10 of 12	1800
6 of 6	1300	7 of 10	99.40	11 of 12	12500
4 of 7	.70	8 of 10	700	12 of 12	25000
5 of 7	16				

The gambler is simply a consumer who makes his purchase (the 70¢ bet and the decision as to how many spots to play) based upon one of a number of defineable attitudes. In this paper, the Keno bet is viewed in terms of decision theory, and optimal strategies for various gambling criteria are examined. A brief discussion of the pertinent aspects of decision theory is provided, followed by their application to the game as perceived by different types of potential customers.

Decisions Theory and Keno

The generalized decision problem is one in which the

¹ Although selection is done via a mechanical hopper device and is probably not statistically random, the consumer has no alternative but to treat the process as random.

decision-maker must make a choice among various possible courses of action. In Keno, the gambler must decide how many spots to mark (the decision as to which numerals to mark is a personal one and has no effect on strategy, as each numeral is equally likely to be a winning one), where his choices are any number of spots between one and twelve. The consequences of any course of action depend upon an unpredictable, or probabilistic event - the "state of nature"; in Keno, the consequence is the payoff given the resulting state of nature, or the 20 winning numerals. Thus, the player wishes to choose a strategy which is logically consistent with his basic preferences for the payoffs.

This gives rise to several classes of basic preferences: (a) the player who seeks to maximize his expected monetary value. This gambler would be willing to pay up to \$50 for a fifty-fifty chance at \$0 or \$100; (b) the risk-averse gambler, for whom the potential winnings are not high enough to justify even a \$10 bet at such a game; (c) the risk-seeker, who would pay perhaps \$55 because that amount is not enough to buy something he wants, but the \$100 (if he wins) is; and (d) the player who simply wants to maximize his chances of winning, regardless of the payoff, and is willing to pay a premium for the "thrill of the game".

Probability of a Win

Given the decision to mark x numerals, the probability of catching y numerals when 20 out of 80 are displayed is governed by the hypergeometric distribution:

$$f(y|x) = \frac{\binom{20}{y} \binom{60}{x-y}}{\binom{80}{x}} \quad (1)$$

For example, consider the gambler who elects to mark 9 spots. The probability that he catches 5 is:

$$f(5|9) = \frac{\binom{20}{5} \binom{60}{4}}{\binom{80}{9}} = .032601$$

As the number marked, x, increases, the probability of catching y increases, for fixed y. For example, when y=5, f(5|5) = .000645, f(5|6) = .003096, f(5|7) = .008639, f(5|8) = .018303, f(5|9) = .032601, and f(5|10) = .051428. On the other hand, for fixed x, the probability of catching y decreases as y increases. Thus, for x=10, f(5|10) = .051428, f(6|10) = .011479, f(7|10) = .001611, f(8|10) = .000135, f(9|10) = .000006, and f(10|10) = .0000001.

Expected Monetary Value

The expected monetary value of a gamble is obtained by multiplying the payoff by its probability and summing these products over all possible outcomes for the choice made:

$$EMV(x) = \sum_i P(y_i|x) f(y_i|x) \quad (2)$$

where $P(y_i|x)$ is the payoff when x spots are marked and y_i are caught, and $f(y_i|x)$ is the corresponding probability. Thus, the EMV of marking 10 spots is:

$$\begin{aligned} EMV(10) &= (1.40)(.0514) + (14.00)(.0115) + \\ &\quad (99.40)(.0016) + (700.00)(.0001) + \\ &\quad (3150.00)(.000006) + (13300)(.0000001) \\ &= \$.508 \end{aligned}$$

The gambler who will choose the strategy with the maximum expected payoff is called an EMV'er. Such a strategy will maximize the gambler's long-run payoff. This is equivalent to maximizing the payoff per game over a long series of games. Table II shows the EMV of each gamble. The optimal strategy is to select one numeral, with an expected payoff of \$.525 on a bet of \$.70. It is interesting to note, however, that the range of EMV's is quite narrow, between \$.500 and \$.525.

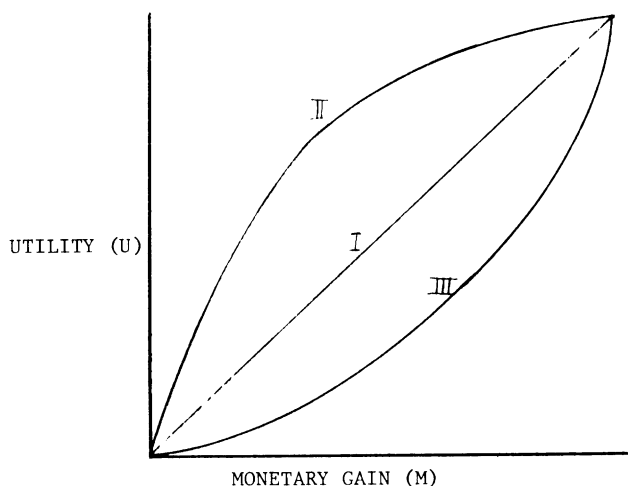
Utility

In a game such as Keno, where the payoffs vary from \$0 to \$25,000, expected monetary values often do not reflect accurately the real consequences of a particular strategy. For example, a gambler who marks two spots (with an EMV of .511) stands to win either \$0 or \$8.50; however, one who chooses twelve spots (also with an EMV of .511) may win anywhere from \$0 to \$25,000. While the two strategies are equivalent to the player who wishes to maximize his expected payoff, many gamblers, in personally evaluating the risk vs. the actual profit, would not regard them so. The utility function measures the subjective value that the decision-maker attaches to different levels of wealth.

Types of Utility Functions

The utility function can have three general shapes, as shown in Figure 1. All three functions increase monotonically throughout; that is, $dU/dM > 0$, since all individuals prefer more money to less. However, the marginal utility of an additional dollar of gain varies among the three cases.

FIGURE 1
THREE POSSIBLE SHAPES OF UTILITY FUNCTIONS



In the first situation, the individual has a constant marginal utility of money; i.e., $d^2U/dM^2 = 0$, indicating that the first dollar of gain is not more valuable to him than the 10,000th dollar of gain. Maximizing utility is equivalent to maximizing expected monetary value for a linear utility function.

In situation II, the player has a diminishing marginal utility of money; i.e., $d^2U/dM^2 < 0$. As the dollar gains increase, they become subjectively less valuable. This is the "conservative", or risk-averse gambler: given two choices with equal EMV, he would prefer the action with lower variability.

In situation III, the player subjectively values each dollar of gain more highly, i.e., $d^2U/dM^2 > 0$. This risk-seeker will select the action with greater variability, as he values very highly the small chance of very large gains.

Thus, the utility function associates numbers $U(M)$, with monetary outcomes (M), such that the following properties hold (Halter and Dean, 1971):

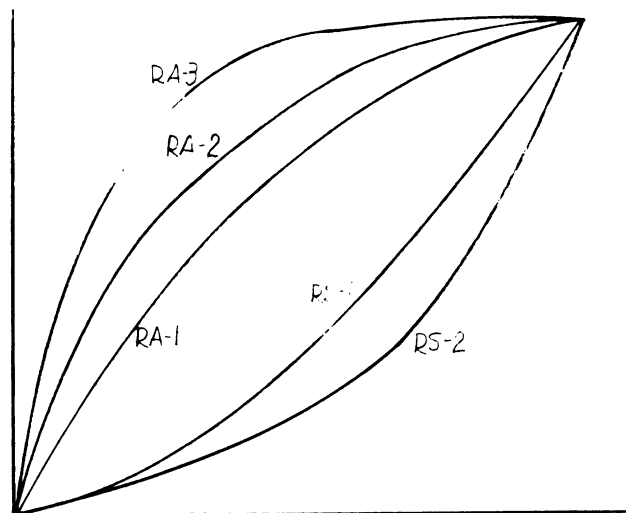
1. $u(M_1) > u(M_2)$ if the individual prefers M_1 to M_2 ;
2. if M is the wealth prospect where, with probability p the individual faces M_1 , and with probability $1-p$ faces M_2 , then

$$u(M) = p \cdot u(M_1) + (1-p) \cdot u(M_2) \text{ or}$$

$$u(M) = E(u(M)), \text{ where } M \text{ is a random variable;}$$
3. the utility function is bounded; i.e., $u(M) < \infty$.

The construction of a utility function for the risk-averse and risk-seeking gambler is a well-documented procedure (Pratt, Raiffa and Schlaiffer, 1965). Arbitrarily selecting 0 and 1000 to represent the utility of \$0 and \$25,000, respectively, utility curves were constructed for three risk-averse individuals and two risk-seekers, in Figure 2. From these curves, it is possible to arrive at the utility values corresponding to the monetary payoffs in the original problem.

FIGURE 2
UTILITY FUNCTIONS FOR RISK-AVERSE
AND RISK-SEEKING GAMBLERS



Since each prefers more money to less, for both the risk-averse individual and the risk-seeking individual,

as the number marked, x , increases, the utility payoffs for catching y , $u(y|x)$, decrease for fixed y ; similarly, for fixed x , $u(y|x)$ increases as y increases. The rates of change, however, are markedly different for the two players. For example, for the most risk-averse player (RA-3), when $x=11$, the utility payoffs rise rapidly at first, then more slowly: $u(6|11)=9.6$, $u(7|11)=71.75$, $u(8|11)=363.53$, $u(9|11)=930.00$, $u(10|11)=958.00$, $u(11|11)=969.00$. For the most extreme risk-seeker (RS-2), the more rapid rise occurs for higher y values: $u(6|11)=.0182$, $u(7|11)=.137$, $u(8|11)=.6916$, $u(9|11)=3.64$, $u(10|11)=41.00$, $u(11|11)=112.00$.

From these utility payoffs, the expected utility for each strategy can be calculated as:

$$EU(x) = \sum_i u(y_i|x) f(y_i|x) \quad (3)$$

where $u(y_i|x)$ is the particular individual's utility for the payoff when x spots are marked and y_i are caught, and $f(y_i|x)$ is the corresponding probability. Thus, for the most conservative gambler (RA-3), the expected utility of marking 10 spots is:

$$\begin{aligned} EU(10) &= (1.913)(.0514) + (19.13)(.0115) + \\ &\quad (135.847)(.0016) + (858)(.0001) + \\ &\quad (942)(.0000006) + (969)(.0000001) \\ &= .6589 \end{aligned}$$

and for the most reckless gambler:

$$\begin{aligned} EU(10) &= (.00364)(.0514) + (.0364)(.0115) + \\ &\quad (.258)(.0016) + (1.82)(.0001) + \\ &\quad (8.19)(.000006) + (107)(.0000001) \\ &= .00133 \end{aligned}$$

Table II shows the EU of each gamble for each type of non-EMV'er. Not surprisingly, for the risk-averse individual, the optimal strategies favor low-risk, low-payoff, while for the risk-seeker, the high-risk, high-payoff is preferred. It should be noted, however, that the utilities for a given type of player are, as in the EMV case, relatively insensitive to changes in strategy. Thus, given the payoff and probability structure for the game, it is interesting that no strategy is overwhelmingly preferable for any type of gambler: the EMV'er, risk-averse, or risk-seeker.

The final class of player to be considered is the one who is interested only in winning, regardless of the payoff: the "thrill of the game" criterion. For this gambler, the optimal strategy is the one which has maximum probability of a nonzero payoff:

$$\max_x \sum_i f(y_i|x) \quad (4)$$

Table II shows the sum of the probabilities of winning for each strategy, and here we have a clearer dominance: marking 4 (closely followed by marking 1) yields approximately a 25% chance of achieving the thrill of winning; any other strategy offers a significantly lower probability of winning.

We may summarize the results of the analysis by making the following observations: (a) for the EMV'er, the optimal strategy is to mark one numeral, although his expected return is not significantly lower if he chooses any other strategy; (b) the risk-averse gambler does best marking one numeral, although his utility is not substantially lower if he chooses any other low-risk, low-payoff strategy (marking 5 or fewer); (c) the moderate risk-seeker does best marking 12 spots, while the extreme risk-seeker maximizes his utility

with 8 spots. In both cases, however, the range of expected utilities is narrow for all strategies; (d) the gambler seeking simply to win, regardless of payoff, does best marking 4 spots, and almost as well marking 1 spot. For any other strategy, his chances drop off substantially.

TABLE II
RESULTS FOR VARIOUS CRITERIA

	EMV	RA-1	RA-2	RA-3	RS-1	RS-2	Thrill
Mark 1	.525*	.07875*	.26250*	.71750*	.00473	.00137	.2500
Mark 2	.511	.07666	.25554	.69847	.00460	.00135	.0601
Mark 3	.513	.07701	.25669	.70163	.00462	.00143	.1527
Mark 4	.508	.07625	.25417	.69544	.00458	.00147	.2589*
Mark 5	.511	.07671	.26082	.69921	.00460	.00138	.0966
Mark 6	.508	.07537	.22377	.58368	.00457	.00132	.1615
Mark 7	.512	.07029	.22403	.52219	.00604	.00147	.0615
Mark 8	.504	.07057	.19647	.51233	.00376	.00157*	.0209
Mark 9	.504	.07289	.23433	.56012	.00510	.00136	.0389
Mark 10	.508	.07581	.25012	.65893	.00336	.00133	.0647
Mark 11	.500	.07261	.24770	.62980	.00455	.00129	.0240
Mark 12	.511	.07541	.24453	.65798	.00651*	.00132	.0404

* denotes optimal strategy for a given criterion

We now consider the value of the game when the cost of playing is included. It is important to keep in mind that an additional implicit strategy is available: not betting. This choice has an EMV of 0; when the cost of the game (70¢) is considered, it has a higher value than the optimal strategy of marking one numeral. Only if the bet were less than 52.5¢ would it be optimal to play. For the risk-averse consumer, losing 70¢ has a small negative utility, making the utilities for the 12 strategies less attractive. For an extremely conservative gambler, not betting may be optimal. On the other hand, for the risk-seeker, who favors high-risk, high-payoff strategies, the zero-risk, zero-payoff alternative of not betting would not be an optimal one. For the thrill-seeker who can afford the 70¢ price, the alternative with no probability of winning would not be considered.

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MULTIPLE MARKETING GOALS AND
MULTIPLE MARKETING INSTRUMENTS

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Abstract

In this paper, the theory of macroeconomic policy is applied to the problem of achieving multiple marketing goals with multiple marketing instruments. It is shown how a rigorous analysis can validate some intuitively acceptable marketing beliefs, and how violation of the principles can lead to very undesirable results. Some major advantages of this approach are that it provides a dynamic analysis rather than a comparative-static one (i.e., it tells the manager not merely where to go, but also how to get there) and that it effectively incorporates macroeconomic principles into the theory and practice of marketing.

Introduction

The marketing manager is often called upon to make decisions regarding the allocation of scarce resources between two or more marketing instruments in order to be able to achieve a certain target. The analysis of such a problem is not new to marketing. However when there is more than one goal to be achieved, each of which is dependent upon a set of marketing instruments, the problem is much more complex.

The theory of economic policy may effectively be used to understand and help resolve such problems without restricting the form of the function as multivariate statistical methods usually require. An additional advantage is that it provides a dynamic analysis rather than a comparative-static one. The present work is essentially an application to marketing of the theory of macroeconomic policy in a multiple goal, multiple instrument setting.

Tinbergen,¹ a pioneer of economic policy in a multiple goal and instrument context, developed the Tinbergen principle, which states that the number of policy instruments must be equal to the number of goals if all the goals are to be achieved. This applies in the context of a fixed target value for each goal, as is common in business practice. If the decision-maker can make a trade-off between goals, then the instruments are only required to be less than or equal to the number of goals. This is the case of variable targets, as discussed by Tinbergen² and by Theil.³ The variable targets approach requires the policy maker to be able to specify a continuous trade-off function (like the utility function) between the two goals. Although some trade-off is possible between goals, such a "utility function" is difficult (at best) to specify in management practice. It is much more probable that a manager is required to meet specific fixed target

values in particular target or goal areas, such as profit (\$X per unit), market share (Y%), etc. Consequently, the fixed target approach is more relevant to the business world. In fact, the fixed targets approach is the more-applied one even in actual economic policy issues. For the above reasons, it is the fixed targets situation that is analyzed in this paper.

A major application of the fixed targets approach was presented by Mundell.⁴ Mundell's principle of effective market classification states that policy instruments should be aimed at the goals on which they have the greatest influence, or, in other words, the greatest comparative advantage. In his review of Mundell's analysis of this principle in the context of the use of monetary and fiscal policy (two instruments) to achieve internal and external economic equilibrium (two goals), Makin⁵ has observed that, while Mundell's basic principle (mentioned above) seems reasonable enough, "It is not immediately obvious that its violation can lead to rather disastrous results."

In this paper, the above analysis of macroeconomic policy will be applied in a marketing context to assist in dynamic analysis of the problem of multiple marketing instruments. The conclusions of the analysis will be shown to be consistent with good marketing practice. It will also be demonstrated how failure to conform to the derived guidelines may lead to "disastrous" (in Makin's words) results.

Analysis

Consider the case of a brand for which the manager must determine the appropriate marketing strategy. There are many instruments of strategy available to the manager; any or all of the elements of the marketing mix may be used to achieve a particular target or goal.

In deciding the marketing plan for the brand, the manager may allocate resources between the instruments depending upon their relative effect on the brand. Such an analysis of effects, whether intuitively done or based on multivariate analysis, is not new to the field of marketing. However, when two or more (sometimes conflicting) targets have to be met, the problem is much more complex. It is this problem that is analyzed here.

For the purpose of this analysis, consider two instruments:

1. Unit Price (P) of the brand
 2. Advertising expenditure (A) per sales period
- only two marketing instruments have been chosen for convenience of illustration. The mathematical analysis

¹ Jan Tinbergen, On the Theory of Economic Policy (Amsterdam: North Holland, 1951).

² Jan Tinbergen, Centralization and Decentralization in Economic Policy (Amsterdam: North Holland, 1954).

³ Henry Theil, Optimal Decision Rules for Government and Industry (Amsterdam: North Holland, 1964).

⁴ R.A. Mundell, "The Appropriate Use of Monetary and Fiscal Policy for Internal and External Stability," International Monetary Fund, Staff Papers, March, 1962, pp. 70-77.

⁵ John H. Makin, Macroeconomics (Hinsdale, Ill.: The Dryden Press, 1975), pp. 460-461.

is generalized and may be extended to any number of instruments (any or all the elements of the marketing mix may be used).

In this paper, the analysis is concerned with the meeting of two goals:

1. Per Unit Profit (C)
2. Share of Market (at the end of the sales period) (M)

These two target areas have been chosen because their importance, and the frequency of their occurrence in business practice; and because they often require conflicting inputs, which makes the problem more interesting. (Over the long term, however, ROI could be negatively related to costs, as Buzzell's (1981) evidence ("Are There 'Natural' Market Structures?," *Journal of Marketing*, 45, 1, 42-51) has shown). As in the case of the instruments, the analysis is general and may be extended to any number of targets. The only restriction is provided by the Tinbergen principle which states that where there are fixed target values for policy goals, the number of policy instruments must be equal to the number of goals if all the goals are to be obtained.

Suppose that a target profit per unit for the brand is set at C* (dollars) and that the desired market share is targeted at M*. (These targets may be determined at any level of the company.) Each of the two target areas are affected by the two marketing instruments mentioned above. These may be expressed in a completely general form as:

$$C = f(P, A) \quad (1)$$

$$M = f(P, A) \quad (2)$$

where: C = Per Unit Profit
M = Market Share
P = Unit Price
A = Advertising Expenditure

The partial derivatives of each target area are taken with respect to each instrument:

$$\partial C / \partial P \equiv C_P > 0 \quad (3)$$

$$\partial C / \partial A \equiv C_A < 0 \quad (4)$$

Relationships (3) and (4) follow from the definition of per unit profit, which increases with an incremental increase of P or a decrease of A.

The partial derivatives for Market Share are:

$$\partial M / \partial P \equiv M_P < 0 \quad (5)$$

$$\partial M / \partial A \equiv M_A > 0 \quad (6)$$

These being partial derivatives, they hold constant other elements of the marketing mix and competitive reaction to marketing inputs. Relationship (5) also assumes a negative relationship between price and quantity sold. Relationship (6) assumes that advertising does have some positive effect on sales.

Relationships (3)-(6) are working assumptions only and violation of these will not invalidate the procedure, only lead to modified results.

We may now analyze changes in the equations (1) and (2), by taking total derivatives:

$$\text{From equation (1), } \Delta C = (\partial C / \partial P) \Delta P + (\partial C / \partial A) \Delta A \quad (7)$$

$$\text{From equation (2), } \Delta M = (\partial M / \partial P) \Delta P + (\partial M / \partial A) \Delta A \quad (8)$$

When the targets have been achieved for profit and market share, the manager would not desire any further changes in these two target areas, i.e., $\Delta C^* = 0$ and $\Delta M^* = 0$. Equilibrium would then be achieved. This state is represented as:

$$\Delta C^* = 0 = (\partial C / \partial P) \Delta P + (\partial C / \partial A) \Delta A \quad (9)$$

$$\Delta M^* = 0 = (\partial M / \partial P) \Delta P + (\partial M / \partial A) \Delta A \quad (10)$$

where C = C* represents achievement of the Profit target and M = M* represents achievement of the Market Share target.

The following relationships may then be obtained:

$$\text{From equation (9), } \left. \frac{\Delta P}{\Delta A} \right|_{C=C^*} = - \frac{\partial C / \partial A}{\partial C / \partial P} \quad (11)$$

$$\text{From equation (10), } \left. \frac{\Delta P}{\Delta A} \right|_{M=M^*} = - \frac{\partial M / \partial A}{\partial M / \partial P} \quad (12)$$

where the left hand side of each relationship (11) and (12) represents $\frac{\Delta P}{\Delta A}$ when C = C* and M = M*, respectively.

For the purpose of convenience, the symbols C_P, C_A, M_P and M_A will be used to represent the partial derivatives ($\partial C / \partial P$), ($\partial C / \partial A$), ($\partial M / \partial P$) and ($\partial M / \partial A$), respectively.

From relationships (3) and (4), it is evident that (C_A/C_P) is a negative number, therefore, from equation (11):

$$\left. \frac{\Delta P}{\Delta A} \right|_{C=C^*} \text{ is a positive number.} \quad (13)$$

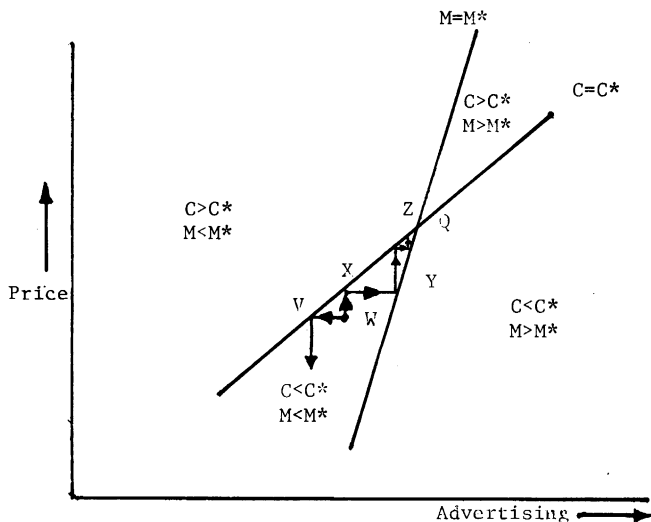
Similarly, from relationships (5) and (6), it is obvious that (M_A/M_P) is a negative number. Therefore, from equation (12):

$$\left. \frac{\Delta P}{\Delta M} \right|_{M=M^*} \text{ is a positive number.} \quad (14)$$

Relationships (13) and (14) are shown graphically below.

Case 1: Assumes Comparative Advantage for Advertising in Affecting Market Share and for Price in Affecting Market Share

FIGURE 1: CASE 1



In Figure 1, above, the line, $C=C^*$, represents combinations of price and advertising that cause the profit target to be met. $M=M^*$ represents combinations of P and A that are consistent with achievement of the targeted market share. The slope of the lines, $\left. \frac{\Delta P}{\Delta A} \right|_{C=C^*}$ and $\left. \frac{\Delta P}{\Delta A} \right|_{M=M^*}$ respectively, are shown to be positive, as relationships (13) and (14) indicated.

Figure 1 is drawn such that the slope of the $M=M^*$ line is greater than the slope of the $C=C^*$ line:

$$\left. \frac{\Delta P}{\Delta A} \right|_{M=M^*} > \left. \frac{\Delta P}{\Delta A} \right|_{C=C^*}$$

For a relatively steep slope of the $M=M^*$ line, $(\Delta P/\Delta A)_{M=M^*}$ is relatively large. This implies that an incremental change in advertising has a greater effect on market share than does an incremental change in price (Relationship 12). Advertising is then said to have a comparative advantage in affecting market share. This is a result of the relative slopes shown in Figure 1. The opposite case will be considered later (Case 2). Figure 1 and the following analysis assume a comparative advantage for A in affecting M and for P in affecting C.

Figure 1 is divided in four regions, bounded by the lines $C=C^*$ and $M=M^*$, depending upon whether C and M are greater than or less than C^* and M^* , respectively. An explanation of this follows.

The portion of the figure to the right of and below the line $C=C^*$ represents $C < C^*$ since it is consistent with values of P which are lower than that of the value of P (for any A) which represents $C=C^*$ and values of A which are higher than the value of A (for any P) which represents $C=C^*$; and $C_p > 0$ and $C_A < 0$. Similarly, the region on the other side of $C=C^*$ represents $C > C^*$. Extending this reasoning to the line $M=M^*$, we note that the region to the right of and below the line represents $M > M^*$ and vice versa, since $M_p < 0$ and $M_A > 0$.

Thus, each of the four regions bounded by the lines $C=C^*$ and $M=M^*$ may be classified as $C > C^*$ and $M > M^*$. Each of these regions (except for $C > C^*$, $M > M^*$ represents a strategy problem for the manager, because one or both of the target areas falls short of the target.

An attempt to bring the "deficient" area on target may cause the other one to fall short of the target because of the nature of the marketing problem, since what is good for market share may be bad for profit and vice versa.

According to the Tinbergen principle, since the manager has two targets, C^* and M^* , and two marketing instruments, P and A, under his control, it is possible to achieve both targets simultaneously (assuming reasonable targets). However, according to Mundell's principle of effective market classification, this simultaneous achievement (overall equilibrium), though possible, need not necessarily be achieved unless his principle is followed. Mundell's principle, repeated here for convenience, states that instruments should be aimed at target areas on which they have the maximum influence or comparative advantage. Though this principle seems intuitively quite obvious, it is not as obvious that violation of the principle may lead to disastrous results. These points are illustrated below in the context of Figure 1, using a dynamic marketing analysis.

If, for example, the manager faces a situation where both, per unit profit and market share, fall below the targeted values (the region indicated by $C < C^*$, $M < M^*$), a dilemma exists. The need for higher (per unit) profit implies cutting back on marketing inputs (decrease advertising and increase price), whereas the need for higher market share implies ploughing more funds into marketing inputs (increase advertising and decrease price). According to Tinbergen's principle (according to marketing understanding as well), a judicious combination of pricing and advertising policies can be found so that both targets may be achieved (assuming realistic targets), i.e. the combination of P and A corresponding to point Q in Figure 1. A comparative-static analysis would be content to state that the use of the two instruments can move the brand from any other point to Q. Such an analysis tells the manager where to go (to Q).

Mundell's principle is concerned with the dynamic analysis--the method to be followed to achieve the targets (how to get to the targets). Consider Point W where $C < C^*$ and $M < M^*$. Since price has the comparative advantage in affecting C, Mundell's principle would suggest increasing price to that corresponding to X where $C=C^*$. Since advertising has the comparative advantage in influencing M, the principle would suggest that advertising be increased to that corresponding to Y ($M=M^*$) so that the brand may be moved from X to Y. In a similar fashion, by price and advertising increase. In a given marketing situation, it may be more appropriate to start with an increase in advertising input.

If however, the principle of effective market classification is violated, very undesirable results may result. If at the starting point W, it is (incorrectly) assumed that price has the comparative advantage with respect to market share and advertising has the dominant influence on profit, a completely different and disastrous path may be followed. In order to increase contribution advertising is cut back to a level corresponding to V which, in fact, decreases market share. In order to increase market share, price is decreased, moving the brand far away from the desired target. As before, it does not matter which comes first -- the advertising cut-back or the price decrease; the result is not an expected or desirable one, in spite of the above (not intrinsically unsound) marketing strategies.

It must be emphasized that these results occur because of the relative comparative advantages of price and

advertising in affecting the two target areas (profit and market share) represented by the relative slopes of the two lines, $C=C^*$ and $M=M^*$, in Figure 1. The opposite case would arise if the comparative advantages were reversed. This is discussed in Case 2, which follows.

Case 2: Assumes Comparative Advantage for Advertising in Affecting Profit and for Price in Affecting Market Share

FIGURE 2: CASE 2

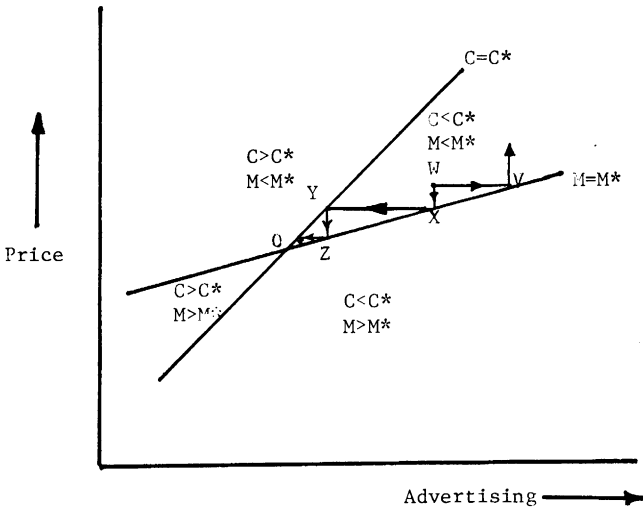


Figure 2 shows the case where comparative advantage exists for advertising in affecting profit and for price in affecting market share.

Figure 2 is similar to Figure 1, except for the relative slopes of the $C=C^*$ and $M=M^*$ lines. Figure 2 assumes a comparative advantage for price in affecting market share and for advertising in affecting profit. This is the opposite case to Case 1 (and Figure 1).

Figure 2 is divided into four regions, bounded by the lines $C=C^*$ and $M=M^*$, depending upon whether C and M are greater than or less than C^* and M^* , respectively. Each one of these regions (except for $C > C^*$, $M > M^*$) represents a strategy problem because at least one target is not met. Consider, for example, the dilemma faced by the manager in the region represented by $C < C^*$, $M < M^*$ (as was described in Case 1).

As in Case 1, Mundell's principle of comparative advantage is used to suggest a dynamic analysis to achieve both targets simultaneously. Since price has the comparative advantage in influencing market share, and advertising in affecting profit, the principle would suggest using appropriate price decreases (to increase M) combined with appropriate advertising cuts (to increase C) so as to move the brand along the path $W \rightarrow X \rightarrow Y \rightarrow Z$, and so on until the targets are met (approached) at point Q . (As in Case 1, an advertising cut-back may precede the price decrease.)

If, however, Mundell's principle is violated, the result will be disastrous. If, at the starting point, W , price is associated with profit and advertising with market share, the advertising input will be

increased (in an attempt to increase market share) to a level corresponding to V , then price will be increased (in an attempt to increase profit), moving the brand further and further away from the targets.

Again, the results of Case 2 are caused by the relative comparative advantages of price and advertising in influencing profit and market share (i.e. the relative slopes of the lines $C=C^*$ and $M=M^*$).

Marketing Implications and Potential Applications

Two cases were considered in the above analysis: Advertising has the comparative advantage in affecting: (1) market share, and (2) profit, respectively. In fact, they may be taken as being instances of an entire spectrum of cases ranging from an extreme situation where the market share is inelastic to price, and dominated by advertising and other marketing inputs; to the other extreme in which price is the all important instrument in affecting market share.

Case 1 assumed that market share was "dominated" (to a greater or lesser extent) by advertising effects and price was the less dominant influence. Such cases are very common in marketing practice. This is the case of the premium product (as seen from a product portfolio viewpoint), or the case of a quality product in a price-insensitive market (viewed as segmentation analysis), or the case of the image building task (at initial stage(s) in the product lifecycle), etc. The above examples (in parentheses) are intended only as instances of potential marketing applications. The theoretical analysis showed that the appropriate marketing strategy, if profit and market share targets are not met, are increased prices and advertising in the indicated manner. This is consistent with marketing judgment.

Case 2 is representative of the situation in which price has the dominant effect on market share and advertising has relatively little influence. The marketing applications of this case are opposite to the ones mentioned above: the standardized product or market, or a product in the later stage(s) of the lifecycle. The theoretical analysis indicated that the appropriate strategy, if targets were not met, would be decrease price and advertising as shown in Figure 2. This, too, is consistent with marketing judgment.

The analysis provides a rigorous theoretical base to some commonly held marketing beliefs. Although the analysis is a general one, it is not any less pragmatic for that reason. The only parameters required for analysis of a specific brand in a particular market are the partial derivatives, (C_p , C_A , M_p and M_A) in the cases discussed above. These parameters may be empirically obtained in a given situation. One method for obtaining them is to use the regression coefficients of a regression analysis with Market Share as the dependent variable, for example, and Price and Advertising (lagged, if appropriate) as the independent variables. (The partial derivatives for profit may be obtained from the definition of per unit profit or profitability used by the firm.)

Some conclusions of the analysis which would not have been immediately (intuitively) obvious without the benefit of this theory are described below:

- (a) The fact that the partial derivatives, C_p , C_A , M_p and M_A are found to be of the appropriate sign in

an empirical study ($C_p > 0$, $C_A < 0$, $M_p < 0$, $M_A > 0$) is no indication that a certain instrument should be used to achieve a particular target. For instance, the analysis indicates that, even if price increases have a positive effect on profit and a negative effect on market share, as expected, it should not be used as a marketing instrument to affect market share unless it has the comparative advantage.

- (b) Violation of the principle of effective market classification leads to disastrous consequences. To continue with the example mentioned in (a), above, if price is used as an instrument to change market share the brand will move further away from its targets.

The purpose of this paper is to analyze the problem of multiple goals and multiple instruments in the marketing context and to provide a rigorous theoretical base for some marketing strategies. The conclusions of the theoretical analysis are shown to be consistent with marketing judgment. Some conclusions of the theory which are not intuitively obvious, and dangers of violation of the theoretical principles, are pointed out.

The analysis presented in this paper uses a dynamic approach, rather than a comparative-static one. In this respect, it adds an additional dimension to the solution of such marketing problems.

This analysis is made possible by incorporating theories of macroeconomic policy into a marketing framework. The resulting expansion of the boundaries of knowledge may well be a major contribution of this paper. The procedure described in this paper is a general one and may be applied to a number of corporate, social or macro marketing goals.

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CHARACTERIZING CONSUMER INTEREST THROUGH THE USE OF CANONICAL CORRELATION:
APPLICATION FOR SMALL BUSINESS

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ABSTRACT

This research investigated alternative methods to complex models of estimating consumer demand and alternative models to those currently being used by small business entrepreneurs. The alternative method that was employed in this study was canonical correlation. This statistical tool produced two significant canonical roots, describing four separate market segments based on degree of consumer interest for a new product. Results from this study suggest that, although canonical correlation may have practical application in a small business setting, it should be used in conjunction with data outputs that are less sophisticated.

INTRODUCTION

Even though small business entrepreneurs are usually equipped with many ideas for starting new businesses, extending product lines, or creating services needed in the marketplace, often they lack the knowledge of how to operationalize their ideas. Consequently, their lack of marketing expertise may inhibit their ability to bring their offerings to the marketplace. Since this phenomena is quite common, there becomes a need for the small business entrepreneur to test ideas concerning new product offerings among consumers.

Additionally, since the wants, needs, and desires of today's consumer is ever changing and because the failure rate of new businesses is high, marketing research to determine the feasibility of newly conceived products/businesses is essential. The small business entrepreneur, as a rule, does not have a variety of tools to use for determining consumer demand, forecasting sales, or for test marketing. These models are usually used by businesses that are well established and with technical understanding of sophisticated diffusion models (Mahajan and Muller 1979).

Currently, very complex models that are not suited for the small business entrepreneur are being tested and used extensively in new product planning. For example, models for generating and testing of new product concepts have been studied and proposed by Green and Wind (1975), Pekelman and Sen (1974), and Shaker and Sirivasan (1974). Additionally, the literature is heavily concentrated in the area of pretest market evaluation of new products (Claycamp and Liddy 1969; Silk and Urban 1978; Tauber 1977). With the widespread use of such models for established businesses, alternatives must be generated for the less sophisticated small business entrepreneur that desires the same types of information, but on a smaller scale. Thus, this paper seeks to present alternatives to the highly complex decision moes that are not very practical for the small business entrepreneur.

Specifically, the purpose of this paper is to present a method of estimating consumer demand for a specific new product offering by characterizing market segments of potential users. This method not only uses frequency distributions, a statistical output easily

interpreted by the small business entrepreneur, but also employs canonical correlation, a statistical technique method that may be applicable to small businesses.

The specific objectives of this study are: (1) determine the level of interest of each of the seven proposed services, (2) examine the functional relationship between price (willingness to pay for each service) and level of consumer interest, (3) develop consumer profiles based on level of interest for each of seven services and demographics, and (4) develop marketing strategy for introducing the proposed product, a consumer information service.

The product context is a consumer computerized information service in which patrons may subscribe to any or all of seven services designed to aid in purchasing decision that are made daily. The services are:

- (1) Shopper's Guide - Information on the best buy (i.e., price, brand, location, pertinent attributes) will be given for a wide range of products based on cost and need that are used by a household, excluding groceries.
- (2) Professional Reference - Referral information will be given for approximately 125 services commonly used by consumers. The information will be based on the most qualified professional in their respective field.
- (3) Simple Tax Service - A service that will compute income taxes for those individual who primarily use the short form and who do not have many tax deductions.
- (4) Complex Tax Service - A service that will compute income taxes for those individual who have many transactions during the year that involve income tax consideration.
- (5) Special Dates - This service will be used by those individuals who desire to be reminded of a deadline, appointment, or any special occasion. The person will receive notice of the date 24 hours in advance.
- (6) Classified Listing - Information will be generated by subscribers who wish to seel or buy a product or a service, and will be disseminated only to subscribers of the service.
- (7) Professional Consultation - Advice will be given to consumers by on-staff professional concerning difficult decisions made by consumers in the marketplace (i.e., life insurance, type of automobile, investment plans, etc.)

METHODOLOGY

Data were collected from personal interviews in a large western metropolitan area. Surveys were administered to 240 subjects, of which 225 were

DATA ANALYSIS

usable. The sampling frame for this study were both males and females. The only constraint was that they were members of a household and contributed to purchasing decisions involving the family unit. Respondents were chosen on the basis of age and sex quotas in accordance with the latest census of the area. Surveys were collected from various sections of the metropolitan area in order to obtain a cross-sectional, representative sample.

The questionnaire was designed to encompass three major areas of interest. The first section consisted of variables measuring: (1) level of general interest in a service that detailed information of "best buys" (conceptual), (2) degree of willingness to try new methods that may save the consumer both time and money in their daily consumer decision making (innovativeness), (3) level of interest for each of the seven proposed services. Respondents were asked to indicate how intense their interest was on a seven-point scale ranging from very uninterested to very interested.

The second area of the questionnaire consisted of: (1) categorical measures of "willingness to pay" for each of the seven services, and (2) preference for how the services would be packaged (i.e., individual services only, package only, or the choice of subscribing to individual services or as a package, for subscription.) The questions concerning pricing consisted of three categories. The three categories differed for each service, ranging from \$12-\$25. Responding to the package design question was made by simply choosing the most preferred method of subscribing to the consumer information service. Likewise, respondents were asked which price they would be willing to pay for each of the seven services.

The third and final section consisted of demographic measures. These measures were used to help characterize the segments of potential users based on information that has been predictive in other similar studies of segmenting markets (Bahn 1982).

This paper will present these findings and demonstrate procedures for consumer demand and characterizing segments of potential users and non-users through the use of canonical correlation. This statistical tool is especially desirable for analyzing criterion variables (interest levels of each service) and predictor variables (demographics) where both are sets of assumed continuous measures. Interpretation from the output of canonical correlation may be useful to this small business entrepreneur in determining: (1) number of consumer segments that are interested as well as not interested in the service (as represented by the number of significant canonical roots, and by the signs of the canonical coefficients), and (2) consumers profiles based upon the strength of correlation between level of interest of the services and demographics.

In addition, a series of t-tests were used to determine the difference among means (averages) between levels of interest for each service and its corresponding willingness to pay data. These two analyses should help to delineate: (1) which demographic variables are useful for segmenting those that are interested in the services from those who are not interested, and (2) the prices that should be charged for each of the seven services.

The use of canonical correlation by the small business entrepreneur should be beneficial in that it is relatively easy to interpret the output. Further, the output from canonical correlations will describe market segment of interested consumers from those who are not interested. The market segments will be designed in terms of demographics and price sensitivity, variables that contribute to planning market entry strategy. Thus, the use of canonical correlation and t-tests should enhance the tools already available (i.e., gut feelings, frequency information) to the small business entrepreneur for estimating consumer demand and characterizing market segments of potential users from non-users.

TABLE 1

FREQUENCIES OF INTEREST LEVELS AND SERVICES

Variables	Levels*							Means
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	
General Interest	10%(22)	4%(9)	3%(6)	16%(35)	20%(44)	17%(38)	30%(66)	5.04
General Innovativeness	5%(12)	3%(7)	6%(13)	12%(27)	22%(49)	22%(49)	29%(65)	5.26
Shoppers' Guide	13%(28)	8%(19)	10%(22)	18%(39)	24%(54)	11%(24)	17%(37)	4.31
Professional Reference	14%(32)	10%(23)	9%(21)	13%(20)	18%(41)	16%(37)	19%(42)	4.33
Tax Service-Simple	28%(62)	11%(24)	14%(31)	13%(30)	12%(26)	10%(23)	13%(38)	3.51
Tax Service-Complex	40%(88)	13%(29)	15%(33)	12%(26)	10%(22)	4%(9)	7%(15)	2.78
Special Dates	47%(105)	14%(31)	9%(21)	8%(19)	9%(21)	6%(14)	6%(14)	2.64
Classified Listing	23%(52)	9%(20)	10%(23)	22%(50)	14%(32)	12%(26)	10%(22)	3.69
Professional Consultation	22%(50)	12%(28)	14%(31)	19%(43)	18%(40)	6%(14)	8%(19)	3.50

*1=very uninterested; 2-uninterested; 3=moderately uninterested; 4=neutral; 5=moderately interested; 6=interested; 7=very interested.

FINDINGS

Table 1 presents frequency distributions and means for the variables consisting of general interest, general innovativeness, and the seven proposed services. The services reporting the highest means are professional reference and shopper's guide, while the mean responses for general interest in the concept of the consumer information service, and general innovativeness to new ideas are very positive. Also, if the intervals neutral to very interested (4-7) are summed, then each of the seven services show a more favorable interest level than merely considering their means. This is an important concept for a small business entrepreneur that wishes to capture from 5%-10% of the market. Obviously, there is not a direct link between degree of interest and overt behavior, but interest is still an important variable when investigating behavior. Findings from **Table 1** suggest there is a general interest in each of the seven services with the least interest in special dates and the most interest in professional reference and shopper's guide.

In addition to the results presented in **Table 1**, the following findings are summarized:

- 91% of those people interviewed said that they would pay \$30 for the Shopper's guide.
- 84% of the people said that they would pay \$15 for Professional reference, while 16% said that they would pay \$20 or more.
- Of those people surveyed, 93% would pay \$20 for the simple tax service while 17% said that they would pay \$35 or higher for the complex tax service.
- 88% will pay \$12 for the special dates service, while 21% said that they would pay \$16 or higher for the classified listing.
- 23% of those people interviewed said that they would pay \$35 or greater for professional consultation.
- 64% of the people interviewed said that they wish to have the choice of subscribing to the service as a package or as individual services.
- There were 126 males (56%) and 99 females (44%) interviewed.
- 76% were married, and 81% had between 0-3 children.
- 66% of the people interviewed consider their background to be urban, while 68% own their home.
- 42% have a high school education or below, while 32% have some college, 20% are college graduates, and 5% have graduate degrees.
- Occupational status was below the national average (mean 71), the mean for this sample was 69. 51 people were categorized as 66 (e.g., salesman, housewife, student, wholesaler, retired).
- Age categories were devised by the latest census data and produced an evenly distributed sample according to percent of each category (the categories were: 18-24, 25-34, 35-44, 45-54, 55-64, 65+).

- 37% read news magazines, 45% read Reader's Digest, 6% read Playboy, 6% read glamour magazines, and 20% read family home magazines.
- Easy listening music is the most popular (31%), followed by contemporary popular (27%), and western (20%).
- 17% of those people surveyed do not read the newspaper, while 25% read for 30 minutes, and 11% read for 60 minutes.
- The average income for this sample is \$17,500, with 20% having an income in the range of \$20,000 to \$24,999.

The purpose of collecting these data (represented as percentages from frequency distributions) gives the small business entrepreneur immediate interpretable outcomes describing: (1) those people interested in the proposed concept and services, (2) demographic information pertinent to strategy planning, and (3) number of people willing to pay for these services.

Table 2 presents t-test results for the difference of means between the categorical variable, willingness to pay, with respect to the interest levels of the individual services, a set of continuous variables. Seven individual t-tests were performed producing four of seven variables significant at the .05 level. This table reports whether price charged for a specific service is a determining factor for degree of interest. The following variables were significant and do demonstrate that price (operationally defined as willingness to pay) contributes to levels of interest; shopper's guide, simple tax service, special dates, and classified listing. When comparing the results from **Table 1** and **Table 2**, it is noted that some services become more attractive to a segment of the market based on price that this segment is willing to pay.

Table 3 depicts the results of the canonical correlations between general interest, general innovativeness, and level of interest for each of the seven services with demographic measures. There were two significant roots extracted from the analysis which represents as many as four different market segments. Using an arbitrary cutoff point of .30 or greater, which represents strength of correlation, root 1 produced 10 variables of importance, while root 2 produced 7 variables of importance for characterizing market segments.

DISCUSSION

Conclusions will be directly related to the specific objectives of this study. The first objective of this study was to estimate the level of interest for each of the seven services as it pertains to consumer demand; this will be accomplished by: (1) interpreting the general frequencies, and (2) examining the t-test results.

After careful consideration of the data reported in **Table 1**, the most enlightening outcome is that people that were surveyed are first, moderately interested in trying new methods that will save them time and money. Second, they are interested in the concept of this new product offering. Third, professional reference, shopper's guide, and classified listing have the highest levels of interest, with special dates having the lowest level of interest. Yet, if categories 4-7 (interest levels) are considered, then the shopper's guide, professional reference,

TABLE 2

DIFFERENCE OF MEANS BETWEEN LEVEL OF INTEREST AND WILLINGNESS TO PAY

Variables	Means*		Significance
	Group 1**	Group 2	
Shoppers' Guide	4.87 (143)	5.71 (14)	.020
Professional Reference	4.84 (128)	5.54 (24)	.055
Tax Service-Simple	4.22 (127)	4.90 (10)	.330
Tax Service-Complex	3.12 (108)	4.27 (22)	.019
Special Dates	3.03 (120)	5.06 (16)	.000
Classified Listing	4.10 (116)	5.13 (30)	.006
Professional Consultation	4.09 (111)	4.53 (32)	.259

*Means = level of interest for the specific services range 1 to 7.

**Group 1 = Shoppers' Guide, 30; Group 2 = \$35-\$40

Group 1 = Professional Reference, 15; Group 2 = \$20-\$25

Group 1 = Tax Service-Simple, \$20; Group 2 = \$25-\$30

Group 1 = Tax Service-Complex, \$30; Group 2 = \$35-\$40

Group 1 = Special Dates, \$12; Group 2 = \$16-\$20

Group 1 = Classified Listing, \$12; Group 2 = \$16-\$20

Group 1 = Professional Consultation, \$25; Group 2 = \$35-\$45

TABLE 3

CANONICAL CORRELATIONS BETWEEN SERVICES AND DEMOGRAPHICS

Variables	Canonical Loadings	
	Root I	Root II
General Interest	.17	-.21
General Innovativeness	-.52	.01
Shoppers' Guide	.75	.06
Professional Reference	-.70	.16
Tax Service-Simple	-.35	-.67
Tax Service-Complex	.06	.52
Special Dates	.24	.52
Classified Listing	-.39	.28
Professional Consultation	.02	.90
<u>Predictor Set</u>		
Gender (Female=1; Male=2)	-.26	.08
Marital Status (Single=1; Married =2)	-.13	-.31
Number of Children (0-1-1;2-3=2;4-6=3;6+=4)	.10	-.10
Background (Rural=1; Urban=2)	-.21	-.05
Housing (Own=1; Rent=2)	.32	-.06
Education (High School=1; Some College=2; College Grad=3;Masters/Ph.D.=4)	.26	-.02
SES (1973 NORC Occupational Prestige Scale)	.55	.62
Age	.55	-.22
News Magazines	.06	.25
Reader's Digest	-.32	-.37
Playboy	-.12	.14
Glamour Magazine	.11	.29
Women's Magazines	-.05	.18
Radio Programming (Rock=1; Contemporary=2; Talk Shows=3; Easy Listening=4; Country Western=5)	-.23	.15
Nespaper Readership	-.21	.26
Income (Under 7,000=1' 7-9,000=2; 10-14,999=3; 15-19,999=4; 20-24,999=5; 25-29,999=6; 30-34,999=7; 35+=8)	-.10	-.43

classified listing, and professional consultation have over 50% of the respondents in the range from neutral to very interested. These percentages of interest levels would certainly be indicative of a viable market given that marketing strategies be created to transform interest to overt behavior.

When **Table 2** is considered, those people that were interested in the complex tax service are willing to pay \$35 and above, while those people who were interested in special dates are willing to pay \$16 or above. The same is true of classified listing, those showing a relatively moderate interest are willing to pay \$16 or above. Even though this segment is relatively small, findings suggest that degree of interest was higher for those people willing to pay more. This indicates to the small business entrepreneur that given a specific price (higher), there is a market segment that may be very interested in the new product offering. These findings also suggest that different pricing strategies be considered.

The major conclusion is that, each of the services are warranted, some received higher interest levels than others. The results from these two analyses suggests that all services be offered in the marketplace, realizing that patrons will probably subscribe to individual services, in which they are most interested based upon a priority structure that is attractive to them.

The second objective of this study was to determine the amount that consumers are willing to pay for each service. Again, this objective will be analyzed by examining the data presented in **Table 2** as well as the frequency data for pricing of the services. This data will help the small business entrepreneur forecast sales which in turn will contribute to his understanding of potential success in the marketplace. One caveat should be offered at this point, namely, that frequency of failure to answer these questions are interpreted as: (1) not enough interest to pay for the service, (2) that they would pay less than was indicated by the categories, and (3) that they choose not to think about the pricing question. Each of these alternatives is certainly a possible outcome.

The shoppers' guide had 91% who said that they would be willing to pay \$30; professional reference had 14% say that they would pay \$20; tax service-simple, 93% would pay \$20; tax service-complex, 17% said that they would pay \$35 and above; special dates, 12% said that they would pay \$16 and above; classified listing, 21% said that they would pay \$16 and above, and 23% said that they would pay \$35 and above. This information is of practical use to the small business entrepreneur when planning pricing strategy for entering the marketplace.

Based on this data, the data from **Table 2**, and projected break-even dollars for each service, the following prices should be:

Shopper's Guide	\$32.50
-Professional Reference	\$20.00
Tax Service-Simple	\$20.00
Tax Service-Complex	\$37.50
Special Dates	\$16.00
Classified Listing	\$18.00
Professional Consultation	\$40.00

The third major area of concern is developing consumer profiles based on the correlations between level of interest and demographics. One must remember

that when interpreting canonical correlation, the signs are arbitrary and indicate different market segments (**Table 3**). Therefore, four different market segments can be distinguished by the two significant roots that were extracted from the analysis. Root 1 - Those people that are interested in the shopper's guide are male, own their home, have fairly high occupational ratings, read Reader's Digest, and are older. Another segment are those people who are female, do not read Reader's Digest, are not very willing to change (innovativeness) and they have a very low interest in the following services; professional reference, simple tax service, and classified listing. Root 2 - Those consumers who are very interested in the complex tax service, and professional consultation are married, high occupational status, and read Reader's Digest, while those people who are single, don't read Reader's Digest, and have a low income are not very interested in the simple tax service.

Generally, the target market appears to be those individuals, above average in occupational status who are older males, that own their homes, of better than average income, have an interest in the shopper's guide, professional reference, complex tax service, classified listing, and professional consultation. In addition to having a high interest in the preceding services, the target market appears to be willing to adopt new products that enter the market place.

If the market segments described by the use of canonical correlation are viable, and they appear to be, then this method of analyzing potential users from non-users of new product offerings, may be an alternative that small business entrepreneurs should consider. Moreover, strategy for aiming promotion at specific segments is readily interpretable from canonical correlation.

Canonical correlation does a good job of matching market segments as described by demographics with likely interest levels of new product offerings. However, this model of market segment delineation appears to be indicative of qualitatively describing potential users, rather than a precise method of estimating demand. Therefore, the use of canonical correlation should be a tool that is used in conjunction with statistical techniques currently being used by small business entrepreneurs to analyze consumer demand of new innovations.

SUMMARY

This study looked at the feasibility of using alternative analytical tools for estimating consumer demand for a new product being introduced in the marketplace. The product is designed to bridge the information gap between consumers and merchants, by providing consumers with the most complete information possible. This information base will help in daily consumer decision making.

Generally, the interest level for each of the seven services was moderately high, which can be considered favorable for introducing this consumer information service. The rationale for this conclusion is based on the fact that individuals who were surveyed had very little information on which to base their interest for the services. The outcomes were expressed as a positive interest in the concept as well as the individual services.

The analysis using canonical correlation produced two significant roots, which can be viewed as four

separate market segments. These four segments would be the focus of most promotional activity designed to build awareness of this new innovation in the marketplace. This analysis, in conjunction with the frequency distributions, and t-test provide small business entrepreneurs with tools that are compatible and descriptive of consumer reactions to a new product.

Future research should look more closely at alternative statistical tools for small business entrepreneurs when estimating consumer demand for new products. Specifically future research should investigate levels of understanding of these suggested tools for estimating consumer demand with small business managers. There is a need for the small business manager to have access to such techniques to aid in their strategy planning for new offerings in the marketplace.

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AWARENESS, USAGE, AND PERCEPTION OF SMALL BUSINESS
ADMINISTRATION'S COUNSELING PROGRAMS

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Abstract

Small Business play a vital role in the economic well being of the U.S. To assist small business owners/operators, federal government passed the Small Business Act in 1953. Passage of this act was responsible for the creation of the U.S. Small Business Administration (SBA). One of the major areas of assistance to the small business owners/operators provided by the SBA is management and technical assistance. Under this program, the SBA provides both in-house and outside counseling. The in-house counseling to small business owners/operators is provided by the management assistance staff (MAS), and the outside counseling by the SCORE/ACE counselors and the Small Business Institute (SBI). Awareness plays an extremely important role in the usage of the counseling services provided by the SBA. This study was, therefore, designed to determine primarily the awareness, usage, and perception of the counseling programs and the areas in which they were used. Analysis of the data provided by 86 small businesses located in Michigan revealed that the awareness was "poor." Perception of the counseling programs was rated as "about average", and most had "never used" the available services. Counseling was mostly received in the areas of accounting, finance, marketing, and marketing research. Any attempt by the SBA to reorganize the counseling programs must investigate the reasons for not using the programs. Based on the results of such an investigation, corrective steps must be taken to design and deliver effective counseling.

Introduction

Free enterprise economy of the U.S. is dominated by large corporations. Between 1950-72 total assets held by 100 largest of the firms increased from 39.7 percent to 47.6 percent. "According to James M. Folsom, of the FTC, mergers were directly responsible for this increase. This means that many small businesses were swallowed up by larger firms or else found it impossible to compete in markets that came under the increasing dominance of economically stronger larger firms" [SBA 1978 Annual Report, p. 4]. In spite of this changing scene in the U.S. small business environment, it is surprising to note that the small businesses account for more than 50 percent of all private employment, 43 percent of the gross national product (GNP) and over one-half of all inventions [President Carter]. To further aggravate the problem of competition between big and small businesses, inflation also takes a toll on small business. "Dun & Bradstreet figures offer more evidence of the damage. More than 5,500 companies, mostly small, have failed in this recession, and at a rate more than 14 percent above the rate in the early part of the 1973-75 recession" [Nag].

Recognizing the importance of small businesses in providing employment in the private sector, and contribution to GNP and inventions, federal government passed the Small Business Act in 1953. The primary objective of this legislation was to slow down the growing concentration of big businesses by assisting the small ones. Passage of this act was responsible for the

creation of an administration unit, which is familiarly known to the small owners/operators and the academic community as the U.S. Small Business Administration (SBA). The three major areas of assistance to the small business owner/operator provided by the SBA are: (1) financial assistance; (2) management and technical assistance; and (3) assisting in processing government contracts.

Ever increasing interest in the welfare of the small businesses led to the passage of a bill by the U.S. Congress in 1947 providing for the employment of a full-time advocate of small business [Baumbach and Lawyer, p. 33]. Continued concern over the status of small businesses was reflected in the "White House Conference on Small Business," held during January 1980. This conference was preceded by "Regional Conferences" and "Open Forums" in all 50 states. Areas of concern discussed during the conference were: (1) capital formation and retention; (2) relief from government regulations; (3) innovation and productivity; (4) minority business development; (5) equal access to justice; and (6) government reform. The conference seems to have either overlooked or ignored counseling programs essential for organizing and successfully operating small businesses.

One of the major areas of assistance provided by the SBA to the small business owners/operators emphasizes management and technical assistance. The Office of Management Assistance is responsible for offering management and technical assistance or counseling to small businesses. Counseling programs provided to most small businesses may be grouped under three major categories: (1) Management Assistance, in-house counseling by SBA staff member (MAS); (2) Service Corps of Retired Executives (SCORE)/Active Corps of Executives (ACE); and the Small Business Institute (SBI).

The MAS counseling consists of helping the potential borrower in doing the needed paper-work and assessing the viability of the proposed/existing business/business plan(s). The SCORE/ACE counseling involves individuals with substantial business experience and academic background. Individuals belonging to the SCORE/ACE groups provide voluntary service, and cost nothing to the small business owner/operator or potential borrower. The SBI provides counseling to the small business owner/operator at no cost. Since the SBI program uses students supervised by qualified university faculty members, the benefit is mutual. Students involved in the counseling program learn the practical aspects of operating business and the small business owner/operator gets free counseling. Popularity of these programs can be evidenced by the number of individuals and universities involved in counseling. The combined membership of SCORE and ACE in the U.S. is estimated at 8,650 and the number of chapters is now in excess of 340 [SCORE/ACE, p.2]. The number of universities participating in the SBI was 460 during 1978. Available data show that the MAS provided face-to face counseling to over 210,543 small firms during 1978. Number of cases handled by the SBIs increased from 8,000 in 1977 to 8,600 in 1978. The Score and ACE counseling program is also expanding at a rapid rate and the volunteers provided services to 43 percent more small businesses in 1978 compared to 1977 [SBA 1978

Annual Report, pp. 1, 15].

It is vital to recognize, that although counseling programs are expanding and offering services to more businesses, very little or no effort has been made by the SBA to assess the perception and effectiveness of the programs. According to the information available to the author, only one study, a study conducted by the Rockville Counseling Group, Inc., investigated the SBA client activities for the years 1973-78. The major objective of the study was to measure the effectiveness of counseling and training programs, including their impact on small business participants. Results of the study indicated that all of the SBA Counseling programs--MAS, SCORE/ACE, and SBI are good for experienced business people [Highlight Report, pp. 1-12].

Problem Statement and Objectives

The only study made to date by Rockville Consulting Group, Inc., at the request of the SBA concentrated on measuring the effectiveness of counseling programs. According to the information available to the author no study seems to have been made to determine the awareness, usage, and perception of the counseling programs. This study was, therefore, designed primarily to determine: (1) whether the small business owners/operators were aware of the counseling programs, frequency of usage, and the areas in which counseling services were used; (2) perception of the MAS, SCORE/ACE, and SBI programs; (3) demographic, socioeconomic, and geographic characteristics of the owners/operators and the business; and (4) to determine relationship between usage and the demographic and socioeconomic characteristics of owners/operators and the business.

Research Procedure

A six-page questionnaire was used to gather data needed to accomplish the objectives of the study. Questions used in the study were related to awareness of the counseling programs, frequency of usage, areas in which the counseling services were used, and demographic, socioeconomic, and geographic characteristics of the owner/operator and the business. Questions on the demographic and social characteristics of owner/operator were: sex, age, education, number of years in business, and the number of years in the present business. The geographic variable was included in the questionnaire to determine the proximity of the business owner/operator to the SBA office and the SCORE/ACE counselors. It is reasonable to assume that the closer the owner/operator, the greater the opportunities to use the available services. Questions on demographic and economic characteristics were intended to ascertain type of business and annual business volume. To determine the perception of counseling programs several attitudinal statements were included in the questionnaire.

Business Loan Approved Listing in the U.S. Small Business Administration 1978 Annual Report was used to select 300 businesses located in Michigan at random. Each of the 300 randomly selected businesses were contacted by phone to inform that they will be getting a questionnaire on counseling programs, and were requested to complete the questionnaire and return it at their earliest convenience. Furthermore, the correct address of the business and the name of the person to whom the questionnaire was to be mailed was also obtained.

Following the telephone conversation a total of 300 questionnaires along with a letter requesting respon-

dent's cooperation and a self-addressed envelope were mailed during May-June, 1980. A total of 86 responses representing approximately 29 percent response rate were received during July 1980. Data provided by the small business owners/operators were coded, tabulated, and analyzed.

Findings

Awareness, Frequency of Usage, and the Area in which Counseling Received

If small business owners/operators were to use the counseling services provided by the SBA, he/she must have a knowledge of the counseling programs available. It is reasonable to expect that everyone who has gone through the SBA office for a business loan must be aware of the MAS. Consequently, questions pertaining to awareness of SCORE/ACE and SBI student counselors were asked. Responses to the SCORE/ACE and SBI counseling programs were provided by 81 and 79 businesses, respectively. Of this number, 10 businesses representing 12 percent of the response were aware of the SCORE/ACE counseling programs, but had never used the services. Only 6 businesses, representing approximately 8 percent of the response had heard about SBI student counseling, but had never used it. These results show that awareness of the two counseling programs is poor, and even those that are aware do not make use of them.

Given that every small business owner/operator is aware of the counseling programs, it is interesting to determine the frequency of usage of the service available at no cost to the business. To determine the frequency of usage, a question was asked for each of the three counseling programs. Respondents answering the question on frequency of usage were as follows: (1) MAS, 81; (2) SCORE/ACE, 81; (3) SBI, 79. Frequency of usage for each program was as follows.

1. MAS--never used, 78 percent; used only once, 17 percent; used more than once, 5 percent.
2. SCORE/ACE--never used, 74 percent; used only once, 17 percent; used more than once, 9 percent.
3. SBI--never used, 81 percent; used only once, 13 percent; used more than once, 6 percent.

Responses to frequency of usage show that only a small number of businesses use the services available to them at no cost. Reasons for such a poor pattern should be looked into and corrective steps must be taken, if needed, to deliver the available services to the small business owner/operator in a more effective manner by reorganizing the counseling programs.

Not only the frequency of usage plays an important role in designing and delivering counseling programs but also the area in which the assistance should be provided is equally important. To ascertain the area in which the assistance is needed most, a question was asked. Responses to the question are presented in [table 1](#).

It can be seen in [table 1](#) that most received counseling services in the area of accounting, finance, marketing, and marketing research. It may, therefore, be necessary to concentrate SBA's efforts in providing counseling in these areas.

TABLE 1
AREAS IN WHICH THE COUNSELING WAS RECEIVED

Area	MAS	SCORE/ ACE	SBI
		(percent)	
Accounting/finance	37	43	74
Marketing/marketing research	37	43	26
Office/plant management	10	-	-
Other	16	14	-
Total	100	100	100
	n=19	n=14	n=23

n=Number of responses

Perception of Counseling Programs

Individuals and organizations providing services should know how the recipients perceive the services provided. To measure perception of the SBA's counseling programs several attitudinal statements were included in the questionnaire. The respondents were to check one of the five responses ranging from "outstanding" to "poor" to express how they perceived the services provided by the MAS and SCORE/ACE counselors. Perception of the services provided indicated by checking the items is shown in [table 2](#).

Data related to the perception of the MAS and SCORE/ACE counselors by small business owner/operator reflects that those responding to attitudinal statements perceive them as "about average". Any effort on the part of the SBA to recognize the counseling programs must carefully consider the qualification/experience of the individuals involved in counseling programs.

Question on perception was further extended to determine what the small business owners/operators perceived as important in the SCORE/ACE counselors. Results of responses given are shown in [table 3](#).

Data presented in [table 3](#) indicates that although a small number of owners/operators answered the question, the majority stated that the SCORE/ACE counselors were "not lacking" in factors perceived as important.

Two questions were asked to assess how the owners/operators perceived the SBI program in relation to SCORE/ACE counseling. When asked how the individual rated the SBI program supervised by university faculty members, 18 responded. The following breakdown provides an analysis of the responses: (1) excellent, 5; (2) very good, 3; (3) good, 5; (4) fair, 1; and (5) poor, 4. Arithmetic mean of the rating was 2.78. This indicates that most owners/operators of small businesses perceived SBI programs as "good".

Question on comparison of SCORE/ACE and SBI programs was answered by 10 businesses. Analysis of the responses about the effectiveness of SBI counseling relative to SCORE/ACE resulted in the following breakdown: (1) much more effective, 2; (2) somewhat more effective, 3; (3) about the same, 1; (4) somewhat less effective, 1; and (5) much less effective, 3. Arithmetic mean of the rating which was 3.00 shows that the respondents perceived both the SBI and SCORE/ACE counseling programs "about the same".

Demographic, Social, and Geographic Characteristics of Owner/Operator

Knowledge regarding the demographic, social, and geographic characteristic of the small business owner/operator is essential to formulate and implement counseling strategies to better serve the clientele. Questions on the age, sex, education, number of years in business and the present business, and the proximity to the SBA office and SCORE/ACE counselors were, therefore, included in the questionnaire.

Responses to the question on sex were provided by 78 individuals. Of this number, 69 or approximately 88 percent were male, and the rest, accounting for 9 or 12 percent were female. This reflects the need for developing more aggressive policies to attract more women into small business.

Seventy-eight entrepreneurs provided answers to the question on age. Analysis of the data on the basis of age groups resulted in the following breakdown: (1) 25-34 years, 14 percent; (2) 35-44 years, 42 percent; (3) 45-54 years, 31 percent; and (4) 55 years/over, 13 percent. Results related to the age show that the majority of small business owners/operators, representing approximately 73 percent of the responses, fall into the "middle age" group.

Answers to the question on educational level were given by 79. The following represents a breakdown of the data pertaining to educational level: (1) some highschool, 4 percent; (2) highschool graduate, 21 percent; (3) some college, 32 percent; (4) college graduate, 21 percent; (5) postgraduate, 14 percent; and (6) vocational training, 8 percent. Results on education reveals that approximately 88 percent were highschool and college educated.

When asked about the number of years in business, and the business owned/operated at the time of this study a total of 79 and 78 responses, respectively, were obtained. Analysis of the responses resulted in the following breakdown: Years in business--(1) 5 years/less, 32 percent; (2) 6 to 10 years, 24 percent; and (3) 11 years/over, 54 percent. Years in the business owned/operated at the time of this study--(1) 5 years/less, 49 percent; (2) 6 to 10 years, 20 percent; and (3) 11 years/over, 31 percent. This indicated that the majority of small business owners/operators were in business for over 5 years.

Proximity to the SBA office and SCORE/ACE counselors to the clients to be served may be important in using the counseling services available. Two questions were, therefore, included in the questionnaire to determine how far the small business owners/operators lived from the SBA office and the SCORE/ACE counselors. Answers to the questions on the distance between SBA office and the SCORE/ACE counselors was provided by 55 and 37 individuals, respectively. Breakdown of the distance between the respondents and SBA office and SCORE/ACE counselors was as follows.

Distance between SBA office and respondent--
(1) 50 miles/less, 65 percent; (2) 50 to 99 miles, 12 percent; (3) 100 to 149 miles, 10 percent; and (4) 150 miles/over, 13 percent.

Distance between SCORE/ACE counselors and respondent--
(1) 50 miles/less, 57 percent; (2) 50 to 99 miles, 16 percent; (3) 100 to 149 miles, 5 percent; and (4) 150 miles/over, 22 percent.

TABLE 2
PERCEPTION OF THE SERVICES PROVIDED BY THE MAS AND SCORE/ACE COUNSELORS

Statement	MAS					SCORE/ACE						
	OS	VG	AA	BA	P	MR	OS	VG	AA	BA	P	MR
1. Knowledge of federal and state regulations	3	8	11	2	4	2.80	3	6	9	2	1	2.62
2. Business knowledge in general	2	9	7	5	5	3.07	2	9	7	1	1	2.50
3. Assistance in planning for successful operation of the business	2	12	6	2	8	3.07	1	7	11	1	1	2.71
4. Personal touch	5	6	12	4	3	2.80	1	10	8	3	-	2.59
5. Counselor's rating	2	10	12	-	6	2.93	3	9	9	-	1	2.41

OS=outstanding; VG=very good; AA=about average; BA=below average; p=poor; MR=mean rating.

TABLE 3
FACTORS PERCEIVED AS IMPORTANT BUT WERE LACKING IN SCORE/ACE COUNSELING

Factor perceived as important	Not important	Not lacking	Somewhat lacking	Noticeably lacking
Interest	-	10	-	1
Availability	-	9	1	1
Concern	-	8	2	-
Knowledge of my business	-	5	4	2
Business knowledge in general	-	6	2	3
Friendliness	-	9	1	-
Good organization	-	7	2	-

Results of the analysis revealed that the majority lived within a couple of hours drive from the SBA office and SCORE/ACE counselors. It is reasonable, therefore, to conclude that distance did not act as a deterrent in using the counseling programs.

Type of Business Operated and Annual Business Volume

Type of business owned/operated by the entrepreneurs was classified into four categories. A total of 79 individuals answered the question and the following represents a breakdown of the type of business: (1) retailing, 40 percent; (2) wholesaling, 6 percent; (3) manufacturing/processing, 22 percent; and (4) service industries, 32 percent. These figures reveal that the majority of small businesses are in the area of retailing, service, and manufacturing/processing.

Responses to the question on annual business volume were provided by 79 individuals. Distribution of annual business volume was as follows: (1) less than \$500,000, 51 percent; (2) \$500,000 to \$1000,000, 18 percent; and (3) \$1000,000/over, 31 percent. This shows that more than two-thirds of the small businesses grossed less than \$1000,000 annually, with the majority grossing less than \$500,000.

Relationship between usage of counseling programs and the demographic and socioeconomic characteristics of small business owners/operators and businesses is presented in [table 4](#).

Data presented in [table 4](#) indicate clearly that the majority of small business owners/operators have "never used" the counseling services provided by the MAS, SCORE/ACE, and SBI. This may be attributed to the fact that most small business owners/operators perceive the counseling programs as "about average". It is important, therefore, the SBA concentrate its effort in improving the "Quality" of the programs rather than increasing the "Quantity" by adding more SCORE/ACE counselors and more schools for the SBI program. Individuals with academic background and experience in the area of accounting, finance, marketing, and marketing research may be able to provide better service to the owner/operator and thus improve the "quality". This may induce small business owners/operators to make use of the programs more effectively.

Summary and Conclusion

One of the basic functions of the SBA is to provide counseling services to the small business owners/operators. The SBA offers three major counseling programs--MAS, SCORE/ACE, and SBI. Effectiveness of any counseling program depends upon how the recipients perceive the program and the individuals providing the service. This study was, therefore, designed primarily to investigate the awareness, frequency of usage, and perception of the three SBA counseling programs. Responses provided by 86 small business owners/operators revealed that the majority "never used" the counseling programs and perceived them as "about average". Analysis of the demographic and socioeconomic variables showed that most small business owners/operators were men, belonged to 35-54 age group, had high-school or better education, were in business for 10 years or less, lived within a distance of less than two hours drive from the SBA office and SCORE/ACE counselors, operated retailing, service, and manufacturing/processing business, and had an annual business volume of less than \$1000,000.

Available data show that the counseling programs are expanding, whereas the results of this study show that the programs are "never used" by many. This may be due to the apathetic attitude of the small business owners/operators toward the counseling programs. It is suggested, therefore, that the SBA look seriously into the reasons for not using the available programs and take corrective action.

TABLE 4
 USAGE OF COUNSELING PROGRAMS AND THE DEMOGRAPHIC AND SOCIOECONOMIC CHARACTERISTICS OF OWNERS/
 OPERATORS AND BUSINESS

Variable	MAS			SCORE/ACE			SBI		
	NU	UO	UMO	NU	UO	UMO	NU	UO	UMO
Sex:									
Males	54	12	2	50	12	5	57	8	2
Females	6	1	2	7	-	2	4	2	2
		$\alpha=0.05$					$\alpha=0.03$		
Age:									
25-34 years	10	1	-	10	1	-	9	2	-
35-44 years	23	8	3	18	9	6	26	5	2
45-54 years	19	3	1	19	2	1	19	3	-
55 years/over	8	1	1	10	-	-	7	-	2
Education:									
Some highschool	3	-	-	2	-	1	3	-	-
Highschool grad./some college	33	7	1	31	7	2	32	4	3
College grad./post grad	21	5	2	21	5	2	21	6	1
Vocational training	4	1	1	4	-	2	6	-	-
Years in business:									
5 years/less	22	5	2	18	6	4	18	7	2
6-11 years	14	4	1	14	3	2	17	1	1
Over 11 years	28	5	1	29	4	1	30	2	1
		$\alpha=0.91$				$\alpha=0.64$		$\alpha=0.13$	
Years in present business:									
5 years/less	33	7	2	29	7	6	30	7	3
6-11 years	13	3	-	11	4	1	15	1	-
Over 11 years	18	4	2	21	2	-	20	2	1
Type of business									
Retailing	28	7	-	23	6	3	25	5	1
Wholesaling	6	-	-	5	-	-	4	-	1
Mfg./processing	21	4	3	12	2	2	12	1	1
Service	5	2	1	17	6	2	21	4	1
Annual business volume:									
Less than \$500,000	35	11	3	36	6	5	36	7	3
\$500,000-\$1000,000	11	-	1	9	1	2	12	-	-
Over \$1000,000	18	3	-	16	6	-	17	3	1

NU=never used; UO=used once; UMO=used more than once
 α =probability at which estimated χ^2 was significant.

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SMALL BUSINESS EXPORT STRATEGIES

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Abstract

This paper examines the information sources and strategies used by a group of small companies to determine and expand their export markets. The average firm used three different sources of information, with satisfaction levels of twenty-five to ninety-one percent. Respondents also gave their perceptions of six marketing mix variables with respect to enhancing their success in exporting. Product quality was felt to be most important and advertising least important.

Introduction

The 1970's brought international awareness to many U.S. firms. Thousands of companies who had never sold overseas found profitable markets for their goods. Expanding sales, often at a time when domestic markets were slow, caused many firms to put increasing emphasis on their export operations. In addition to these positive aspects of foreign trade, many firms were sharply brought international reality. They found themselves at competitive disadvantages due to increasing competition at home and abroad. Balance of trade deficits averaging twenty-six billion dollars annually for the past several years have caused increasing economic problems for the country and companies alike. (U.S. News, 1980)

Most small businesses have not been aware either of the international competition or the need to expand their markets to foreign lands. They see no reason to look abroad when the United States offers such a huge backyard market. However, with more and more foreign companies competing in the U.S., many small domestic firms could find their home markets threatened. In that event, a business would be in a stronger position with a foothold in, or at least familiarity with, the world of international trade. (Halbrooks, 1979)

While the benefits accruing from international activity might be great, there are many problems associated with it, especially to smaller firms. A recent study by the International Trade Committee of the Smaller Business Association of New England listed twenty-eight real and potential barriers to exporting. (Halbrooks, 1979) Among the top problems were those dealing with obtaining information on potential markets and the strategies that could be used to sell to these markets. These are problems that companies must overcome to successfully compete in the international market.

This paper presents the results of a survey of small exporters, the information sources they use and the marketing facets they found to be most crucial to export success. It is hoped that seeing the market sources that other small businesses use and examining strategies they take will aid those businesses who have the potential to export but who are not currently doing so.

Methodology

As part of a broad study on export interests and activities, questionnaires were sent to a random sample of 360 exporting companies in Ohio with total annual revenue of less than ten million dollars. Sixty-one completed questionnaires were received, of which fifty-

eight were useable. The questions asked the respondents to indicate the various sources they used to learn about new foreign market opportunities, how useful they felt the sources were, in what level of international markets they sold, and their perceptions of the relative importance of the various marketing variables in selling their products.

Because of budget limitations and sponsorship of the survey, only firms in Ohio were included. However, since the emphasis of the survey was not on statistical analysis of industries or geographic differences, but instead on an examination of information sources and strategies, it is not felt that this sample limitation should hinder other companies from finding the results useful to their own export planning.

The respondents did represent a wide variety of small businesses in terms of size, level of international activity and industry. They ranged in size from annual sales less than fifty thousand dollars to just under ten million dollars. Exports were from one percent to over fifty percent of their annual sales. **Table 1** shows the size distribution of the respondents and average level of exports for each category.

TABLE 1
SIZE OF RESPONDENTS' FIRMS AND
THEIR EXPORT ACTIVITY

Size of Firm (Annual Sales)	% of Respondents	Average % of Sales Exported
Less Than One-Half Million Dollars	17.2	12.2
One-Half to One Million Dollars	13.8	17.9
One to Three Million Dollars	24.1	20.7
Three to Five Million Dollars	17.2	13.5
Five to Ten Million Dollars	27.6	20.5

Even though the survey was limited in geographic scope, the firms responding corresponded to the overall U.S. export trade mix very closely. **Table 2** shows the types of products represented by the sample compared to the 1980 exports as found in the U.S. Department of Commerce's F.T. 410. The sample had more companies exporting machines and other industrial goods and fewer in the consumer goods categories. Other than these slight differences, the mix is quite similar to U.S. exports.

TABLE 2
U.S. EXPORTED GOODS COMPARED TO RESPONDENTS

	% U.S. Exports (Exclud. Military & Agricultural)*	% of Respondents
Raw Materials, Com- ponents & Supplies	28.3	27.0
Machinery	45.6	51.4
Other Manufactured Goods	20.2	16.2
Services & Misc. Goods	5.9	5.4
	100.0	100.0

*FT 410, U.S. Exports-Schedule E Commodity by Country (U.S. Department of Commerce, 1980).

Sources of Market Information

Respondents were asked to indicate which sources of information they used to learn of new export market opportunities and how useful they felt each source was to them. Seven sources were given on the questionnaire along with a blank space for sources not listed. The average firm used just under three different sources for information. The most commonly used source of information was overseas dealers, with two-thirds of the respondents indicating usage. Government agencies were the second most used source, with fifty-five percent of the respondents indicating usage. These were the only two sources used by over half of the respondents.

There was a considerable difference in the feeling of quality towards the information received from these two sources, however. Eighty-seven percent of those using overseas dealers felt the information they received was very useful or useful. Positive comments included ones on the dealers' intimate knowledge of the market place, feedback on customer reactions, and help with communications. The only negative ones dealt with some dealers' unwillingness to handle new products and/or expand to new markets.

Only twenty-five percent of those using government information felt it very useful or useful. The biggest criticisms of the information were its lack of timeliness, difficulty in finding the correct agency or source, and erratic support (i.e., changes in government efforts and personnel turnover). There were some very positive aspects mentioned. These included the government's new computerized information service, the area desks at the Department of Commerce, and government conducted feasibility studies.

Thirty-eight percent of the respondents used trade publications as a source of market information. Most of them (sixty-four percent) felt they were useful. Positive aspects included low cost and concentration on their industries. Negative features mentioned were lack of timeliness and overly optimistic outlooks.

Field sales personnel and domestic agents were both used by twenty-four percent of the respondents. In each case, a very high percent of those using them (eighty-six percent), felt they were useful. The direct interaction with the market (or foreign contacts in the case of domestic agents) and quick response seemed to be strong points. The only negative aspect mentioned was to be sure a well established domestic agent was used or many foreign opportunities could be missed.

Banks and export newsletters were used by nineteen and fourteen percent of the respondents respectively. About one in four users of each felt they were useful as sources of market information. Both suffered from the same drawbacks of being too general in nature and not being timely enough--according to respondent comments. Some respondents indicated that banks and newsletters were much better sources of other types of information and help. Banks especially were mentioned as providing export procedure information.

Several other sources of market information were indicated, including current customers, trade shows, personal visits, university Small Business Institutes, university graduate classes in international business, private research firms, and local world trade organizations. As might be expected since these were given by the respondents, they received very high marks for usefulness. **Table 3** gives a summary of the information

sources used and the percent feeling each source useful.

TABLE 3
USE OF FOREIGN MARKET INFORMATION SOURCES

	% of Respond. Using	% Felt Source Very Useful or Useful
Overseas Dealers	66	87
Government Agencies	55	25
Trade Publications	38	64
Field Sales Personnel	24	86
Domestic Agents	24	86
Banks	19	27
Export Newsletters	14	25
Other Sources	38	92

Product-Market Strategies

The next area of questionnaire dealt with the types of markets in which the respondents sold and what product changes, if any, were needed to sell there. As might be expected, the majority of the respondents sold to markets most similar to the United States. Almost ninety-seven percent of the respondents sold to industrialized countries. Of those, seven out of eight sold the same product abroad that they sold domestically, without any changes. A little over five percent of the respondents sell more advanced versions of their products in these markets and five percent indicated that changes depended on the specific product (i.e., electrical current, metric measurements, etc.).

Slightly over ninety-one percent of the respondents sold their products in developing economies. Of these, four of five sold identical products to those sold in the U.S. In these markets about five percent of the firms modified their products to make them more basic. None sold more advanced products and slightly less than nine percent said the change depended on the product.

The percent of respondents selling to less developed economies drops from over ninety percent for industrialized and developing to just over fifty percent. Comments on this drop indicated lack of market knowledge, lack of product applicability, greater uncertainty, and feeling of lack of financial resources. Only five percent of the respondents indicated that they made any market modifications for this market. **Table 4** gives the breakdown of respondents selling to the various levels of markets and product changes made to sell them.

TABLE 4
PRODUCT-MARKET STRATEGIES USED

Product Strategy	Market		
	% Indus. Economies	% Develop. Economies	% Less Dev. Economies
Same Product	86.2	77.6	46.5
More Advanced Prod.	5.2	0.0	0.0
More Basic Product	0.0	5.2	0.0
Depends on Specific Product	5.2	8.6	5.2
Do Not Sell in Market	3.4	8.6	48.3

As can be seen, there is a strong tendency on the part of the respondents to sell the same product in international markets as they well in the United States. There is some difference in the composition of the changes that are made, depending on the level of the

market, but overall nine of ten respondents selling to a foreign market sell the same product internationally as domestically. This finding has several implications. First, it should prove encouraging to many non-exporters who have avoided the international marketplace because of the fear that extensive product changes would be necessary. Obviously, research is required before entering a foreign market. However, many products in the manufacturer's present line can be effectively marketed in selected international markets. (Muraer, 1979)

The other implication is that there appears to be much of a product orientation in the firms' international marketing. The largest difference occurring in product strategy appears to be not in the changes made, but whether the firm sells to that market. It appears that for most of the respondents the product strategy is determined, sell the same product, and then selection of a market is contingent upon the basis of whether this strategy can be implemented.

Importance of Marketing Mix Variables

The last section of this paper deals with the perceived importance of the various aspects of the marketing mix relative to being successful in selling overseas. The respondents were given six variables and asked to rank them in terms of which they felt was most important in selling their products. The variables were product quality, price, sales representatives, overseas dealers, after sale service, and advertising. **Table 5** gives the average rank of each of the variables, the percent feeling each variable most important and least important.

TABLE 5
PERCEIVED IMPORTANCE OF MARKETING MIX
VARIABLES TO EXPORT SUCCESS

Marketing Variable	Average Value*	% Feeling Variable Most Imp.	% Feeling Variable Least Imp.
Product Quality	5.4	63.8	0.0
Company Sales Representatives	4.0	15.5	5.2
Dealers	3.9	8.6	0.0
Price	3.2	8.6	22.4
Service/Maintenance	2.7	3.5	10.3
Advertising	1.8	0.0	62.1

*Based on 6 for most important variable to 1 for least important variable.

As might have been expected, product quality was felt to be the variable most crucial to success. Almost sixty-four percent of the respondents felt it was the number one determinant. Some interesting comments were made with respect to this variable. The consensus seemed to be that if a product's quality was not competitive domestically, it probably would not be competitive internationally. Most appeared to realize that you couldn't sell inferior goods overseas.

Representation, by company personnel or overseas dealers, was felt to also be very important. These two variables came out very closely, ranked at second and third. Price was a somewhat surprising fourth, with over twenty-two percent of the respondents feeling it least important. Comments here indicated that if you had a good product, the cost disadvantages of selling overseas could be overcome.

Service was not felt to be too important, coming in fifth. The main reasons given were distance and dealing with customers or distributors who handled most of it. Advertising came in a distant sixth in importance. Over sixty-two percent of the respondents felt it to be the least important variable. Again, many left it up to their customers or distributors to do if it was to be done. Also, there was a rather heavy industrial orientation (as in U.S. exports in general) among the respondents. Because of this, many felt personal contacts much more important than advertising.

Summary

This paper has examined the informational sources and strategies used by a group of small companies to determine and expand their export markets. The companies ranged in annual sales from forty thousand dollars to ten million dollars. Most sold between ten percent and twenty-five percent of their output overseas.

The respondents used a variety of sources for information on new export markets. The average firm used just under three different sources of information. Overseas dealers, sales representatives, and domestic agents appeared to provide the most useful information overall. However, comments indicated that selective use of most of the sources could provide new market opportunities.

Most companies were able to sell the same products overseas that they sold domestically. This is especially good news for companies without the resources to make product modifications to sell in foreign markets. This approach does appear to limit somewhat the markets in which the respondents sold.

Product quality was felt to be most crucial to overseas success. Good personal representation was also felt to be important. Price and mass promotion were not felt to be nearly as crucial.

It is hoped that this brief look at small companies who are currently exporting will help other exporters by giving them additional sources of information and as a basis of comparison for strategies. It is even more hoped that it will be an aid and impetus to the many companies that have potential to sell overseas but who currently, for lack of information or knowledge, are not currently doing so. With increased world interaction and competitiveness, U.S. firms will have to join in the scramble for world market shares to remain successful in the future. (Business Week, 1980)

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THE COLLEGE TOWN: SMALL BUSINESS OPPORTUNITY OR PITFALL?

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Small businesses often fail due to poorly conceived marketing strategies. In other cases, overly-optimistic estimates of market potential foredoom an otherwise good marketing plan. This may be frequently the case in college towns. Entrepreneurs, might erroneously believe that the town can support a wide variety of businesses because it has a large student population.

College student populations do swell the purchasing power of a college town. However, it is likely that student expenditures are not spread evenly across the broad spectrum of merchandise and shopping facilities that a town has to offer. Thus expenditure patterns of a town of 25,000 people - consisting of 15,000 permanent residents and 10,000 students is not likely to parallel those of a non-college town of 25,000 residents. Small businessmen may fail to recognize this important difference and start or expand businesses which have very limited market potential.

An important distinction between students and permanent residents may be found in their outshopping behavior. College students may purchase some items in the college town while other purchases are made in their home town. The small business entrepreneur must develop information as to what merchandise lines are normally purchased locally and what merchandise is purchased out-of-town.

The current literature describing outshopping behavior is not sufficiently specific to aid college town businessmen since it focuses largely on non-student populations. By examining student purchasing patterns, outshopping behavior, and attitudes toward local business practices, the planning activities of local merchants and community leaders would be enhanced. Therefore, the objectives of this study were to provide planning guidance to small business owners by (1) describing student purchasing patterns and (2) to examine student satisfaction/dissatisfaction with college town business practices. Analysis of these factors should suggest planning implications for merchants located in college towns.

NATURE OF THE STUDY

A random sample was taken of 250 students attending college in the study community. The community is ideally suited to the present study since it is a "typical" college town of about 17,000 permanent residents and a student population of about 7,000. Further, the town is isolated in terms of shopping facilities with the nearest superior shopping alternatives being located eighty miles away.

The survey instrument was personally administered and collected data including student:

- 1) demographics
- 2) dollar expenditures
- 3) place of purchase - local or hometown
- 4) distance from hometowns
- 5) employment
- 6) attitudes toward local merchants
- 7) attitudes toward hometown merchants

Attitudinal and satisfaction/dissatisfaction data was measured on a five-point Likert scale.

Findings and Discussion

The demographics of the sample surveyed closely matched those of the population. In that no significant variances among these variables were noted, it may be assumed that the sample is a close approximation of the population.

Table I illustrates the relative and absolute locality of expenditures. It would be natural to assume that school supplies would be at the top of the list, followed closely by groceries. It is the remaining items which bare witness to the stark reality of outshopping.

Those items which are most frequently purchased in the study town tend to be of either inconsequential nature with a relatively low profit margin, or necessities which are utilized regularly.

The products which yield the greatest return are purchased elsewhere. The cornerstoen items that keep a retail center viable and vibrant are towards the end of the list. Of particular note are the findings related to stereo equipment, clothing and sporting goods. These are among the items which many might assume are heavily purchased by students in a college town. Such an assumption might lead one to estimate a much larger market potential than may be the actual case. Dress clothing is of most significant note with only 18% of the students purchasing the majority of these goods in the college town studied.

Table II provides some insight as to perhaps why the students shop where they do. More specifically, the Likert scale which examined consumer content/discontent with shopping in the town studied indicates those areas which have a relatively low consumer rating.

TABLE I
 LOCALITY OF EXPENDITURES

Where do you purchase the majority of:	Study Area		Hometown		Other City		Do Not Purchase	
	Absolute Freq.	%	Absolute Freq.	%	Absolute Freq.	%	Absolute Freq.	%
School Supplies?	227	90.8	19	7.6	4	1.6	—	—
Groceries?	216	86.4	19	7.6	4	1.6	11	4.4
Cosmetics?	176	70.4	64	25.6	7	2.8	3	1.2
Entertainment?	173	69.2	33	13.2	42	16.8	2	0.8
Auto Supplies?	95	38.0	95	38.0	21	8.4	38	15.2
Medical Care?	93	37.2	128	51.2	21	8.4	8	3.2
Stereo, etc.?	85	34.0	101	40.4	52	20.8	—	—
Every day Clothing?	75	30.0	133	53.2	39	15.6	3	1.2
Hardware?	71	28.4	104	41.6	17	6.8	57	22.8
Sporting Goods?	68	27.2	105	42.0	41	16.4	35	14.0
Dress Clthng?	45	18.0	144	57.6	55	22.0	6	2.4
Others?	28	11.2	29	11.6	8	3.2	185	74.0

TABLE II
CONSUMER CONTENT/DISCONTENT ON
SHOPPING IN STUDY TOWN

As Measured On A Likert Scale

	1 Strongly Agree	5 Strongly Disagree		Satisfaction With Shopping In Study Town
			\bar{X}	
I like to shop out of town just to see what is new.			2.08	-.92
Store hours are too short in (Study Town)			2.63	-.37
It is more fun to shop in your hometown than in (Study Town).			2.66	-.34
You have a better selection to shop from in your hometown than in (Study Town).			2.66	-.34
(Study Town) stores are attractive place to shop.			3.25	-.25
Prices in (Study Town) are higher than prices in your hometown.			3.24	-.24
It is hard to get credit in (Study Town).			2.95	-.05
(Study Town) sales clerks are poorly trained.			2.99	-.01
It is not worth the effort to shop out of (Study Town).			3.40	+.04
(Study Town) merchants offer good selections.			2.96	+.04
Stores in (Study Town) try to sell old stock.			3.05	+.05
I get more for my money in my hometown.			3.08	+.08
(Study Town) stores do not offer the latest styles.			3.24	+.24
(Study Town) stores offer good quality for the price.			2.58	+.42

While enjoyment at shopping out-of-town is the most negative statistic, it must be regarded with the traditional "grain of salt." Many people simply enjoy looking in other areas to see what is new. And, from a practical standpoint, there is little that the typical small, college-town merchants can do to alter this. The degree to which store hours are too short is of importance as this directly effects the shopping behavior of the consumer.

Product selection is also a factor apparently retarding the growth of this retail community. Students feel that they do not have the choice that they would otherwise have in their home community. This may be considered the most serious fault in the town studied, as patronage would be limited to the store-loyal consumer.

The attractiveness of the community in which the stores are located also dissatisfies the consumer. The pricing structure is also viewed in a negative fashion. This may be actual or perceived but the results are the same; the consumer will go elsewhere.

On the positive side, the town studied is doing a fine job in the area of quality of goods, also in the spectrum of fashion. These are somewhat difficult tasks for a town which draws from a small population.

Conclusion

Small businessmen and civic planners should take into account the unique purchasing patterns and behavior of college students. Student attitudes toward local business practices may contribute to hometown or other

outshopping. Certain merchandise categories are relatively infrequently purchased in the college town and thus substantially reduce the apparent local market potential.

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SOME INSIGHTS INTO THE EFFECTIVE PROMOTION
OF GIFT CERTIFICATES:

BEHAVIOR AND MEDIA CHARACTERISTICS OF
DEPARTMENT STORE GIFT CERTIFICATE PURCHASERS

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Abstract

Gift certificates are a potentially profitable element in the product mix of the retailer. This research extends knowledge about gift giving behavior and provides department store managers with insights into effectively promoting gift certificates.

Introduction

Gift certificates are vouchers which are given as a gift to be redeemed by a recipient for merchandise or services. It is surprising that, given their potential profitability, relatively little information about the promotion of gift certificates is available to department store managers.

The purpose of this research is to provide managers of department stores with information that may be utilized to promote gift certificates. Specifically, the study addresses the several salient issues relating to buyer behavior of gift certificate purchasers.

THE STUDY

Data were obtained from a mail survey of known gift certificate purchasers residing in a large metropolitan area in the Southeast. All subjects were recent purchasers of gift certificates from local units of a national department-store organization. A total of 201 questionnaires were returned.

FINDINGS

Purchase Rate/Transaction Size

Most subjects reported low purchase rates of gift certificates. Eighty seven percent of the sample indicated they made only one or two purchases a year. Forty one percent of the sample indicated that, on the average, they spend \$25 or more per certificate. Expenditure level per certificate was independent of purchase frequency. There was some suggestion that gift certificate purchasers are also frequent users of charge cards. The relationship between certificate transaction size and the use of charge cards tends to be inverse.

Purchase/Patronage Motives

Giving the recipient his or her choice for a gift was the most important single reason for purchasing a gift certificate rather than a specific gift item. Concern with purchasing an improper gift and the perception that a gift certificate would be more appreciated than a specific item also emerged as highly rated motives.

Breadth and depth of the store's merchandise assortment is the most important determinant of the outlet chosen for a gift certificate purchase. Consistent with the findings relating to purchase motives, gift certificate

buyers are primarily concerned with providing the recipient with maximum flexibility when the certificate is redeemed for merchandise.

No significant differences were found between large and small purchasers in the factors relating to gift certificate purchasing. Similar results were obtained regarding patronage factors.

Use Occasions

Birthdays, Christmas and graduations are the three occasions for which gift certificates would most likely be chosen. Weddings and anniversaries seem to be the least preferred occasions for gift certificate giving.

Media Behavior

Gift certificate purchasers are heavy users of print and broadcast media. For example, 45.4 percent of purchasers read the local morning newspaper with 66.5 percent reading the Sunday paper.

Heavy television use for purchasers is during the prime time evening hours. While insertion costs per commercial tend to be higher during this period, returns to the advertiser may be greater than concurrent costs. Finally, media patterns were independent of transaction size.

THE ROLE OF MARKETING IN ECONOMIC DEVELOPMENT

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The Role of Marketing

Abstract

Most writings on economic growth have focused on industrialization and increasing industrial productivity. This traditional approach neglects the role of marketing in stimulating economic growth via increasing productivity in all sectors of the economy and in integrating segmented markets in developing areas. Marketing by integrating the large rural sector into the national market converts a static system into a dynamic system.

Background of the Problem

First of all we should distinguish between economic growth and economic development. Economic growth refers to quantitative changes in the economy such as increases in GNP, physical goods, investment, etc. On the other hand economic development is a process of improvement with respect to a set of values and the values in question relate to desired conditions in the society.

Second, one should be clear in what constitutes development or underdevelopment. This is easier said than done. No matter where we start from, the end results of underdevelopment are low incomes, poverty and starvation, for the majority of the population living in these countries.

Third, the problems created by underdevelopment are not only national, but they are also international. At the national level there is a clear contradiction between a small rich minority that enjoys life standards as high as those enjoyed by the upper middle class of developed countries and the majority of the poor that hardly subsist. A similar dualism is visible at the international level where developed countries, excluding communist countries, constitute about 25 percent of the world population and control around 65 percent of the world GNP.

Economic development clearly is the only viable alternative to this explosive situation which is a threat to mankind. If economic development is to be set in motion and sustained, then the agricultural sector and marketing functions assume a very important role.

Structure of Markets in Developing Economies

With some exceptions, most developing countries embarked on a process of growth via import substitution industrialization and creation of basic infrastructure. The emphasis given to these two components led to a systematic neglect of agriculture and creation of organizations that bring together economic resources and needs in the most efficient way possible.

The neglect of agriculture has caused a decline in per capita food consumption in the majority of developing areas over the past decade. This constant decline in food production coupled with a high population increase in these countries is creating a potential danger to mankind. Even in those countries where food production has increased, this was achieved only by a small minority of modern farmers, while the great majority of farmers are left outside the process of this growth. As such, agriculture is not a homogeneous sector. It is made up of a small modern and commercial sector, a large sector.

The role marketing can play within this framework is very important for both the short-run and long-run considerations. In the short-run not only productivity and incomes are low among transitional and traditional farmers, there is not also an effective use of whatever is available. The present day developing country marketing techniques, as well as institutions, are archaic and inefficient. The diversity and limited nature of marketing outlets in the form of middlemen, government institutions and local markets produce a high per unit cost of marketing due to waste, spoilage and accumulation of unusable inventories. The long-run problem is to create mass markets out of these 80 percent of farmers, which is a formidable task and cannot be achieved unless productivity and purchasing power of these farmers are increased.

To achieve this farmers should be aided in increasing productivity via the supply of modern inputs, credit, technical know-how, extension services and indirectly by making consumer goods available. All these should be effectively channeled to a vast majority of small producers. Precisely, it is here where marketing comes in and assumes importance.

The breakthrough in agriculture can be done by efficiently linking rural areas to urban areas, and vice-versa, through effective and efficient channels of marketing. Marketing in this sense implies more than the traditional trader approach that most developing countries do tend to have. It rather implies the creation of a system that links economic resources, capacities and capabilities present in the economy for efficient production that is geared towards satisfying individual needs and wants.

The limited nature of present day marketing outlets in developing countries - in the form of commercial intermediaries, government institutions, and local markets - puts the farmer in a weak position in trying to fix his price. Present day marketing outlets enjoy an oligopsony situation vis a vis the farmer, and oligopoly situation vis a vis the consumers in the city. Modern marketing with its distribution and information systems should demonstrate to the farmers that there is latent demand and that markets can be easily expanded. In short, the small farmers should be made to realize that the market demand conditions facing them are elastic.

An efficient and effective marketing system not only stimulates production and economic growth through integrating markets, but at the same time imposes standards, specifications and quality on the producers. As such, it tends to remunerate the efficient and penalize the inefficient. Development of standards, specifications and quality are not only important for the domestic markets, but assume much more importance in international markets.

The channels that supply the small farmer with inputs, credit, warehousing and industrial goods also help to train and create small businessmen and entrepreneurs, which are in short supply in developing countries and are badly needed. Integration of the markets, activation of economic resources, increasing wants all will intensify each other to produce economic growth.

INVESTORS' PERCEPTIONS OF FULL-SERVICE
VERSUS DISCOUNT SECURITY BROKERAGE FIRMS

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Introduction

Over the past several years, discount brokerage houses have experienced rapid growth and development. It is estimated that the discount brokers' market share has experienced a 55% to 65% annual growth rate since 1975. This event has been made possible by the relaxation of the previously fixed commission schedules and the introduction of price and service competition into the securities business. Instead of discount competition encouraging the full-service brokers to cut their commission rates to attract individual retail investors, the "Mayday" decision resulted in higher charges to the small investor. The full-line firms stress the continued importance of "brand" identification, and they feel that this gives them a competitive edge.

The discount brokerage houses promote their services by offering substantial reductions in the commission rates - done at the supposed sacrifice of financial advice and research. If this is true, then the resource allocation decisions determined by the investment process are being placed in the hands of individual customers who may not operate with the best available information.

Several testable hypotheses can be advanced from this situation. The investor still utilizes the advisory and information services of the full-service brokerage house but directs a significant amount of its commission generating business to the discount house. The investor relies on the advice and information offered by the discount broker - an individual who does not have a large and sophisticated research arm to provide him with information. As an alternative, the investor may not request advice from the discount broker but may, in fact, rely upon random selection, often done under the auspices of a "hot tip." Finally, the investor may prove to be well informed via his own expertise or other outside purchased resources and consequently gives up nothing by utilizing the discount broker's services. In this case, the cost of purchasing information is assumed to be less than the savings generated by utilizing the discount brokerage service. If these transactions mean greater savings, it is possible there will be more trading, thus bringing greater fluidity into the market.

These hypotheses are important to the field of marketing and finance as they introduce the fundamental problem of market efficiency. In recent years, some financial analysts feel that the attempts to use the capital asset pricing model and indexing technique in the portfolio construction process may well be allowing for less efficient investment decisions. This condition could be compounded if one were to conclude that individual investors were contributing to market inefficiency due to their association with discount brokerage houses. One implication of this market inefficiency is the investor's portfolio may generate inferior risk return combinations after considering transaction costs.

Purpose

The primary purpose of this research is to develop a workable understanding of the decision process variables investors use in selecting between a full-service

or discount brokerage firm. The secondary purpose is to estimate the efficiency of the investor's decision model in providing the least cost alternative.

The primary objectives are to: a) determine the variables investors consider relevant in selecting between full-service and discount brokerage firms; b) determine if the relevant variables used in the decision process are congruent with the final decision; and c) to determine if investors' perceptions of benefits derived from the two firms are congruent with the firms' actual offering of services.

Methodology

Securing an adequate and appropriate respondent base was understandably difficult for this type of study. A number of discount and full-service brokerage firms, located throughout the East, were contacted for the purpose of obtaining a client list from which a random sample could be drawn. A sample of one hundred fifty possible respondents was developed, using a systematic selection process from each group for a total sample size of three hundred. Data were collected through the use of a pre-tested mail questionnaire. Personal and/or telephone interviews with brokerage firms were conducted for the purpose of establishing supplier perceptions.

Summary and Conclusions

Results from this study will indicate the sources of information used by the discount brokerage houses. From this, conclusions can be drawn about the likely performance of security portfolios generated via the discount houses versus those recommended by the full-service firms. If the results drawn from this study indicate that investors are operating with less than all normally available information, then additional work is indicated for evaluating the economic consequences of the lack of informed decisions. This problem could be evaluated by comparing the expost performance of exante type of portfolios constructed by both the discount and full-service brokerage house. If the performance of the full-service facility exceeds the discount house by more than the difference in commission rates, then the discount facilities are operating to the detriment of the investor.

It would be of extreme interest to the full-service brokerage firm to be aware to the degree they are providing free information to the clients of the discount houses. If this is a large problem, managerial effort should be devoted to developing a means of pricing for these previously used "free" services. If the investor relies upon the consultative services of the discount broker who admittedly does not have a large financial research team, then the problem of inferior portfolio performance is indicated. If discount investors purchase outside advisory services, then one might imply that an upward adjustment in the discount commissions would be justified.

This project will hopefully open up new avenues of research dealing with perceived versus actual decision making in the area of investor choice decision. Heretofore, there has been a paucity of published data. This study represents an initial effort to address the economic performance of discount brokerage houses vis-a-vis the full-service brokerage houses.

PRIZM: A GEODEMOGRAPHIC MARKET RESEARCH AND
PLANNING SYSTEM FOR ESTIMATING RELATIVE SALES POTENTIAL

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Introduction

Marketers have for decades been using systems for segmenting consumers based on their individual demographic characteristics, such as age, income, sex, race, etc. The reason is simply that some demographic segments offer higher potential for sales than others. Similarly, it has been evident to marketers that there are pronounced differences in sales potential from one metro market to the next.

Through the vast computerized resources of the U.S. Census Bureau, it became possible to begin to investigate the phenomena that neighborhoods and communities tended to differ markedly from one to the next and that each community, therefore, could be looked at as a significantly differentiated market area. A vitally important conclusion that emerged from this work was that neighborhood patterns tended to reappear throughout the country. This led to the conclusion that a geographically targetable market segmentation system could be constructed around the similarities and differences among neighborhoods. The remaining portion of this paper deals with such a system and how it can and has been applied in specific business situations.

Prizm

"PRIZM," which stands for Potential Rating Index by Zip Markets, is a marketing system which offers consumer marketers a new technique for estimating relative sales potential by neighborhood and community and for efficiently targeting marketing effort against those areas with highest potential.¹

System Methodology

The PRIZM system was developed in three main steps: 1) building an extensive data base from the Census Bureau data; 2) identifying key characteristic factors of U.S. residential neighborhoods; and 3) establishing an hierarchical cluster analysis technique for estimating relative sales potential.

Development - Step 1

The first phase in the development process of the PRIZM system began with the construction of a data base using over 1,000 Census data items for every residential zip code in the United States. The data base can be portioned into smaller segments of zip code areas, Census block groups and enumeration districts (BF/ED). These smaller segments can be aggregated by demographic composition to form any larger, contiguous marketing area. The larger areas can then be ranked and compared by their composite demographics.

Development - Step 2

The second phase in the development process was identifying key geodemographic characteristic factors used to describe residential neighborhoods. This task was accomplished through a multivariate factor analysis on 535 basic measures of U.S. neighborhood demography. These 535 variables can be broadly grouped into the following five categories: a) measures of education and affluence; b) measures of ethnicity; c) measures of the housing stock and degree of urbanization; d) measures

of family life cycle; and e) measures of mobility.

Development - Step 3

The last phase in the development process of the PRIZM system was to establish a statistical technique for analyzing 34 key factors developed in Step 2. All 35,000 residential zip codes were rated on each of the key factors identified. Using all key factor scores simultaneously, the 35,000 zip codes were classified into clusters.

The final 40-cluster neighborhood/community classification model has proven in numerous applications to be a strong market segmentation system. The real value of the cluster system is that each cluster is descriptive, quantitative and addressable. Therefore, given only the zip codes associated with sales and/or consumer research data, one can precisely estimate what kinds of people consume a given product, how many of them there are, and where they live. Once this association is made, the cluster system provides the means for locating high concentrations of target consumers and reaching them by individual neighborhood and by type with media and other marketing programs.

Application

A manufacturer of chain saws and related power equipment was the first to use the PRIZM research which showed that 12 population groups - roughly totaling one-third of the U.S. households - accounted for more than 70% of the company's business. The research also pinpointed those population groups which were key to the sales of the smaller homeowner saws, versus those population groups which were key to the sales of the larger, mid-size, and professional chain saw models.

Information available prior to PRIZM indicated a dual nature to the market for small and mid-size saws. One portion of this market was the relatively up-scale suburban male using a chain saw for various light duty tasks while the other portion of the market was perceived as blue collar, rural, lower income, more dependent on wood as a heat source and using bigger saws. PRIZM research accurately segmented these two portions of the manufacturer's market by locating the population clusters in each and showing that, within this overall business concentration, the blue collar segment was approximately 2-1/2 times as important as the suburban segment.

Conclusion

Through the use of the PRIZM system marketers of hundreds of different consumer products and service categories can both estimate relative sales potential by neighborhood and community market areas and also evaluate the degree to which various magazines, TV programs, and newspapers cover the high potential areas for their products. A coordinated marketing program which uses the PRIZM marketing system to focus multiple media and marketing resources on priority targets can yield important dividends in terms of sales return on marketing investment.

¹The PRIZM system was developed by and is a trademark of the Claritas Corporation of Roslyn, Virginia. Portions of this report were obtained from Claritas and from the Stuart Ford Agency of Richmond, Va.

SALES MANAGEMENT CONTROL SYSTEMS:
AN INFORMATION DEPENDENT MODEL

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Abstract

An information-dependent view of management suggests that the sales management style, whether bureaucratic, professional, or output-only, depends upon the quality, quantity and kind of information available about the marketing environment. While writers generally agree on the techniques of sales management and the environmental variables involved, the linkages of contingency selection are unclear and call for research.

Current Sales Management Models

Books and articles on sales management agree that a major responsibility of sales managers is controlling the actions of sales forces to achieve objectives set by upper level management. There also is agreement on the techniques which can be applied to sales force management, including: (1) personnel recruiting and selection; (2) sales training; (3) compensation; (4) motivation; (5) supervision; (6) evaluation and auditing; and (7) autonomy control. The sales manager's problem is deciding what mix of sales management techniques to use in specific situations. Each control technique has numerous variations; some of which work wonderfully in one context and fail in others.

Several sales management models link selection of specific control techniques to variables such as: (1) product line; (2) type and number of customers; (3) distribution system; (4) conditions within the company; (5) makeup and qualifications of the sales force; (6) industry; and (7) outside constraints such as business conditions and government regulation.

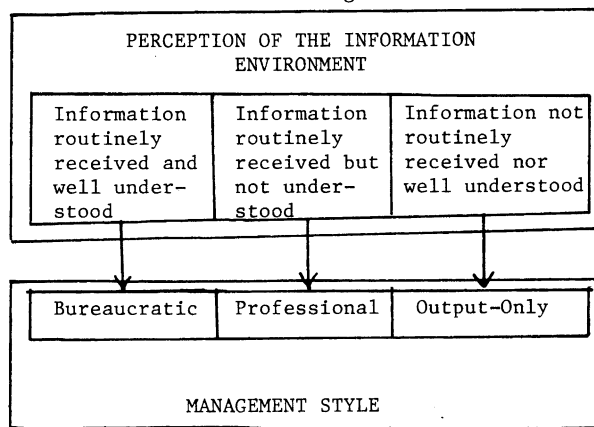
There are three basic models of sales management. Bureaucratic models include techniques to determine and control for "correct" selling behavior. Professional models stress selection and training to maximize salespersons ability to analyze and react to a wide range of selling situations. Output-only models stress compensation and motivation techniques that seek to limit the need for supervision and other behavioral controls. Output-only controls include some MBO approaches.

An Information-Dependent Model

An information system view of sales management suggests that the techniques managers select for controlling sales forces depend on the quality and kind of information available about the marketing environment. If a sales manager understands the relationships between salesmen's actions and sales results, he will manage through bureaucratic means. Such an understanding comes through routine receipt of relatively simple information about the environment. If the routinely received information is complex and difficult to understand, the model suggests that the sales manager will adopt a professional management style. If environmental information is not received regularly and is complex and difficult to understand, the model suggests that a sales manager will select an MBO or output-oriented management control policy.

The model of sales management that emerges by combining these concepts suggests that selection of specific management techniques comes about as shown in Figure 1. Sales manager's perceptions of their environments cause them to select a set of management techniques which can be collectively labeled as bureaucratic, professional, or output-only.

Figure 1: An Information-Dependent Sales Management Model



Research Needs

Much of the research into sales management involves piecemeal description of the techniques of management. No fully articulated contingency models exist. But before the model suggested here can be used to design either information systems or to select management techniques a great deal of research needs to be done. The makeup and weight given to environmental variables calls for clarification. Selection of particular techniques may reflect the personality of a manager more strongly than any of the suggested variable. Similarly, the role of information system design on managers' perceptions requires further research.

The classification system of management style may require revision. It is possible that management techniques are being used without regard to the "fit" among techniques, and that perceptions of the importance of specific techniques vary widely among managers. But as sales force costs increase, sales managers need guidance in devising management systems that are effective in both monetary and human terms, and that meet the needs of their specific situations.

NEW PRODUCT CRITERIA IN RETAIL CHAINS

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Abstract

This study suggests that the small, relatively unknown supplier has a better chance of having his new product adopted by one of the larger chain operations, since they tend to be relatively more willing to adopt new items.

In the large chain retail organization, the major obstacle to new product penetration is created by the screening performed by members of the central buying unit. How can the small, relatively unknown supplier penetrate such a formidable obstacle as the central buying unit (CBU) of a major retail chain organization?

This study identified the subjects to be examined as members of the CBUs of large retail corporations operating in non-food areas. Examples of respondents to this study include Firestone, K-Mart, Sears, Shoppers Drug Mart and Woolworths. Thirty-three decision criteria were identified through a number of extensive personal interviews with purchasing executives of Sears, Canadian Tire Corporation, the T. Eaton Co. Ltd., and Hudson's Bay Company.

A three-page, self-administered questionnaire was developed and pretested through repeat personal interviews with the buying executives mentioned above. A revised instrument was mailed to 506 principal buyers in 144 firms across Canada. These buyers were identified as follows: first, non-food chain stores with five or more geographic locations were located using the Directory of Retail Chains in Canada (1978). Then each firm was contacted by mail and was asked to submit a list of its various buying categories or classes, each group of which was the responsibility of a principal buyer. Follow-up letters were used to ensure maximum participation. In the cases of the largest chains, this technique was supplemented by telephone calls and personal visits. The research questionnaire was mailed in late August 1980, and was followed with a second wave mailed in late September. Two hundred and seventy-two usable questionnaires were returned, providing a 54% rate of response.

The list of 33 decision criteria which had been developed and revised according to personal interviews with purchasing executives was organized under seven categories. Respondents ranked the 33 criteria on a five-point semantic differential scale according to their importance in assessing whether or not to adopt a new product. The three most salient criteria, in order of importance are:

- (1) Expected profit contribution
- (2) Supplier's ability to fill repeat orders quickly
- (3) Product quality

It was found that in chain stores having a larger number of people responsible for buying (six or more buyers), individual buyers purchased a relatively larger number of new items. Buyers in longer established firms were found to purchase relatively more new items than those in companies 30 years or less in existence. Chain buyers in stores operating in only one province were found to purchase relatively fewer

new items than their counterparts with operations in several provinces, nationwide, or operating internationally. Buyers in firms whose annual sales volumes exceeded \$100 million purchased relatively more new items than those in smaller organizations. Buyers older than 30 years of age purchased relatively more new items than younger buyers. No significant relationship was proved regarding the level of educational achievement of the responding buyers and the number of new items which they purchase.

These relationships would suggest that the individual who wishes to introduce a new product to a retail chain organization might improve his probability of obtaining adoption if he were to pursue a strategy of contracting an older buyer, who works in a chain incorporated more than 30 years ago, which is operating in more than one province, which has a central buying unit consisting of six or more buyers and whose dollar sales volume is larger than \$100 million.

The three most important criteria in overall ranking by respondents -- expected profit contribution, supplier's ability to reorder quickly, and product quality -- were tested, using chi-square, to identify whether they were considered to be "most important" significantly more often by respondents in larger firms (more than \$100 million in sales volume) than in smaller chains (less than \$100 million). No difference could be found between large and small firms on the first-ranked criterion (expected profit contribution). However, large firms did respond "most important" more frequently than small firms on the second ranked "ability to fill repeat orders quickly" (chi-square = 2.77, significance = .096) and the third ranked "product quality" (3.39, .066). Since larger chains tend to purchase relatively more new items, the prospective supplier trying to introduce a new product should attempt to meet or exceed the chain's expectations concerning these criteria.

T-tests were performed on the differences in importance of the 33 criteria for the five dimensions of the chain operations that had been found to be significant relative to innovativeness. A T-test was also performed directly on differences of the 33 criteria between chains adopting relatively more, and relatively fewer new items. In these six groups the number of significant differences per group ranged between four criteria and ten criteria. However, certain of these criteria were repeatedly found to be significant. The five most frequently appearing criteria were: (a) advertising support provided by manufacturer or supplier, (b) package attributes, (c) potential liability of retailer concerning new product, (d) new product meets government regulations, and (e) financial capabilities of supplier. Hence, in attempting to be more appealing to the most innovative potential customers, a manufacturer should emphasize these elements in his marketing strategy.

The results of this research provide an optimistic outlook for the smaller potential supplier to large retail chains. To the extent that such a supplier is able to fulfill the expectations of CBUs regarding the most highly ranked decision criteria (expected profit contribution, ability to refill orders quickly, product quality, etc.) his success of becoming an "in" supplier will be similar to that of a larger, better known potential supplier.

HISPANIC CONSUMER BEHAVIOR:
A REVIEW AND ANALYSIS

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As of 1979, the U.S. had the fifth largest Hispanic population in the world(19 million), according to the U.S. Dept. of Commerce. By 1985 it is estimated that Hispanics will be the largest minority group in the U.S., and many predict that by 1990 the Hispanic population will be 25% of the U.S. population. The buying power of this market is enormous. Recent studies have shown that they buying power of Hispanics in New York City is \$6 billion, while in Los Angeles and Orange Counties it is \$4 billion.

The Culture and its Subsets

In an early study Sturdivant(1971) reported on low income families in two small towns. Findings showed insignificant differences between the two towns on eight variables. Two variables did have significant differences from one town to the other(use of credit, and family indebtedness). Many studies, however, have suggested that assuming Hispanic segments of the U.S. to be homogeneous is a drastic error.

Anomie and Attitudes Toward the Market

Longman and Pruden(1971) reported that there were significant differences among Afro-Americans, Mexican-Americans, and Anglo-Americans with respect to anomie. Mexican-Americans experienced a significantly greater level of anomie than did Anglos, but not as much as Afros.

Landon and Lundstrom(1973) challenged these results, however, contending that alienation is a very complex construct treated lightly by Longman and Pruden.

Discrimination in the Marketplace

Griffin and Sturdivant(1973) published the findings of a discrimination study of middle-income Anglos, Blacks, and Chicanos. No statistically significant differences as relates to possible racial discrimination among the groups was found. Regarding the income level, Aaker and Day(1971) have suggested that as regards consumers there are only two important segments: low-income ghetto shoppers, and all others.

Sturdivant and Wilhelm(1968) reported findings different from those above. They found that prices quoted to three disadvantaged couples were higher outside each couple's local area, and that prices were higher in the lower-income areas than the higher-income areas.

Shopping Patterns and Habits

Berry and Solomon(1971) studied 100 low-income Mexican-American food shoppers in Denver. It was determined that the majority of the shoppers shopped at supermarkets outside the barrio. Contradictions arose in a study by Wall(1969), among others. This study found that the low income consumer had a propensity to shop in his/her own neighborhood.

Communications

One of a few, a study by Alexander and McCullough(1979) showed that Mexican-Americans tend not to use print

media, their preference is television and radio. Cervantes(1979), however, reported that of 250 households interviewed, 48% read La Opinion(Spanish language newspaper) and 45% read The Los Angeles Times. He also found that one of the local English language television stations garnered 57 rating points against KMEX, a Spanish language station.

Conclusions: Directions for Further Research

Our search yields several immediate general conclusions. First, a rather small body of literature has been attempted in this area. Second, the studies in the area suffer from a lack of an integrative focus. The literature is repleat with a number of small studies which have addressed a myriad of issues. Third, studies in the area seem to be largely devoid of a theoretical focus. Such a focus is needed if further investigation is to take place.

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WHATEVER HAPPENED TO CONSUMPTION IN MARKETING THEORY?

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Abstract

A research in progress paper which explores the treatment of consumption in the marketing literature and poses a model of a broadened concept together with implications to marketing thought.

More Attention to Consumption is Needed

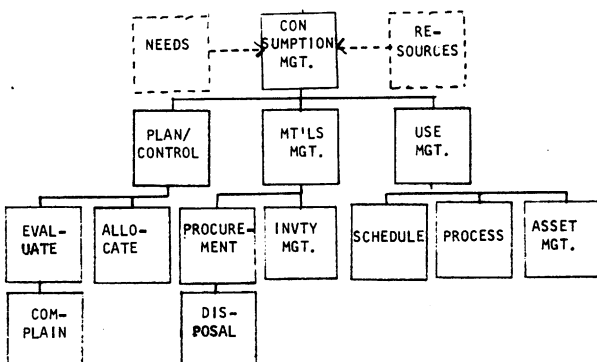
The literature of marketing reveals that the topic of consumption is given relatively scant attention. Among contemporary texts, only 3 deal with the subject in any detail. A search of readings books and periodical literature is similarly frustrating. Even those researchers who have created the field of consumer satisfactions have dealt largely with post-consumption aspects. A scattering of authors, notably Nicosia, have proposed that the process of consumption be viewed less narrowly, but they are principally interested in the sociology of consumption. We have seen very little concern with use behavior.

Toward a Theory of Use Behavior

It is presumptuous at this stage before even adequate descriptions of use behavior have been produced, to more than speculate what the shape of a theory of use behavior might be. However, drawing from the literature available and limited explorations of actual consumption processes, a general framework is suggested.

Consumption is comprised of all those acts performed by the consumption unit (household or individual) for the purpose of satisfying needs and wants within the constraint of limited resources. These acts (called here the consumption management functions) are shown in Exhibit 1. This exhibit presents a normative model of the consumption management system, the components of which are described briefly below the exhibit.

Exhibit 1
Consumption Management System



1. Planning defines consumption goals, develops an overall plan for guiding the disposition of resources to satisfy the needs of the consumption unit. Allocation rules are established. Control receives use feedback information, evaluates satisfactions, specifies corrective action (including complaining behavior and/or plans modification).

2. Materials Management makes procurement decisions, assuring an available supply of goods and services. It also manages inventory and disposes of consumption waste.

3. Use Management schedules and supervises the processing consumption inputs (purchased goods and services as well as productive inputs by consumption unit members). Use management is responsible for the maintenance and repair of fixed consumption assets.

Insights From a Broadened Concept

It is possible to identify some changes that might take place in our thinking about the discipline of marketing as a result of a broadened concept of consumption which would include the concept of consumption management.

1. We may discover that goods and services are relatively minor inputs to consumption.
2. We may find that not-for-profit suppliers are more important elements in the overall system of marketing than we had thought.
3. We could find out that service suppliers are more directly involved in consumption than are goods marketers.
4. We may discover a means of uncovering new opportunities to conceive and develop new products, new services, and even entirely new modes of consumption.
5. We will probably conclude that shopping and buying are of relatively no more importance in consumer marketing than they are in industrial marketing.
6. We may discover that the maintenance and servicing of consumption assets (durables) present new and different marketing challenges.
7. We could even face the prospect of having to redefine the role of the consumer in the marketing system.
8. We may well want to take another close look at the aggregate consumption system in order to discover ways in which overall consumption efficiency can be improved.

References

References are included in the complete working paper.

SLOGANS: AN HISTORICAL PERSPECTIVE ON THEIR EFFECTS

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The birth of the slogan dates back to the start of history itself. Today, the slogan remains visible in virtually every segment of society, attesting to its unique staying power. As much as the slogan has been able to influence people throughout the ages, however, very little research has been conducted on the topic. Of the substantive material that does exist, most focuses on slogans used by advertisers, with a few minor exceptions found in the political slogan area (e.g., Sherif, 1937). The purpose of this paper is to trace the empirical work which has been conducted in the area of advertising slogan effectiveness.

Upon reviewing the slogan literature, while it appears that it is the most frequently addressed, slogan effectiveness is still the least understood aspect of sloganism. Specifically, what is the nature of a successful slogan? What are their effects? How do they work?

Slogan Effectiveness

Historically, the most popular area of slogan effectiveness research is that of the effects of certain variables on slogan awareness. Larson and Wales (1970) conducted a study among a random sample of householders in Chicago, and found that four factors (age, income, sex, and race) could predict a relatively high identification rate of slogans (55%). Further, it was found that: 1) young people were more aware of slogans than older people, 2) higher income groups were more aware of slogans than low income groups, 3) males were more aware of slogans than females, and 4) whites were more aware than non-whites.

Keiser (1975) conducted a similar study concerning slogan and brand awareness, limiting his sample to adolescents. Those predictor variables found mostly related to slogan awareness were exposure to mass media, opinion leadership, social class, and age. The effects of social class and age were consistent with those found by Larson and Wales' with positive and negative correlations respectively.

In both studies, the way in which an individual's slogan awareness was measured was by providing the subjects with a list of slogans and partial slogans; and then asking them to either complete the slogan or to name the company using the slogan.

Katz and Rose (1966) found that there was much consumer confusion for heavily advertised product categories. Slogan recall was not found to be influenced by the sex of the respondent; however, the effects of age and the amount of product consumption were significantly correlated with slogan awareness. The authors concluded that slogan recall was a learned phenomenon.

As an alternative to identifying audience member characteristics that are associated with slogan awareness, the effects of different types of slogans, qualified versus unqualified, on recall of product advertisements have been investigated. An unqualified slogan is one containing arguments that favors only its conclusion, whereas a qualified slogan restricts the main argument (Misra and Jain, 1971). An example of a qualified slogan would be, "You may pay more, but ours is the best toothpaste to prevent cavities;" an unqualified slogan might only suggest, "Ours is the best toothpaste to prevent cavities." Some work in psychology has attempted to investigate the persuasive impact of one-sided communication (unqualified slogans) as opposed to

two-sided communication (qualified slogans), and the attitude-change literature suggests that qualified slogans could prove to be more effective (Johar and Kanungo, 1975).

In their study, Johar and Kanungo supported the hypothesis that qualified slogans are perceived as more believable than unqualified slogans, even for frequently purchased consumer non-durables. Further, they found that qualified slogans increased the credibility of the advertised message; however, the qualification did not significantly effect the other two dependent measures, the liking for the product or the subject's intention to buy it.

In the Jain and Misra (1971) study, brand recall for advertisements with unqualified slogans was found to be slightly higher (but not significantly) than those with qualified slogans. Thus, the researchers were unable to clearly identify the relative impact of qualified and unqualified slogan types.

Moore and Stephens (1975) examined differential processes associated with four measures of consumer learning. These included price accuracy, brand specification, attitudes toward advertising, and slogan recall. The study involved more of an emphasis on adolescent consumer learning than on the slogan recall area itself, however. After testing two different groups, middle and high school adolescents, the researchers found intelligence to be the most significant explanatory variable accounting for differences in slogan recall. Magazine reading and television exposure time also contributed as significant predictor variables.

Finally, Pathak (1974) explained the recognition of advertising slogans by applying the closure principle of learning and the influence of knowledge associated with past experience on perceptions and their commitment to memory. Results showed that the application of the closure principle to advertising needs re-evaluation, since the motivation to form a complete slogan was not found to be an adequate explanation for learning advertising slogans. Major recall differences were mainly due to the past experiences of the individual with the product advertised. Pathak's results also showed that a slogan can be misused through constant repetition to the extent that the audience becomes tired of it (i.e., wearout).

Conclusion

It is somewhat surprising to find so little research conducted on a device that has been used so extensively among advertisers, politicians, religious leaders and the like for so long. It is unfortunate that so many advertisers, for example, use this tool with virtually no idea why, what characteristics work best, or even if their slogans are effective. On the basis of the historical perspective presented, hopefully the need for further empirical work on the effectiveness of slogans has been made apparent.

References Available Upon Request

MARKETING ORIENTED STRATEGIES FOR PHYSICIANS:
THE COMING COMPETITION IN HEALTH CARE DELIVERY

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ABSTRACT

This paper examines dramatic changes that are taking place in the health care industry with respect to the coming competition between health care providers. Strategies are developed for physicians to better market health care and to survive within the changing environment.

Introduction

This paper examines a number of trends that will have a significant impact on competition of physician practice modes over the next decade. This "future picture" is contingent upon forces present in today's medical market place, making it necessary to also examine the present health care structure.

Competition in any industry is affected by four basic forces: the demand for the product, the supply of the product, consumer attitudes toward the product, and system constraints, including government regulation. The health care industry is no exception. There are some interesting changes taking place in these forces in the health care industry that will significantly increase competition among health care providers.

The Present Health Care System

Demand for medical care is a function of population, geographic distribution, age, technology and consumer attitudes, knowledge and information. Other factors equally important but more difficult to quantify include things such as the consumer's insatiable demand for care to remain healthy as well as physician-induced demand. Health care spending as a proportion of GNP doubled between 1950 and 1978, rising from 4.5% to 9% (Social Security Bulletin, Nov., 1981). For the average American family, this rate of growth means that 10% of its gross income was spent directly or indirectly on health care in 1975; by the year 2000, the percentage is projected to exceed 15% (Russell, 1978). The supply side of the health care equation is viewed in terms of the number of health care providers available to meet requirements. Physician supply has been examined, studied, and explored since the 1960's. At first, health experts were concerned about the possibility of a physician shortage. In the late 70's, the focus shifted to the consequences of a projected surplus. Now, experts have decided that the real problem is a combination of surplus, geographic maldistribution and specialty imbalances (GMENAC Report 19).

Any discussion of the health care system would be incomplete without reference to the third party payment mechanism. Under such a method, the recipient of services does not pay the provider of services directly; rather, a third party makes the payment. According to health economists, the effect of this type of payment system has been an increase in health care costs (Newhouse, 1976, Altman and Eichenholz, in Zubkoff ed.).

The recognition that a leveling off of costs has not been occurring prompted the government to intervene in an attempt to restrain costs and reduce unnecessary

utilization of services. However, government regulation is believed to constrain the normal behavior of the health care system and is attacked as inflationary, anti-productive, and inevitably crippled by red tape.

Until recently, government regulation has been considered the principal, if not only, means to reduce duplication of medical facilities and fragmentation of services to stabilize price rates and to improve levels of minimum standards (McNerney, 1980). Other approaches, indirect regulation and voluntary control, have been tried but have not adequately addressed the major issues. Another alternative - competition - has aroused a great deal of interest within the health care sector.

The concept of competition is based on the premise that individual consumers, making diverse decisions in their economic self-interest in an open marketplace, will solve collective societal problems more effectively and efficiently than government controls. In the health care system, competition can be introduced to impact one of five groups (Friedman, July, 1980): 1) patient at the point of seeking health care, 2) patient at the point of purchasing insurance, 3) third party payers, 4) institutional providers and 5) physicians.

Strategic Planning for the 1980's

Most experts predict the immediate future will consist of a combination of competition and regulation. It also seems that fee-for-service will be the primary mode of physician reimbursement. However, the roles of all the actors in the system are changing. For the physician, a good practice will require more than good medical skills.

There is not a physician in this country who can change the environment, yet every physician will have to change if the environment changes. To adapt to a dynamic environment it is necessary to look at what the health care system will be in the 80's and then develop an appropriate strategy for that environment. Strategy can be defined as a "decisive allocation of resources in a given direction." Using this definition, every physician currently has a strategy - resources having been committed in some direction. The question becomes: Is it the right direction?

Historically, it was not really necessary to have a business strategy for a physician. A physician practiced medicine and a "good practice" was equated with medical quality. It is not that such a philosophy will be changed. Rather, it is that "good medicine" will need to be supplemented by additional communication and the skills necessary in a competitive environment. The following strategic timetable is an indication of how physicians can utilize resources to adapt to the 1980's health care environment:

1. Develop patient/consumer orientation and improved office management/marketing procedures (1-2 years).
2. Consider forming appropriate groups (2-5 years).
3. Monitor economic/competitive trends and conduct market studies (5-10 years).

(References available from authors.)

THE WEBB-POMERENE ASSOCIATIONS' SAGA

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Abstract

In order to promote U.S. exports via the Webb-Pomerene Associations the Webb-Pomerene Act of 1913 must be revised, U.S. manufacturers must abandon their do-it-yourself attitude and the Associations must improve their marketing "mix".

Introduction

The U.S. Department of Commerce estimated that for 1981, the U.S. trade balance deficit may be several billion dollars wider than the 1980's \$36.4 billion gap¹ and this is due to the lack of competitiveness in many U.S. products, prices, promotion, and distribution. It is the purpose of this paper to focus on the distribution segment of the U.S. international marketing mix and more specifically, to the Webb-Pomerene Associations (WPA's) which have been created in order to promote U.S. exports.

WPA's: From Inception to Present

The Webb-Pomerene Export Trade Act was passed in 1918 in order to reduce various barriers to small firms. The Act was designated to allow domestic competitors to cooperate in foreign trade by forming export associations called Webb-Pomerene Associations (WPA's) where such cooperation might be illegal under the Sherman and Clayton Antitrust Acts. This antitrust exemption, in effect, allowed U.S. firms to fix prices and allocate customers in foreign markets.

By mid-1978, there were 32 WPA's and only 27 of them are currently active, hence, the numbers of active registered WPA's has dropped drastically from the 1918 number of 176 and 29 in 1965. The share of exports generated by the WPA's has shrunk from 12 percent in 1930 into only 1.5 percent by 1978.²

The causes of failure come from: 1) the WPA's; 2) their clients; and 3) the legal basis provided by the Webb-Pomerene Act itself discussed as follows:

1. The WPA's failed mainly because of their marketing "mix". The WPA's failed to provide a "total product" package needed by their customers at a comparatively low cost. Without the WPA's help, it is hard for U.S. exporters to figure out, for instance, the types of labeling requirements to be met in an African country such as Zaire as compared to different requirements found in Singapore for the very same product, such as canned pineapple. The WPA's also failed to have a "total product" because they did not provide financing

facilities much needed by smaller U.S. exporters. Furthermore, as an agent in the entire channel of international distribution, the WPA's failed to have sufficient foreign offices in order to establish themselves overseas and promote efficiently, U.S. products in highly competitive foreign markets. Last, but not least, the WPA's failed to accomplish economies of scale via high numbers of members, and for high volume of business. As indicated on Table 1, only five associations had more than 20 members, four with 10 to 20 members and the rest had less than 10 members.

2. The WPA's failed also because of the traditional attitude to the U.S. manufacturers. They use the WPA's just as a starter to test foreign markets and to build up sales. Once they have gained the experience and the sales volume needed to eliminate the economies of scale provided originally by the WPA's, the U.S. exporters would rather "go it alone" and leave the WPA's for more control.

3. Finally, the WPA's failed because of the vagueness and the restrictions found in the Webb-Pomerene Act itself. The Act filed to provide a legal basis for requiring the WPA's members to export through the association for a clearly prescribed period. While the Act states a "reasonable" period of time, it is not clearly stipulated what period of time is reasonable. The Act also failed to prevent the WPA's members from selling their products to a competing domestic exporter. Furthermore, it is impossible for a WPA to create territorial rights to markets it has developed by requiring that any member's exports, after withdrawal from the WPA, be handled, by or through the association. Lastly, the lack of clear cut definition of what export action by a WPA constitutes a violation of the antitrust laws prevents the WPA's from adopting a vertical integration of manufacturers, insurers, shippers and others in order to further take advantage of economies of scale instead of the traditional horizontal form of integration found among the WPA's.

Conclusion

In order to promote U.S. exports via the Webb-Pomerene Associations the Webb-Pomerene Act of 1913 must be revised, U.S. manufacturers must abandon their do-it-yourself attitude and the Associations must improve their marketing "mix".

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PEDAGOGICAL MODEL
FOR INTRODUCING PROMOTION BUDGETING

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Abstract

This paper presents a useful teaching tool for introducing the basics of promotional budgeting

Introduction

An understanding of the principles of determining optimal promotional expenditures is important for marketing students for at least two reasons. First, such an understanding provides a basic framework from which to present actual promotional budgeting techniques, illustrating how to make promotional decisions with respect to countering competitive advertising or pricing, or the impact of legal, social or economic change. Second, the analytical framework employed to determine optimal promotional outlays may also be employed to effectively illustrate budgeting in the areas of research, new product development and distribution systems as well.

Existing Models

Numerous models of promotional budgeting have been proposed (Aaker and Meyers, 1975; Dean, 1951; Engle, Wales and Warshaw, 1975; Longman, 1971; Magee, 1964; Vidale and Wolfe, 1964). These models tend to confuse the students with an awkward conceptual framework (Dean, 1951) or with factors that may in most cases be irrelevant (like promotional startup costs) (Aaker and Meyers, 1975; Longman, 1971) or with analytics too complex to present in the time one normally allocates in an advertising course to budgeting. The following model has been found to be more effective than the above models for pedagogical purposes.

The Model

Figure I presents a Revenue Response function (RR) which may be defined as a locus of points each of which describes a level of net sales revenue that is expected for a given level of promotion (P) after all non-promotional expenses have been subtracted. All other elements of the marketing mix are assumed constant. The shape of the Revenue Response function reveals the presence of increasing and gradually decreasing rates of revenue growth as promotional outlays are increased.

A (45°) Zero Profit Line (ZP) may be superimposed upon the RR function. The purpose of this line is to distinguish between those outlays at which net revenues (as measured by the RR function) exceed promotional costs and those outlays where revenues fall short of promotional costs. Note that in many cases the RR function may never cross the ZP line (an unprofitable product).

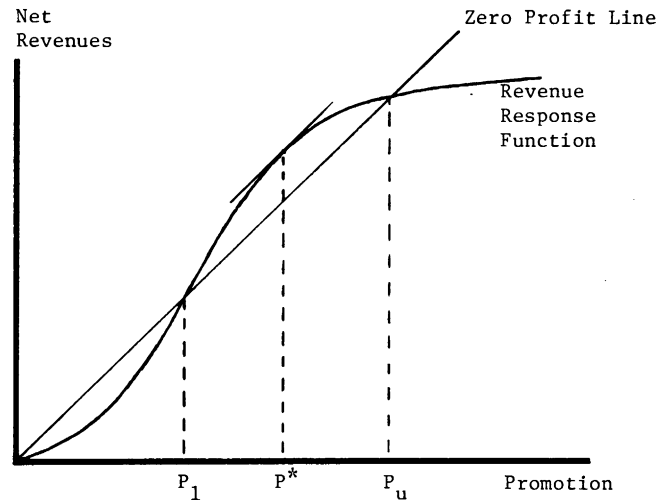
In Figure I, net revenues fall short of promotional costs at outlays below P_1 and above P_u . These levels therefore denote the lower and upper breakeven promotional levels, respectively. The profit maximizing promotional outlay may be determined in one of two ways. Either the greatest difference between net revenues and promotion cost may be identified as P^* by graphical means, locating a 45° tangent to the RR function or

maximizing distance between RR and ZP, or the principles of marginalism may be employed to identify P^* as the volume at which $\delta RR / \delta P = 1.0$.

Actions which make promotional expenses more efficient (better copy or headline, better sales training, etc.) move RR to the left, increasing profits while lowering the optimal budget. Legal requirements or competitive ads which lower promotion efficiency have the opposite effect. Any social, economic or marketing mix changes can similarly be analyzed, i.e. production cost increases rotates RR downward, reducing profits while lowering the optimal budget.

FIGURE I

Promotion Budgeting Model



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APPLYING THE MARKETING CONCEPT TO NURSE RECRUITMENT STRATEGIES

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ABSTRACT

Although it is recommended that nonprofit organizations adopt a marketing orientation, little is known about how well these organizations succeed. This paper analyzes the area of nurse recruitment to see whether hospitals have adopted a marketing orientation. This study analyzes the organizations' actual performance by measuring newspaper want ads.

INTRODUCTION

The shortage of registered nurses is quite severe. In response to the shortage, hospitals and healthcare facilities have stepped up their recruitment activities. However, hospitals are unsuccessful in attracting nurses because they have not yet adopted a marketing approach.

With respect to nurse recruitment, a marketing approach means that hospitals recognize that nurses differ according to their personal characteristics and their professional objectives. Recognizing these differences, hospitals then attract the various segments of nurses by providing features that are most likely to satisfy these nurses' needs.

The purpose of this study was to measure whether hospitals have adopted a marketing orientation towards nurse recruitment by content analyzing newspaper want ads.

To determine what type of nurses were being recruited all references to personality traits, demographic characteristics and employee qualifications were counted. To determine the nature of the appeals being used, the appeals were divided into three broad categories: hospital-related features, professional development opportunities, and scheduling and economic benefits.

The study was limited to hospitals in the greater Chicago area. All the boxed want ads for nurses that appeared in the Chicago Tribune during the entire month of June, 1981, were included. A total of 27 hospitals were represented with one ad per hospital. The sample included 8 large hospitals (over 500 beds), 12 medium hospitals (250 to 500 beds) and 7 small hospitals (under 250 beds).

Findings

Most of the hospitals used a mass marketing approach to define the nurses they needed. They were recruiting registered nurses, experienced in a particular specialty area, a description that fits nearly every nurse in the marketplace. Among the hospitals in the sample, 81 percent were recruiting registered nurses. Some 15 percent were seeking experienced nurses only; another 26 percent either experienced nurses or new graduates; and a single ad was targeted toward new graduates only. Over half (59 percent) of the hospitals wanted to fill openings in one or more of the specialty areas.

Most of the hospitals did not differentiate themselves from the other hospitals with whom they were competing. The hospitals generally offered a combination of benefits instead of concentrating on the ones which could have best filled the needs of the nurses they were

recruiting. A third of the hospitals offered hospital features, professional development opportunities, and economic benefits. Some 55 percent mentioned two of the three benefits and 12 percent mentioned a single benefit. Furthermore, the hospitals tended to stress the same benefits. Nearly all the want ads (85 percent) offered scheduling and economic benefits; 78 percent offered hospital features; and 59 percent professional development opportunities.

Of the hospitals which mentioned scheduling and economic benefits (N=23), 61 percent offered a general benefits package; 57 percent offered scheduling considerations; and 52 percent specified a salary.

The hospitals stereotyped themselves as caring institutions with the latest in equipment and facilities. Of the hospitals which offered hospital features as an inducement (N=20), 70 percent positioned themselves as modern, progressive institutions; 55 percent as caring, community oriented ones; and 40 percent as offering a variety of medical services.

As additional evidence of how similarly the hospitals projected themselves, it should be noted that 10 of the 14 hospitals who mentioned that they were modern did so in the middle of the ad. Likewise 7 of the 8 hospitals who specified their bed size did so in the middle of the ad, and 7 of the 11 hospitals who portrayed themselves as caring did so in the middle of the ad.

The hospitals were least likely to discuss career development opportunities in their ads. Of the hospitals mentioning career development (N=16), 50 percent said they provided a "challenging and rewarding position" for nurses; 44 percent offered a "professional" environment; and 44 percent a "caring and innovative" nursing philosophy.

In summary, most of the hospitals in the sample were not marketing oriented. They did not identify their markets in ways which were useful for identifying the different objectives that nurses desire. This lack of differentiation of the market has resulted in the failure of the hospitals to target their recruitment appeals. Instead the hospitals offered similar benefits to one and all.

In the future, the want ads from hospitals across the country should be analyzed to see if this lack of marketing orientation occurs nationally. Hospitals located in regions with the most severe nurse shortages should be compared to hospitals in regions where the shortages are not as great. The recruitment programs of large hospitals should be compared to that of small hospitals. Also, hospitals with the most successful recruitment programs should be compared with hospitals with less successful programs. Lastly, more effort should be devoted to segmenting the nurse market. This would help hospitals identify the category of nurses they want to attract and help them target their appeals to meet those nurses' needs.

PROGRAMS AS PRODUCTS
ASSESSING TELEVISION FOR THE NEW TECHNOLOGY

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Since programs will have to be marketed as products under the new TV technology (cable systems, subscription TV, satellite communications, home video systems), it will become necessary to assess viewers' perceptions and evaluations of them--in addition to their likelihood of viewing them. Moreover, viewer segments will need to be portrayed in far richer terms than the traditional demographic profiles.

Methodology

Respondents

Respondents for the study were females, ages 18-49. All residents of the Cincinnati SMSA, they were recruited through their (community) organizations, to which a per-capita contribution was made. Altogether, 139 women comprised the sample which, compared with the U.S. population, is skewed somewhat toward higher income and education.

Procedure and Stimulus Materials

Stimulus materials consisted of videotaped portions (typically the initial 2-3 minutes) of (then) currently available, prime-time TV programming. In all, 20 regularly-scheduled programs were assessed, representing the popular and unpopular, a variety of program types and network affiliations, and new and established shows. The programs assessed (with their network affiliations) are: BENSON (ABC), BUCK ROGERS (NBC), DALLAS (CBS), DUKES OF HAZZARD (CBS), DYNASTY (ABC), FANTASY ISLAND (ABC), HILL STREET BLUES (NBC), LITTLE HOUSE ON THE PRAIRIE (NBC), LOU GRANT (CBS), LOVE BOAT (ABC), M*A*S*H (CBS), NERO WOLFE (NBC), QUINCY (NBC), REAL PEOPLE (NBC), 60 MINUTES (CBS), TAXI (ABC), THE JEFFERSONS (CBS), THE PAPER CHASE (PBS), THOSE AMAZING ANIMALS (ABC), and 20/20 (ABC).

Data collection took place in late Spring, 1981, and consisted of small-group (10-20 persons) viewing sessions which lasted approximately two hours. After an orientation, respondents were shown the videotape of a program and then asked to respond to three scales, representing perceptions, evaluations and categorizations of the show. After all 20 tapes were shown and responded to, respondents provided additional data about themselves.

Variables Assessed

For each of the 20 programs, respondents supplied a 26-item perceptual profile, a 14-item evaluation, and a 6-item category description. In addition, respondents indicated whether they would "definitely watch," "might watch occasionally," or "would never watch" each of the programs. All the program responses were grouped according to these definitely/might/never categories, as were respondents' overall measures--their viewing behavior, reasons for watching TV, attitudes toward television as a medium, feelings about watching TV, psychographic profile, other media habits, demographics and socioeconomic status.

Illustrative Results

Because of space limitations, it is possible to present results (highly condensed ones) for just three shows: DALLAS, FANTASY ISLAND, AND HILL STREET BLUES.

Dallas

This show is extremely popular because of its villains, which viewers (both regular and occasional) regard as appealing. This characteristic in turn renders the program gripping and captivating, one that viewers find most enjoyable.

Nonviewers disagree with these perceptions. They also are far more critical of their TV watching than DALLAS viewers, having essentially no loyalty to a regular program schedule. And they feel no "irresistible attraction" to watching TV, unlike DALLAS viewers who like TV and worry about watching too much of it. Otherwise, viewers (re nonviewers) are more concerned about their personal appearance, hold relatively traditional opinions regarding marriage and the family, and admit to a fair amount of daydreaming.

Hill Street Blues

Our research (Spring 1981) caught HILL STREET BLUES in a very early stage, prior to the time its popularity (with attendant word-of-mouth promotion) had become established. Even in its nascent stage, HSB was perceived as absorbing, complex, deep, believable and realistic by regular viewers (and only slightly less so by occasional viewers).

Viewers watch more TV than nonviewers, watch it "to be entertained," and are more susceptible to regularly-scheduled series than to specials or mini-series. Finally, HSB viewers are least likely to be employed, most likely to be married (least to be divorced), and have the lowest proportion of \$25,000+ incomes.

Fantasy Island

This program's regular viewers are reasonably likely to be employed full-time (but not in the professions) and half as likely as nonviewers to be college graduates. Their income level is the lowest one we studied. And they watch the greatest amount of television--46.7 hours/week--of any group, almost three times that by nonviewers.

This viewer segment is a traditional group; they think the world and television is like FANTASY ISLAND--a place with predictable complications and happy endings.

Nonviewers, however, point to this program as the archetype of TV drivel; for them it is irritating, boring, superficial, and farfetched (i.e., not plausible)--a complete waste of one's time.

RESPONSE RATE STIMULANTS IN MAIL SURVEYS: A POTENTIAL
SOURCE OF SAMPLE COMPOSITION BIAS

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Abstract

Users of mail surveys are continually searching for ways to increase response rates without adversely affecting total survey costs, but it is possible that higher response rates are sometimes achieved at the cost of decreased quality of response and/or increased sample bias. This paper studies return envelope style as a response stimulant. While recognizing the trade-offs between higher response rates for stamped return envelopes and lower total costs for business reply return envelopes, this study asks if response quality and sample composition are affected. Response quality was not differentially affected by return envelope style. However, an important difference in the age composition of the different groups of respondents was detected. It appears that the middle categories of age (41-55 years) may resist returning questionnaires in business reply return envelopes to a greater extent than in stamped return envelopes. More research on this question is needed. No differences in sex, marital status, occupation, education or income were detected.

Introduction

Many studies of mail surveys have been conducted investigating a wide range of variables. The important issues in many studies include the effect of various response stimulants (incentives, follow-up letters, envelope style, etc.) on response rates, response speed, and response quality. Furthermore, different inducement methods have been reported as differentially affecting rates of response for different segments of people. The study reported in this paper looks at the differential effects of using business reply or first class stamped return envelopes on response quality and sample composition.

We know that higher powered return postage in mail surveys serves as a response stimulant at economic cost. Business reply mail is much less costly in the lower ranges of response rates, but we don't know if return envelope style influences more than just response rates. The study summarized here is exploratory in nature. No hypotheses are offered, but a finding of no difference in response quality or sample composition due to return envelope style would be welcome. If differences are found, it will be necessary to re-evaluate the benefits of business reply envelopes. See Finn (1981 - 1982) for a more complete summary of the literature.

Method

A random sample of 1000 heads of household was randomly split in half. To return a questionnaire on usage and opinions of financial institutions, one half received a first class stamped envelope, while the other half received a business reply return envelope. The questionnaire had three types of questions: 43 check-off questions on the topic; 6 check-off demographic questions; and two pairs of related questions.

Response quality was measured 3 ways; number of omissions in the check-off questions, consistency in

responses to the question pairs, and number of incomplete questionnaires. Sample composition was measured by comparing the distribution of answers to the demographic questions. More complete details of the study design can be found in Finn (1981 - 1982).

Results

No differences between return envelope styles were noted for any of the measures of response quality. The sample composition comparison yielded no differences in sex, marital status, occupation, education or income. However, potentially important differences were noted for age. Table 1 highlights these differences.

TABLE 1

AGE COMPOSITION OF THE DIFFERENT SAMPLES
Percent of Response Category
[Percent of Total Sample in Response Category]

Age	Return Envelope Style	
	Business Reply	Stamped
Under 41	51.8 [9.2]	46.7 [11.5]
41-55	14.5 [2.6]	28.8 [7.1]
Over 55	33.7 [6.0]	24.5 [6.1]

The unbracketed numbers in Table 1 report the percentage breakdown of age categories for each envelope style actually returned. As can be seen, there are proportionately more older people and fewer "41-55" year old people responding via business reply mail. An alternative way of viewing the response pattern is as a percentage of the total sample size for each envelope style (the bracketed numbers). With this view, the difference in the "over 55" category disappears, and the "41-55" year old age group is almost three times more strongly represented with stamped envelopes. Unfortunately, because the number of people in each age category who received each envelope style is unknown, these differences cannot be tested for significance, even though both samples were chosen randomly. However, this view offers an important future research question: do people in the 41-55 year old age category selectively resist returning questionnaires in business reply envelopes? If "yes", users of mail surveys may be unknowingly biasing their samples toward older or younger respondents.

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COLLEGE ATHLETICS AS A MARKETING TOOL: IMPACT ON BENEFACITOR GENEROSITY

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Abstract

In this paper the different types of marketing activities practiced by universities are outlined. Among these is the operation of the athletic program which can generate funds in a number of ways, perhaps even by eliciting greater gift-giving by university patrons. Results are presented from a pilot study designed to assess the plausibility of this hypothesis.

Introduction: University Marketing

Although non-profit organizations, by definition, have different objectives than profit-seeking firms, both types of institutions will typically need to generate large amounts of revenue to sustain operations. So the two types of institutions are alike in that revenue is the means to an end--profit in one case, non-profit goals in the other. Another common characteristic is that the techniques of marketing can be applied to the problem of revenue generation in either case.

One familiar enterprise in the non-profit category is the university. Universities need to generate large amounts of funds for their operations and the totality of means by which a university raises funds can be regarded as its marketing function. An illustrative listing of such "university marketing" activities includes: (1) Providing quality education in order to obtain tuition revenues; (2) Providing quality research in order to attract private and public grants; (3) Commercial enterprises such as television and radio stations, book publishing, farms, hospitals, retail stores (e.g., book-stores and restaurants), rental of auditorium facilities, stock market investments, and promotion of athletic events; (4) Solicitation of donations from alumni and other benefactors.

Of these marketing activities, one that may present some unique dimensions is the operation of the athletic program, particularly the production of athletic spectacles for mass audiences. This is properly included among university commercial enterprises since it generates revenue directly from gate receipts, stadium concessions, broadcasting rights, sales of ancillary souvenir items, and payments from post-season special events. The athletic enterprise of a university may also contribute indirectly to the raising of revenue through either of two mechanisms: (1) Since virtually the only regular contact any university has with the general public is through its athletic program, the total impression thus communicated provides much of the backdrop against which the fund-raising effort is conducted. Successful athletics may therefore contribute to a favorable overall public impression of a university, which may translate into a greater propensity to bestow gifts upon that school. (2) More directly, many schools' alumni attach great value to athletic success and may reward such achievement with increased monetary contributions. This latter proposition was the subject of a pilot study which is described in the following section.

Analysis and Results

The hypothesis to be considered can be expressed as

H: A strong positive association will be observed between a university's degree of athletic success and the amount of monetary donations received.

TABLE
PREDICTORS OF NOTRE DAME CONTRIBUTIONS

<u>Independent Variable</u>	<u>Coefficient</u>	<u>t-value</u>
Constant	-1,189,668	-1.61
Football Record	4,016,436	4.85 ^a
Basketball Record	44,225	.10
TV Football Games	93,283	1.20

$R^2 = .771$ (.695 adjusted); F-ratio = 10.11 ($p < .01$);

Durbin-Watson statistic = 1.56

^a $p < .001$

Data were used from a convenience sample of two universities, Notre Dame and Wisconsin. These schools were considered appropriate subjects because both operate high-level athletic enterprises which are known to be popular with their respective alumni markets. So if the hypothesized relationship is to be found anywhere, it is likely to be manifested in subjects such as these, which provides opportunity for convincing falsification.

In the Notre Dame case, data were collected for these independent variables: Football won-lost percentage, basketball W-L pct., and number of football games on national or regional television. For Wisconsin, hockey W-L pct. was used instead of televised football games, with the other two variables the same. These variables are the indicators of athletic success judged to be prominent in each situation, e.g., Wisconsin has few televised games but a very popular hockey team. Dependent variable for the Notre Dame analysis was amount of contributions to the Annual Fund, in constant dollars; for Wisconsin, amount of private gifts, grants, and contracts (constant dollars). Different measures of monetary donations had to be used, representing the best available operationalization of "benefactor generosity" for each school. Data were collected for the period 1964-76 in the Notre Dame case; FY 1965-66 to '78-79 for Wisconsin. These time periods reflect a number of considerations, principally the availability of complete data. Care was taken to assure proper sequentiality, or concurrence, between independent and dependent variables, i.e., athletic results must not have occurred subsequent to the dependent measure within each observation. Multiple regression was used to identify any relationships between the various measures of athletic achievement and the dependent variables.

In general, the results were equivocal but provocative. The Notre Dame data produced support for the hypothesis (see Table) but the Wisconsin data did not, and are not reported. Despite the conflicting results, the conclusion can still be offered that, in some cases, a university's athletic achievements may have a tangible effect on the amount of monetary donations received. The managerial recommendation, then, is to identify which public endeavors of a university, athletic or not, are both salient to the donor market and controllable, and allocate resources according to which activities seem to produce the greatest return, including any impact on monetary contributions. Here, based on the regression results and converting to current dollars, each Notre Dame football win is worth about \$500,000 in donations.

NEGOTIATIONS IN TURN-KEY PROJECTS
A CROSS-CULTURAL STUDY

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Abstract

Turn-key projects are becoming increasingly frequent in international business. In these projects negotiation process is of particular interest. In this paper a model has been developed for the investigation of the important factors in negotiation process. This model has been utilized to describe and analyze two case studies.

Introduction

In the context of turn-key projects, the negotiation process is of great importance due to its particular significance for the question of success or failure for the whole project. This is particularly crucial when the parties involved have no experience of each other and come from entirely different environments; e.g. one industrialized country and one developing country.

In this paper we have developed a model for the investigation of important factors in the negotiation process. Also, we have utilized this model for analyzing two cases of negotiations. As we intend to concentrate on environmental differences, one case refers to a negotiation between a Swedish seller and an African buyer, while the other case describes a negotiation process between two Swedish companies.

Model

For the purpose of this analysis a model has been formulated.¹ The relationships developed during the interaction between the parties, and as a consequence of this interaction, are particularly considered in the model. The model consists of three groups of variables: Antecedents, Concurrent and Consequent.

Antecedents: These are the variables which primarily exist at the beginning of the relationship. They are divided into two sub-groups: Objectives include common, conflicting and complementary objectives; Background factors include environment (social, cultural and political), market structure, third parties and negotiators. The environmental variation and the unfamiliarity among the parties is of particular interest.

Concurrent: These variables constitute the dynamic part of the model and the relationship. They are divided into the process and the atmosphere. The atmosphere can be defined as the perceived "milieu" around the relationship.

Case Studies

Two case studies are made, one illustrating negotiations between two Swedish firms and the other between a Swedish firm and a government body in a LDC. In both cases the buying organization is state owned. The buyer is financing the project itself which means that no loan or aid is involved. The seller is the producer of a significant part of the equipment supplied. Data is

collected through documents regarding the projects and by interviewing the negotiation leaders from both parties. In both cases the negotiation process was investigated up to and including the signing of the contract.

In case one both the firms, the seller and the buyer, came from the same environment. The seller had supplied the same type of equipment to the buyer a couple of times before. In case two both the parties came from different environments and countries. They had never had any contact and were totally unfamiliar with each other.

Findings and Areas for Future Research

The impact of environmental differences on the negotiation process is very apparent from the above case studies. It was observed that in Case Study I most of the time was consumed by the informal negotiations. The parties belonged to the same environment and had complete information about each other which made the whole process easier and shorter.

In Case II, it was very difficult for the parties to understand each other's behaviour. The delays and the influence of political changes on the negotiation process were quite normal for the buyer. The influence of political changes in particular was so great that the project was nearly abandoned.

We found that most of the issues which were crucial in Case II, e.g. legal issues, remittance of money, price increase, language of the contract etc., were not necessary to discuss in Case I.

Therefore, the differences between the two cases in terms of the mode, i.e. conflicts, misunderstandings etc. are probably caused by environmental differences. These differences occur on two levels: national, and organizational.

The differences on the national level are obvious. In Case I the two firms are situated in the same country, in Case II they are not only situated in different countries but they also seem to know very little about each other's environments. The differences on the organizational level go in the same direction.

We believe that our model is an adequate framework for the study of negotiation processes. It should however be developed towards more specificity and richness in details. This would need more detailed knowledge about these processes, particularly regarding the impact of atmosphere. Also, it would be valuable to investigate negotiations between the parties regarding problems arising after the formal signing of the contract.

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¹
The model is based on Sawyer & Guetzkow, 1965, and Håkansson, 1981

SHOPPING AND LEISURE ACTIVITY PATTERNS WITHIN
THE ELDERLY CONSUMER SEGMENT: THE "YOUNG-OLD" AND "OLD-OLD"

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INTRODUCTION

Consumer research generally confirms that the elderly are less active consumers and shoppers than young adults. But the single-category treatment of older consumers does not provide insight into just when their life-space contraction begins, how rapidly it develops, and how extensive and varied are its effects on consumer lifestyles. The consensus of gerontological research seems to be that approximately 75 years of age marks the transition point into advanced age. Unfortunately, there has been very little investigation of the effects of aging on actual consumer behavior. Particularly lacking is detailed information on shopping and other consumption-oriented leisure activities and how these patterns and their accompanying lifestyle and socioeconomic status change with chronological aging. Compounding the problem, as Bernhardt and Kinneer (1975) point out, most of the existing studies of elderly consumer behavior use quite small samples and unrepresentative "captive audiences" of a single elderly residence or attendants of a single senior center.

The present research purpose is to profile older consumers in a major metropolitan market, comparing younger and older households within the broad "over-65" age category. Following Neugarten (1974) and others, the age split is above and below age 75. The study focuses primarily upon non-institutionalized older persons who are presumed to be at least marginally active in out-of-home pursuits. Specific activities measured here include (1) non-grocery shopping, (2) vacation patterns, and (3) a variety of relatively passive to more physically demanding leisure lifestyle activities. Demographic profiles of both age groups are examined. The study will investigate the extent to which the 75-and-older age group exhibit lower levels of leisure-oriented activity.

METHODOLOGY

Data are provided by a recent personal interview survey of households in Maricopa County (metro Phoenix), Arizona, sponsored by Phoenix Newspapers, Inc. The survey boundaries encompass Maricopa County, including outlying rural areas and small towns. This survey, conducted annually by an independent marketing research firm, follows generally accepted survey research procedures for selecting and interviewing a representative sample of area households. The survey questionnaire consisted of over 800 questions probing detailed shopping patronage, purchases, shopping attitudes, product ownership, lifestyle activities, and detailed demographics.

Personal interviews were completed with 3300 households, including about 600 elderly households (head 65 or older). Institutional addresses, such as dormitories or nursing homes, were not sampled so that the elderly sample includes only independent households engaging in some minimum amount of personal shopping and other outside-the-home activities. For purposes of the present study, elderly consumers were subdivided into two age groups, these being: household head age 65 to 74, and 75 and older. This age split produced subsamples of 433 households aged 65 to 74, and 175 aged 75 and older.

RESULTS AND IMPLICATIONS

The primary purpose of this study was to investigate whether independent non-institutionalized households in the broad "over-65" age group exhibit different levels of shopping and leisure lifestyle activities. The survey data provided an opportunity to split the elderly household sample at the 75-year-old break suggested by Neugarten and others as meaningful in differentiating the "young-old" from the "old-old."

Differences in leisure and shopping activity patterns between the two older age groups were mixed. Clearly, the data evidence a reduction in away-from-home activity with advancing age. This pattern was especially apparent, and expected, in the more physically demanding of the recreational activities measured in the survey. But there is less evidence that store shopping activity as measured by the frequency of visits and variety of retail areas and stores patronized, diminishes sharply by age 75. Rather, for many older persons, shopping may continue to be a source of recreation. Most of the "old-old" shoppers continue to drive a car and travel rather widely to shop. Further, household income would not appear to constrain shopping more among the older group.

Most elderly households take vacations and short motor trips, a finding that supports those of other studies of older consumers. Older consumers are found to be above average in foreign travel, air travel, and possession of passports, airline and auto rental credit cards, and traveler's checks. Bartos (1980) reports that "active retirees" and, especially retired women, are active domestic and international travelers, interested in luxury and comfort in travel and more leisurely trips. Vacationing is somewhat less frequent in the 75-and-over age group. But, again, the frequency of vacation travel does not diminish sharply; and, in fact, the frequency of vacations outside the state and foreign visits is similar in both older age groups.

In conclusion, this first look at lifestyle activity levels within the broad "over-65" consumer market offers some evidence that independent elderly households are, indeed, not homogeneous in level of leisure activity and that the age-75 split suggested in gerontological literature has some value to marketers. Nonetheless, the frequent similarity in activity profiles shown here suggests that the factors contributing to a contraction of the leisure-oriented lifestyles of older persons are more complex than chronological age can capture, a point which has been made elsewhere in the literature. More work needs to be done to explore the mix of socio-economic and lifestyle conditions that shape elderly consumers' leisure activities. The variety of shopping and leisure activities surveyed here should be expanded. A wider range of consumption-oriented, outside-the-home activities could be generated that focus upon interests of older persons, females, and single-member households.

The complete paper and reference listing is available on request from the authors.

AN EXAMINATION OF THE DECISION PROCESS LEADING TO ENERGY CONSERVATION

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INTRODUCTION

Increasingly, government, corporate, and independent organizations are seeking to advance the practice of energy conservation. Their efforts to promote energy-saving behavior may be seen as marketing programs to move consumers of energy from a state of being unaware of the need for conservation, through a sequence of intermediate states in a cognitive decision process, to an output stage of having selected a set of energy-saving behavior alternatives.

Such marketing programs will better succeed with their customers to the extent they focus on those states in the process which most influence the choice of desired behaviors. That is, certain intermediate states in the decision process can serve as entry points for persuasive communications. For example, if perceived risk of failing to conserve appears as a particularly influential antecedent of the choice of conservation behavior, promotional campaigns should seek to communicate to consumers the riskiness of their current rate of energy usage.

This research investigated the influence of 12 states in the decision process that were hypothesized to be antecedent to energy-saving intentions and behavioral choice. Data came from 180 respondents to a personally administered survey based on an age-and-sex quota of adult residents of a large western city.

FINDINGS

The results of the descriptive statistical analysis raise doubt whether American consumers are indeed yet coming to grips with the relative scarcity of energy that is now affecting them and will continue to shape their lives in the future. Responses with respect to car-pooling, riding the bus, reduced vacation travel, walking to stores, and turning down thermostats indicate a lack of behavioral response that is consistent with the efforts called for by governmental and conservation bodies.

When the emphasis shifts to psychological states of the respondents, energy conservation fares somewhat better. A majority projected their consumption for the coming year to decrease, and another one-fourth expected to hold consumption constant. Fewer than one-fifth admitted a lack of willingness to conserve whenever possible. A clear majority favored sub-compact and compact cars, even given the hypothetical nature of the question. More than four-fifths said they prefer energy-saving products. Turning to attitudes, better than three-fourths were willing to overlook the sacrifices required to see the good in energy conservation, and an even greater proportion said they like the energy-saving features now found in products on the market.

The interpretation of these findings lies in an understanding of the consumer decision process. While actual behavioral choice lags behind the hopes of those who espouse conservation, the states conceptualized as directly antecedent to energy saving behavior indicate stronger support for energy saving. As quite favorable attitudes and intentions now exist, it is presumably

only a matter of time before behavioral change consistent with these antecedent states comes about.

On the positive side, there is no doubt the idea of energy-saving has found acceptance. In fact, it would appear marketers have underestimated the promotional value of energy-saving features in products. While this study made no direct assessment of the relative appeal of a sample of energy-using products, it appears that energy-saving attributes are highly preferred by consumers.

The support for conservation at the affect state suggests that many consumers have finally come to accept their position of relative scarcity. However, the affect items show somewhat less support for conservation than the conative measures, even though affect is assumed to precede conation in the decision process model. One likely interpretation of this difference is that to some extent Americans prefer conservation for their own well-being, but don't like the situation in which they find themselves to such a degree. That is, they value conservation as a means for the end of maintaining their standard of living, not for any reasons intrinsic to conservation itself.

For an inferential statistical analysis, given 12 criterion measures and 35 predictor variables, bivariate correlation was selected as the means of statistical analysis. To aid in determining which conservation behaviors and mental states were predictable from antecedent constructs, the number of significant correlation coefficients was tested by means of the cumulative binomial distribution. Of the six behavioral choice criteria, all but decreased vacation travel from the previous year and increased walking to stores found a significant number of correlations with antecedent constructs. Intention was also significantly connected with previous states. The three measures of preference and the two items for affect correlated quite well with antecedent constructs, as well.

The correlations supporting the conceptualization indicate that the most appropriate entry points for communication designed to influence behavioral choice are: factual knowledge of the energy situation, concern for the situation, personal involvement in conservation programs, and level of information concerning the reasons for high energy costs. Psychological states immediately antecedent to behavior are similarly related to their conceptualized antecedents. Favorable states are predicted by: a liking for energy-saving features of products, a realization of the money savings that result from conservation, a belief in the seriousness of the energy situation, a concern for the natural environment, a perceived risk of falling behind the timetable necessary for ensuring future availability of necessary energy resources, and having a predominantly altruistic motivation to conserve.

ORGANIZATION DEVELOPMENT IN MARKETING
- THREE ERRORS AND HOW TO AVOID THEM

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Abstract

This summarises a paper studying three errors of organization development (OD) in marketing that I have found particularly significant in determining the success or failure of the firm. OD encompasses all sorts of methods for a firm to develop its strategy, its organizational structure and its working climate. Each error is defined below and consequences and remedies will be spelled out. The paper is based on case studies in the Nordic Countries and research reports and books from Scandinavia, the UK and the US.

Error 1. The organizational Dilemma: The Marketing Department vs The Marketing Function

Marketing is carried out to a lesser or greater extent by everybody in the company. Thus the marketing function becomes something more than the marketing department. The board of directors may draw up marketing strategies. The managing director may devote time to marketing, e.g., negotiating with important customers. Service engineers influence the image of the firm and the sales of spare parts. Construction engineers need to understand customers' needs. All these members of the organization are involved in the firm's marketing function although most of them do not see themselves as marketers or businessmen. This creates The Organizational Dilemma. The following lessons can be learned:

- Marketing orientation of the firm: Recognize that several members of the organization belong to the marketing function although they are not attached to marketing departments. Marketing orientation of the whole company can thus be speeded up.
- Training and education: Marketing and sales training should be given to all those belonging to the marketing function.
- Recruitment: In recruiting new members the marketing content of each job should be defined and candidates assessed in relation to that.
- Cost calculations: When marketing costs are calculated, the marketing function concept should be used to determine the "real" cost.

Error 2. The Intellectual Trap

Common symptoms of problems in the marketing are low sales, low profits and slow implementation of decisions. In order to improve conditions, restructuring of the organization, the systems and the routines is often carried out. The solutions - which are all intellectually based - may be valid, but they are seldom effective in isolation. The problem is often both intellectual (left brain half) and emotional, relational and creative (right brain half). To a large extent we are controlled by our emotions which express themselves in conflicts with colleagues or customers, attitudes toward changes, motivation to sell etc. The Intellectual Trap means that we try to solve emotional, relational and creative crises with intellectual techniques.

Dynamic marketing directors and tough salesmen are often badly equipped to deal with fear, anxiety, defence mechanisms, personal crises, love, insecurity etc.

Methods to deal with these problems include a number of approaches: sensitivity training, group dynamics, meditation etc. These methods can be used to (1) develop positive relations between members of a group and solve conflicts (2) to develop individuals. We can learn the following lessons from The Intellectual Trap:

- A lot of effort and money is spent in corporations to work out new organizational structures, new systems and new routines without any positive result - actually just blurring the real issue. Therefore, diagnose and accept the real problem.
- Usually malfunction is caused by a combination of structural and emotional-relational-creative factors. Take care of emotional problems with appropriate behavioural techniques, e.g. group dynamics and other exercises.

Error 3. The Inverted Sequence

When profits are low and the firm is threatened, focus is often on the organizational structure rather than on goals, objectives, marketing strategies and the definition of the business as such. The Inverted Sequence means that the firm tends to change the organizational structure before the management has determined what sort of services they are going to give to the market.

In my experience the strategy should first be reviewed. Even if people logically accept this approach it is often difficult to get it implemented, the impact of the existing organization structure and its history holds them back. The following sequence should be used:

1. Review and define the business, its products and market segments, its goals, objectives and marketing strategies. A number of models are concerned with solving this, e.g. the portfolio analysis developed by the Boston Consulting Group and the Directional Policy Matrix.
2. Recommend a new organizational structure to fit the new definition of the business.
3. Appoint executives and let the newly appointed executives work out the details.
4. Develop planning and control systems to fit the new conditions.

If the Inverted Sequence is pursued the following will occur:

- Management becomes occupied with restructuring the organization with no positive result at all. Conflicts will occur and the firm will suffer from inertia and delayed action.
- The review of the firm's products, services, market segments, goals and strategies will be delayed and the real problem obscured.

AN EXPORT MARKETING MODEL FOR LESS-DEVELOPED COUNTRIES:
A CASE STUDY OF TURKEY IN LIGHT OF THE JAPANESE EXPERIENCE

Metin N. Gurol, University of Baltimore

Abstract

Less-developed countries (LDCs) rely heavily on export marketing to obtain foreign currencies necessary for economic development. Several new developments in the theory of international trade have been incorporated to form general guidelines for an export marketing model for LDCs. The model also incorporates some of the features of the successful Japanese export strategy. Its usefulness is illustrated by applying it to Turkey, an LDC which could greatly benefit from an increase in export marketing.

Studying actual trade patterns of manufactured goods in the 1970's has led to an international "Product Life Cycle Model" (Wells 1972). This model has many potential uses for LDCs in indicating the characteristics of successfully exportable products and the countries to which they should be marketed. For fast and efficient market growth, government planners and marketers could use these characteristics to select their export portfolios and target markets. Another research development in the 1970's the "Experience Curves" could be beneficial in ensuring the success of the export marketing strategy. The "Experience Curves" show that in a variety of industries, the total cost declines by a characteristic amount each time accumulated production experience doubles (The Boston Consulting Group 1970). If an LDC uses a model which combines "The Product Life Cycle Model" and "Experience Curves," it could make better choices of exports and decrease costs and prices by large scale production which would enable it to capture substantial shares of the world markets in certain industries.

The Japanese have made very effective use of these two concepts in their export market development. First, Japanese manufacturers satisfied internal demand for products that were produced overseas. Then they started exporting to LDCs in Asia where there was a growing demand for the product and no domestic competition. Frequently Asian LDCs served as a testing ground for Japanese manufacturers in the world market. After a firm gained worldwide competitive strength, the Japanese manufacturers were exported to industrial nations.

Turkey is an LDC struggling with export marketing problems. The major concern, as expressed in the five-year development plans, is to shift the majority of its exports from agricultural to industrial goods. This has to be done in a relatively short period of time, 14 years, because in 1995, Turkey will be a full member of the European Economic Community (EEC). At the moment, the country is not ready for such an entry and cannot compete with the stronger, industrialized Western European countries. If industrialization is not accomplished within the allowed period, free competition with EEC countries will push Turkey back to being an agrarian economy. One of the main problems is that analytical studies of current Turkish export marketing have not been conducted. This paper tries to lay the foundation for such studies and proposes an "Export Marketing Model" for Turkey, which is based on the international product life cycle model and the

experience curves. The Japanese have made very effective use of these two concepts in their export market development. The Japanese experience can serve as an enlightening example in Turkey's struggle to become an industrial economy.

The Model

The export marketing model we have developed for Turkey provides general guidelines which other LDCs could use. It is composed of five stages.

Stage I: Product Selection. The first stage of the model is selecting the products that are at the threshold of being exportable from the LDCs. These should be products that are in or are moving into the mature phase and have the following characteristics: (1) high domestic raw material content and, (2) a labor intensive technology to benefit from low labor costs.

Stage II: Domestic Sales. After selection of the products, investments are made to build the production facilities. Economies of scale are important considerations, but the capacities are generally limited by the domestic consumption potentials.

Stage III: Export Sales to Middle East. After experience is gained and costs are lowered, bigger and relatively more capital-intensive production facilities are built and exporting to Middle Eastern countries starts. International marketing experience is gained and sliding further down the experience curve allows further lowering of costs and prices, which stimulates additional domestic as well as international demand.

Stage IV: Export to EEC. EEC should be the main target of exports, since Turkey will be in this free trade area soon. In this stage, larger capital investments are made considering the substantial demand of the EEC countries.

Stage V: Export to U.S.A. The products that are successful in the EEC could be exported to the U.S.A., because mass production with lower labor rates, cheaper raw materials and perhaps newer plants may enable Turkey to produce at a lower cost than the U.S.

An Example A good example for a product that can be exported from Turkey to other LDCs and developed countries using this export marketing model would be textiles.

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MARKETING A PREDOMINANTLY BLACK UNIVERSITY

Metin N. Gurol, University of Baltimore

Abstract

Non-profit organizations can use marketing research to gather data as a base for designing their own marketing strategies. One predominantly black state university conducted a survey to determine what had attracted students to the university. The quality of academic programs was found to be the first attraction for most students, with being predominantly black, the second attraction. The main reason for choice of business as a major was the job opportunities.

Introduction

A progressive, predominantly black state university (a non-profit organization) had been attracting talented black high school graduates for many years. Then the university encountered competition for student enrollment from the predominantly white main campus of the state university system which was under pressure to increase its proportion of black students. The main campus rejected lowering the entrance requirements for blacks and instead decided to use a large number of scholarships to attract talented blacks. This created problems for the predominantly black university because many of these students would have normally attended their university. In order to keep getting the best black high school students, a major recruitment campaign was planned.

Methodology

To provide a systematic approach for marketing the predominantly black university a marketing research class volunteered to conduct a study. The impetus was the campaign that the School of Business and Economics hoped to mount if it received American Association of Collegiate Schools of Business (AACSB) accreditation. The research design for this project was a descriptive, cross-sectional survey. A self-administered questionnaire was given to 124 students selected by cluster sampling--treating classes as clusters.

Findings

Out of the thirty possible reasons, twelve were "agreed" by 50% or more of the students to be influential in their decisions to attend this university. (See Table 1).

Best job opportunities was indicated as the major reason for becoming a business administration major and choosing a concentration.

The students felt that the two major effects of AACSB accreditation would be attracting more academically proficient students from high school and more qualified professors. One-hundred-eighteen (95%) indicated that they were "for" accreditation while five (4.1%) were "against" it.

TABLE 1

Reasons	Agree	
	Number	Percent
Good academic programs	114	91.9
Predominantly black student body	106	86.2
A particular major offered	100	80.6
Financial aid available	88	71.6
Good athletic programs	86	69.9
Convenient school location	86	69.9
Size of the university	79	64.2
Many majors to choose from	79	64.2
Job opportunities upon graduation	79	64.2
Good faculty	69	55.7
Easy to be admitted	62	50.0
Employment possibility while attending college	62	50.0

Summary of Findings and Conclusion

It might be expected that the major reason why a student attends a predominantly black university is because it has a predominantly black student body. On the contrary this was the second reason for students in this university. The major reason was good academic programs. This was predictable because the state's university system had five predominantly black universities and this university was the best one academically. This was clearly demonstrated later in the semester when the School of Business got AACSB accreditation in its first trial, becoming one of the three predominantly black business schools to be accredited by this prestigious organization.

The availability of a particular major was stated as the third reason for coming to this university. The option of ninety majors makes the university appeal to many students. Availability of financial aid was the next reason and about 70% of the respondents were on some type of financial assistance. Job opportunities after graduation were excellent because major corporations were recruiting on this campus.

Given these findings, the best alternative for the university is to market itself as "an institution with good academic programs for blacks with ninety majors to choose from." The School of Business should emphasize the career opportunities of its graduates. A very effective marketing tool for attracting academically oriented black high school students would be to acquaint them with the average and top salaries of its graduates, as well as, the names of the companies who employ them.

QUALITY MARKETING EDUCATION AND A BOOK RENTAL SYSTEM:
CAN THEY COEXIST?

Metin N. Gurol, University of Baltimore

Abstract

A predominantly black university with an AACSB accredited business school has a book rental system which was initiated in 1957. The adopted books must be used for at least three years in each course. This paper reports the results of a survey which measures the student's knowledge, attitudes, intentions and behavior with respect to the book rental system and how it affects their education process.

The book rental system had been initiated in 1957 because most of the black students who came from low income families could not afford to buy textbooks. In the intervening years, the business school had received (AACSB) accreditation, which means that the school is approximately in the top 10% of the business schools in the U.S.A. Many of the marketing professors as well as other business school professors now consider the book rental system a hindrance to quality business education.

The marketing professors are concerned because the rental system requires that a book adopted for a course be used for at least three years. As a result, many texts do not reflect the current marketing trends. Many texts also do not correspond to the sophistication level of the student body. For example, in the Marketing Research course seniors were using Churchill's Marketing Research which is considered to be a graduate level text in many universities. On the opposite end, in the Consumer Behavior course the textbook for the same seniors was Essentials of Consumer Behavior by Block and Roering which is considered to be a junior college level book by many marketing educators. Therefore, the marketing professors had to simplify the more sophisticated books and supplement the lower level books with many additional materials to bring them to the level of the students. Such time consuming efforts distract from teaching effectiveness. Faculty also resent having to use texts which they may not have chosen. Since teaching techniques vary, instructors are often better able to teach with one type of text rather than another. If they were allowed their preference, their teaching would reflect their enthusiasm which is generally conveyed to their classes as well.

Methodology

The research design for this project was a descriptive, cross-sectional survey. A self-administered four-part questionnaire was given to 117 students selected by cluster sampling--treating classes as clusters.

Findings and Discussion

Part I. Attitudes: Thirteen statements were used to assess how the students felt about the book rental system. These statements were ranked from most agreed to least agreed for all respondents.

The book rental system was established to "quarantee that all students have books for the courses they are taking." When students were asked to state their

attitudes about this statement, most of them the main purpose of the rental system was the least agreed (39%) of all thirteen statements. It is interesting to note that "sometimes there are shortages of books at the beginning of the semester" was the most agreed (95%) statement. These findings indicate that the rental system is no longer fulfilling the function it was created for in 1957.

Part II. Knowledge: When asked how much they pay to rent their books, only seven students (6%) stated the correct dollar value.

Part III. Behavior: Fifty-one percent of the students indicated that they have a small library started at home or in the dormitory with their textbooks but 78% of these libraries contain four books or less.

When the bookstore had a textbook shortage at the beginning of the semester, the students had to wait to get the books they needed. The waiting period varied as follows: One week (5%), two weeks (12%), three weeks (13%), four weeks or longer (22%). Eight percent never got their books.

Part IV. Intentions: The fourth part gave students more information about their present "book rental system" and about "buy used and resell system" used at a nearby university. Then the students were asked to indicate their preference. Thirty-two percent wanted to keep the present system whereas 68% wanted to change to the alternative system.

Recommendations

In order to modernize the bookstore's performance, a university committee of faculty, administration and student representatives should be formed. This committee should investigate the present rental system as well as bookstore systems in other universities. Based on this university's needs a best alternative should be found and implemented because quality education and the book rental system cannot coexist for a long time.

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MARKETING FOR NON-PROFIT INSTITUTIONS: A CASE FOR INDUSTRIAL DEMARKETING

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Abstract

Non-profit institutions by nature are generally less concerned about the increasing costs of their required resources. Therefore, demarketing must focus on an organizational need which is not related to monetary considerations. This paper discusses a demarketing program directed to non-profit institutions.

The Problem

If one must reduce to a single word the energy problem for colleges and universities in the 1980's, the word has to be financial. For example, the energy bill of San Diego State University for 1980 was \$3,200,000. A much smaller university, the University of the Pacific, incurred a bill for the 1979-80 academic year of approximately \$1,250,000 or \$312.50 per student! The California Energy Commission predicts that rates for energy in California will almost double by the time today's entering freshmen graduate. At the University of the Pacific this translates to approximately \$70 per month per student over academic year 1985-86!

Fortunately the problem for the college or university and the problem for the utility are related, neither organization benefits from increased usage. More importantly, both institutions benefit from decreased usage. Planned energy conservation programs which reduce the campus' usage of energy, result in smaller utility bills (as long as rates remain the same). Energy Conservation Programs which reduce the demand for energy also are of great benefit to the utility company because existing capacity is released which can in turn be used to provide energy for new customers.

Thus, since a mutual benefit results when both the customer (the college or university campus) and the supplier (the serving utility) work together, an ideal situation exists for demarketing.

Objectives for College and University Target Market

The PG & E Company has an objective to reduce energy consumption at 150 campuses in its service territory by 20% by 1985 (based on 1979-80 usage). As a whole, these 150 campuses consume approximately 12.3% of the total large commercial load on the PG & E system. This 20% reduction translates into an annual savings of approximately 170 million kwh (or \$11,000,000) and 14 million therms (or \$6,000,000) and would release approximately 3,000 kw of system capacity which would cost approximately \$5,000,000 to construct, based on 1981 construction cost figures. Planned energy conservation programs which result in released system capacity are not only the most cost-effective method for obtaining capacity to serve new loads but also the quickest. It takes approximately 6 to 14 years to bring a new plant on-line from the time of PUC authorization to its operating stage.

Decision Making Behavior and the TEEM Program

Industrial marketing literature frequently cites the importance of understanding the role of multiple buying influences. Within the college and university sector, the importance of group decision making is particularly

prevalent. Seldom does one individual have the authority to make decisions which affect the entire institution.

The PG & E Company recognized that their college and university program must establish a framework which involved as many of the "decision makers" as possible. Experience had proven that it was not sufficient to work only with the Campus Engineer or the Director of Building and Grounds.

The Total Educational Energy Management program was developed by PG & E in cooperation with Dr. Carl York of Lawrence Berkeley Laboratories, University of California, Energy and Environment Division.

The program was developed to aid colleges and universities throughout the PG & E service territory to establish energy management programs. The College and University Program is, in part, a response to California Public Utilities Commission (CPUC) Decision number 84902 (September 16, 1975) which introduced energy conservation into rate case proceedings as a determinant of rate of return:

"...We intend to make the vigor, imagination, and effectiveness of a utility's conservation efforts a key question on future rate proceedings and decision on supply authorization."

In addition to satisfying program goals and regulatory mandates, the College and University Program will demonstrate PG & E's solid commitment to energy conservation to a group of customers that influence all sectors of local, state and national government, business and industry. The PG & E Co. recognizes its social responsibilities related to energy conservation. The company believes its College and University Program is ideally suited to assist in its corporate efforts to fulfill those social responsibilities.

The development of a conservation ethic within this group of customers will potentially spill over into the business and government sector. The education of students in energy management and conservation will have lasting effects in all areas of society. A long range effect will be to smooth the path for future energy conservation efforts within California.

Concluding Remarks

In actuality, the PG & E Company's success results from their developing an approach which enables their customers to "manage" energy as opposed to "conserving" energy. The latter generally means doing without as opposed to increasing the efficiency of usage. Demarketing involves the art of discouraging through higher prices, poorer product quality, less service, less promotion and reduced convenience. From this perspective, demarketing is negative or even punitive and is of questionable applicability in the industrial marketing sector over any extended period of time given the long-term organizational relationships between industrial suppliers and their customers. Therefore, is this demarketing, or is it marketing?

Have it your way!

THE USE OF DUMMY VARIABLES TO EVALUATE PROMOTIONAL PROGRAMS IN THE AUTOMOBILE INDUSTRY

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Abstract

A dummy variable in a regression model was used to represent a manufacturer (company name, image, reputation, and promotional activities). The coefficient of this variable became a measure of the premium paid for a particular manufacturer's automobiles.

Introduction

There is a constant search for techniques to evaluate promotional programs, preferably on a continuous basis. The authors propose use of a regression model which demonstrates a technique that has such potential. It is simple, inexpensive, and can be easily implemented on a continuous basis.

Methodology

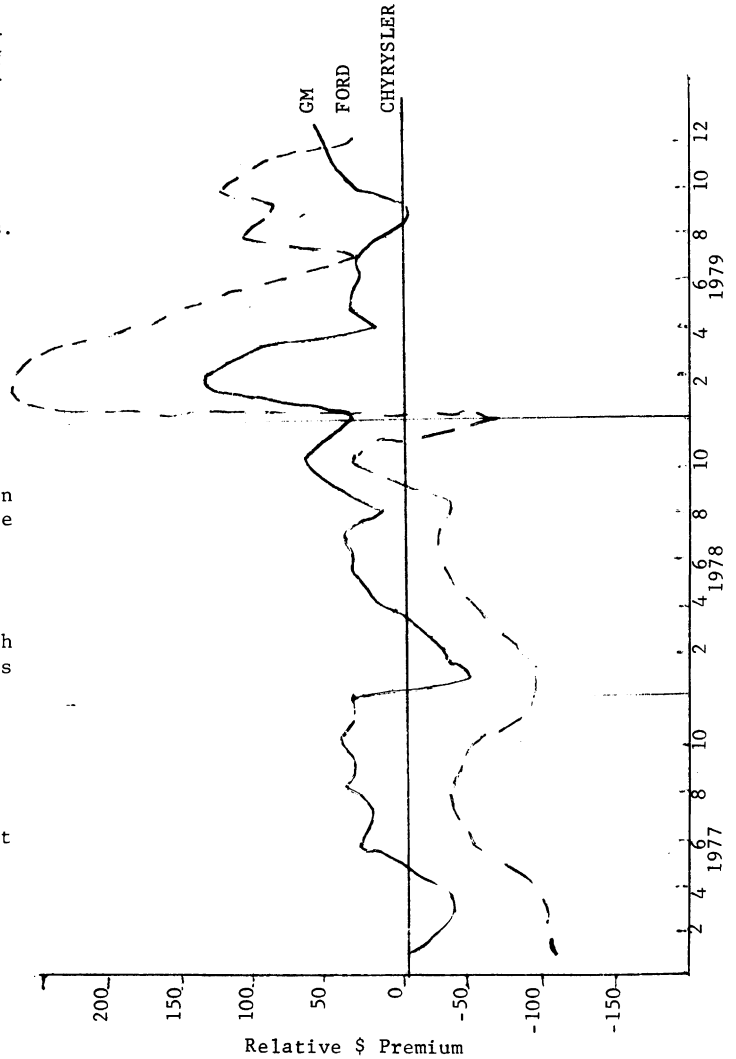
Auction prices of one and two-year old cars were used instead of new car "sticker" prices because of their greater reliability and representativeness of supply and demand forces. For this study, over twenty station wagons of different sizes and average price ranges were selected from the Automotive Market Report Journal. These represented models manufactured by GM, Ford, and Chrysler. Each monthly price covering 1977, 1978, and 1979 was used as the dependent variable and passenger volume, cargo space, mpg, class size, and features such as air conditioning, type of roof, and luxuriousness as the independent variables. Additionally, each manufacturer was represented by a dummy variable.

By running the regression model each month and observing the coefficients of the independent variables, one can argue that each coefficient can be treated as a rough measure of the dollars paid for that particular component. Since monthly price changes reflecting consumer attitudes towards such factors as energy shortages would be captured by the coefficient for mpg, one can also argue that changes in the coefficients of the dummy variables representing each manufacturer would reflect the amount of premium consumers are willing to pay for that manufacturer's wagons in the short run. Such short run changes in these coefficients can be taken to reflect promotional effectiveness among the three manufacturers.

Results

During each twelve months for a given year, two regression runs were made, one for a basket of one-year old wagons and another for a basket of two-year old wagons. The two sets of premiums for each manufacturer can be combined in various ways although in this instance they were given equal weights. Although the premiums showed significant fluctuations from month to month, annual averages were as follows: In 1977, GM models received nine dollars more than Chrysler's and \$84 more than Ford's. In 1978, GM models received \$20 above Chrysler's and \$124 above Ford's. Finally, in 1979, Ford models received \$130 above Chrysler's as well as \$77 above GM's.

Figure 1: An Index of the Relative Premiums for each Manufacturer



Each month, the variation explained by the dummy variables representing the manufacturers was about four percent. The adjusted R-squared for the regression model had a range of 0.58-0.88 during the 36-month period used in the analysis.

Conclusion

The results, the authors believe, can be an incentive for manufacturers to investigate the application of a similar tool to evaluate effectiveness of promotional programs in the short run. The model can be improved through additional data that is at the disposal of a manufacturer. The approach can also be utilized by brand or product managers in a competitive situation.

MARKETING INFORMATION SYSTEMS:
POTENTIALS FOR HEALTH CARE FACILITIES

Thomas J. Hayes, Roy D. Adler, and Elizabeth Hansen

ABSTRACT

Health care professionals have largely resolved the question of whether to market their services using techniques developed in the profit sector. The question has now become one of how to do it in the most efficient manner. At the same time, hospitals have invested heavily in sophisticated data processing equipment used largely for patient care and accounting purposes. The hardware capacity now vastly exceeds the current and projected software capability.

The purpose of this research note is to list a number of ways in which use of the computer can be extended for marketing purposes. In this context, the term marketing is used to mean the management of demand from a number of constituent groups, such as patients, physicians, employees, financial donors and trustees, vendors, and the community served by the health care facility. The full paper contains far richer detail and is available from: Prof. Thomas J. Hayes, Marketing Department, Xavier University, Victory Parkway, Cincinnati, OH 45207

APPLYING A MARKETING INFORMATION SYSTEM
TO HEALTH CARE FACILITIES

Attracting professionals

1. Interactive satellite units in the doctor's office or home to receive lab test reports or patient records immediately for diagnostic purposes.
2. The same units available to tie into the monitoring system already in use on high risk patients.
3. Branching routines for drug interaction, poison control, or diagnosis confirmation.
4. A computer graphics diagnosis routine for children or other nonverbal patients.
5. A monitoring system for noscomial diseases.
6. Electronic indexing by key word for literature review and resource confirmation.
7. Hands-free voice actuated programming in surgical or other intense concentration situations.
8. Automation of lab processing and results.
9. A disaster planning simulation designed to detect stress points under unusual load situations.
10. An emergency mobilization system to automatically telephone key hospital personnel and blood type donors (with periodic call-backs) in case of emergency.

Providing better service to patients

1. Extremely rapid credit verification to extend the concept of courtesy discharge to all patients.
2. Availability of preadmission data for all patients (exc. emergency).
3. A real-time customer satisfaction/dissatisfaction system similar to that used in major lodging chains.
4. Interactive programming to stimulate the patient's mental activity (eg. computer games) vs. passivity (merely watching television).
5. Interactive programming to monitor the psychological profile of long-term, infrequently visited patients.
6. After-discharge reminders for follow-up care.
7. An open line phone available to respond to medical questions, with tapes selected and played by computer.
8. Language translation capability for medical or other terms used infrequently in conversation.
9. Translating units for the visually-impaired (either Braille or enlargement).
10. Patient self-service diagnosis and triage.

Bringing marketing management to the administrator

1. Application of modern inventory control routines to reduce on-hand requirements for blood or other perishable items.
2. Data storage for market characteristics, market potential, market share, and internal marketing audit information.
3. A cuing system for beds, operating rooms, and shift schedules.
4. Text editing and output reports to key supporting members of the community.
5. A simulation program to aid in planning with variables such as decline in the base of financial support, bed occupancy severely over or under capacity, etc.
6. Pricing analysis for specific services.
7. A UPC-type scanner for automatic re-ordering from vendors.
8. Forecasting for future economic conditions, such as employment, average income, etc.
9. Data on activities of rival hospitals and competitive services.
10. Government health and planning activities.
11. Information on new service potential and acceptability.

ASSESSMENT

Some of the applications of marketing information systems presented here are clearly easier to implement than others. Many of the proposed applications are already in effect in some of the more advanced health care facilities as the constraints of the past decades are being lessened due to more advanced technology and reduced costs. The implementation of a marketing health care information system would not be without its limitations, and there are a number of potential technological, economic, external, conceptual and managerial restraints listed in the main paper.

As competition and costs increase the problems facing health care administrators, a stronger orientation toward the needs of their publics must be developed. Administrators, aided by responsive computer hardware and software manufacturers, will find marketing information systems one method of developing this orientation. Information that is intelligently used and information systems properly planned can aid the health care administrator in meeting the problems of the present and the demands of the future.

CRIMINAL JUSTICE AGENCIES
VS.
TYPE A MARKETERS OF STOLEN PROPERTY

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Abstract

Type A fences are dealers in stolen property that operate legitimate-appearing businesses. They handle only stolen goods that are compatible with their legitimate specialized product lines. Law enforcement agencies should implement special "fence management" programs to deal with these fences more effectively.

Introduction

Almost all previous research indicates that middlemen involved in the marketing of stolen property are critical links between thieves and final buyers. These middlemen, often referred to as "fences," make disposal of stolen property relatively easy, add to the profitability of theft, and often assist in planning and carrying out burglaries, robberies, shoplifting, auto theft, employee pilferage, cargo theft, and other property crimes. Because fencing operations vary widely, criminal justice agencies should follow a marketing segmentation approach of dividing the population of fences into types of analysis and for development of anti-fencing strategies.

The purpose of this paper is to examine one type of fence which will be called the "Type A" fence. These Type A dealers in stolen property are legitimate-appearing businesses handling stolen goods compatible with their legitimate specialized product lines. Furthermore, this paper suggests ways that law enforcement agencies and the broader criminal justice system can better combat Type A fences.

Methodology

Findings are based on an ongoing study of fencing activities in Colorado. Forty Type A fences have been identified, and fourteen of these fences have been studied in depth. Sources of data include law enforcement agencies, judicial officers, public records, thieves, and fences.

Characteristics of Type A Fences

Most of the Type A fences examined are legitimate-appearing businesses that few customers and competitors would suspect of fencing stolen property. Many of these Type A fencing businesses selling stolen goods are small, but some are retail chains that are well known in their market areas. Some are marginally profitable depending on stolen merchandise to achieve adequate profits for survival while others are highly profitable enterprises.

Because Type A fences cautiously limit their stolen property dealings to narrow product assortments compatible with their legitimate product lines, they possess several features making them more secure from detection and prosecution than other fences. These features include their ability to mingle stolen goods with legitimate goods, their reputation as upstanding

businessmen, their small volume of stolen goods handled, their intermittent dealing with relatively small numbers of suppliers, and their skill in selling merchandise to unaware customers.

Anti-Fencing Strategies

Eliminating all Type A fences is an unrealistic goal, and law enforcement resources are inadequate for conducting careful surveillance and investigation of all of these operations. Type A fences are too numerous and their operations are too well covered by their legitimate business activities. Instead, criminal justice efforts should concentrate on a "fence management" program involving the raising of perceived risk of these fences. As a result, Type A fences would perceive a higher probability of being detected and prosecuted; and they would expect more severe consequences of successful detection and prosecution. Deterrence should be emphasized with full investigations being conducted on an opportunistic basis rather than from a thorough, systematic and vast resource-consuming program.

The underlying premise is that Type A fences have much to lose if detected and prosecuted. An effective fence management effort should alert these fences to possible loss of legitimate business profits or even the loss of their total business.

In addition to using traditional receiving-stolen-property strategies against Type A fences, law enforcement agencies should strive to have the business licenses and permits of these operations revoked. Also, greater publicity about anti-fencing programs would be effective in controlling Type A fences. Another promising approach against these fences is more frequent prosecution for violating income and sales tax regulations.

SMALL CLAIMS COURTS: A REMEDY OFTEN
OVERLOOKED BY CONSUMERS

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Abstract

Consumers have several avenues of recourse to resolve dissatisfactions with the products or services provided by businesses. This study indicates that consumers are unfamiliar with the availability, practices, and procedures of the Small Claims Courts.

A primary vehicle for resolving consumer complaints against uncooperative businesses is the Small Claims Court. These courts are designed to provide an avenue for resolving civil conflicts at a relatively low cost. The procedure normally allows the parties involved in the suit to represent themselves without incurring the expenses of an attorney. Prior to this study, a review of the dockets of two Small Claims Courts in a Texas county revealed very limited usage of the court by individual consumers. In this study, consumer knowledge of Small Claims Courts was studied by means of a questionnaire completed by 184 business administration majors at a university of 16,000 students. The respondents' knowledge of procedures necessary to sue another individual or business firm for a relatively small amount of money and not incur extensive legal costs was examined.

Study Findings

As shown in [Table 1](#), almost 75% of the respondents indicated a knowledge of the established court system and procedure for settling claims for less than \$100.

TABLE 1

"IS THERE AN ESTABLISHED COURT SYSTEM AND PROCEDURE FOR SETTLING LAW-SUITS FOR A CLAIM FOR LESS THAN \$100?"

Type of Response	Number	Percentage
yes	135	73.5
no	3	1.5
don't know	46	25.0
Total	184	100.0

Study participants were also asked to indicate what cost they would expect to incur in a suit for \$100. As shown in [Table 2](#), only 9.2% of the sample identified the correct range of "less than \$10."

TABLE 2

"WHAT WOULD YOU EXPECT TO BE YOUR LOWEST POSSIBLE TOTAL COST TO SUE SOMEONE FOR \$100?"

Range Indicated	Number	Percentage
Less than \$10	17	9.2
\$10 - \$25	33	17.9
\$26 - \$50	38	20.7
\$51 - \$100	45	24.5
over \$100	48	26.1
no opinion	3	1.6
Total	184	100.0

Respondents were asked about the advisability of going to court to sue for a small amount of money without a lawyer. As indicated in [Table 3](#), a total of 32.6% of the sample responded correctly to the question, while 48.9% answered incorrectly and 18.5% indicated that they did not know. With nearly half of the sample

answering the question incorrectly, it is apparent that there does exist another misconception concerning the nature and processes of the Small Claims Court.

TABLE 3

"IS IT EVER GENERALLY ADVISABLE TO GO TO COURT TO SUE FOR A SMALL AMOUNT OF MONEY WITHOUT A LAWYER AND THEREBY ESCAPE THE COST OF ONE?"

Type of Response	Number	Percentage
yes	60	32.6
no	90	48.9
don't know	34	18.5
Total	184	100.0

As shown in [Table 4](#), only 36.4% of the sample were aware that plaintiffs can recapture court costs and attorney fees if they win a judgment for less than \$100.

TABLE 4

"CAN YOU RECAPTURE COURT COSTS (INCLUDING ANY LAWYER FEES), IF YOU WIN A JUDGMENT FOR LESS THAN \$100

Type of Response	Number	Percentage
yes	67	36.4
no	41	22.3
don't know	76	41.3
Total	184	100.0

It is important to recognize that the right to a trial by jury is available to an individual in Small Claims Court. The respondents were asked, "Is it possible to get a trial by jury involving a claim for less than \$20?" Although the right to a trial by jury is available, only 17.9% of the study group gave the correct response to this question as can be seen in [Table 5](#).

TABLE 5

"IS IT POSSIBLE TO GET A TRIAL BY JURY INVOLVING A CLAIM FOR LESS THAN \$20?"

Type of Response	Number	Percentage
yes	33	17.9
no	75	40.8
don't know	76	41.3
Total	184	100.0

Conclusions

The university business majors participating in this study revealed limited knowledge of Small Claims Courts. Their limited knowledge should be a cause of concern for at least two primary reasons. First, as consumers who have a higher level of formal education than most of the population, they are not familiar with a legal avenue of recourse that is readily available at a low cost. It is obvious from this study that the sample's knowledge and understanding of the processes and procedures for resolving complaints is somewhat limited. Second, as future business leaders, they are relatively unfamiliar with the Small Claims Courts as a legal means that a business can use to resolve conflicts.

SOME CONSIDERATIONS IN THE EVALUATION OF INDUSTRIAL SALES TRAINING PROGRAMS

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Abstract

Careful evaluation of sales training programs has never been more important. The continuing impact of inflation on the cost of industrial sales activities and training programs dictates that increasing attention be devoted to their evaluation. This paper presents a discussion of some considerations in the evaluation of industrial sales training programs.

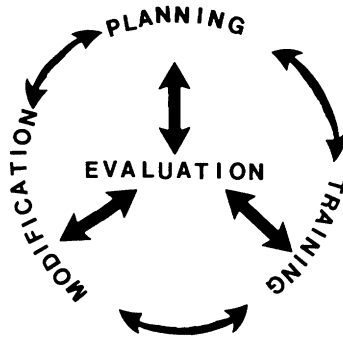
Introduction

More than \$100 billion were spent on personal selling in the United States during 1977 (Kotler, 1980, p. 565), and expenditures for industrial sales activities accounted for a substantial proportion of this total. Many industrial firms provide sales training programs for both new and experienced sales reps in an attempt to increase their productivity. Weitz (1981), in fact, estimated that more than one billion dollars are spent each year in the United States for sales training programs. Obviously, sales training represents a major corporate investment and its evaluation ought to be an important concern of top management (Smith, 1980).

A Conceptual Model

Figure 1 presents a conceptual model of industrial sales training programs. IPTEM is an acronym which stands for the Interrelationships of Planning, Train-Evaluation, and Modification.

FIGURE 1



While evaluation should be a continuous process, it can be logically subset into three stages for purposes of discussion: pretraining evaluation activities, evaluation activities concurrent with the training, and posttraining evaluation.

Pretraining Evaluation

An example of pretraining evaluation would be administering a "final exam" to trainees at the very outset

of the training process (Hochberger, 1978). If the scores on the pretraining "final exam" were compared to scores achieved on similar (but not identical) final exams administered after the training, the firm would have a measure of the learning that occurred. Also, by administering a "final exam" prior to the training, it is possible to make modifications in the planned training procedures.

Concurrent Evaluation

While the industrial sales training program is in progress, it should be subject to evaluation by the trainees and by the trainers. The evaluation could consist of the analysis of completed surveys or evaluation forms. In most cases, however, an informal, but concerted attempt to monitor the progress of the program would be an improvement over what most firms now provide in the way of concurrent evaluation.

Posttraining Evaluation

Most firms encourage industrial sales trainees to comment on the value of particular training programs. This is an important aspect of posttraining evaluation, but it should be supplemented by additional measures in order to adequately evaluate industrial sales training programs.

Ideally, in the long run, the sales effectiveness of the firm in the marketplace should be increased by the firm's sales training activities. Trying to evaluate this macro outcome, however, is difficult because many factors influence the firm's ultimate rate of sales. It may be more productive for the firm to develop experimental designs which could provide valuable effectiveness measures. The sales performance of employees receiving training could be compared to the sales performance of employees who received no training, or training of an alternative form. By analyzing the variations within and between each of the specified treatments, management would be able to at least partially determine the impact of its training efforts. In addition, measures other than sales performance should be analyzed.

Conclusions and Discussion

In order to develop a productive sales force, a dynamic industrial sales training program which is responsive to the evolving training needs of the firm is needed. Systematic evaluations of the training program are necessary for the marketer to determine whether the firm's training objectives are being met.

References

References and a more detailed version of this paper are available from the authors.

MARKETING RESEARCH: FAMILY INCOME
LEVELS AND ENROLLMENT STRATEGIES

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Abstract

In times of impending enrollment declines Institutions of Higher Learning (IHL) seek ways to control the situation. Marketing Research can provide needed insights. High School seniors from families with different income levels were asked their perceptions and enrollment strategies were evolved from the response patterns.

Introduction

Census Bureau enrollment projections are creating much concern to IHL administrators. They are beginning to realize that IHLs are facing impending adversity which calls for a change in operation.

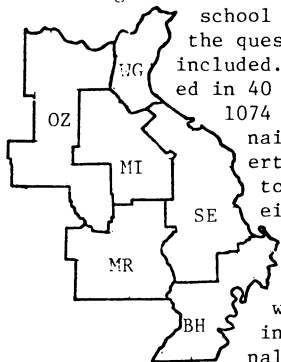
Professors Kotler and Levy (1969) first suggested marketing for nonprofit institutions. Since then, Nickels (1974) has shown that 95% of the college marketing educators have accepted this position. Leister (1975) suggested that marketing as an educational management tool has become accepted because of its utility to IHL administrators. Johnson (1979), founder of an agency which provides marketing assistance to colleges and universities, has proven the importance of marketing to IHLs and is optimistic about its contribution as a tool for institutional planning.

Statement of the Problem

At one university, the Office of Institutional Research, using the total expected births among the state's residents as its projection base, has forecast a potential student decline of 52%, 9000 to 4300, by 1990. Such a projected decline is a strong incentive for any institution to find effective ways to counteract this expected enrollment trend. If effective ways are found, then the institution can expect stable enrollments and reasonably appropriate resource support from the state legislature. The institution has turned to a deliberately programmed market research effort.

Methodology

The 26 county service area was divided into 6 segments using geographic, economic and historic factors as shown. All the high schools were assigned a number and by using a table of random numbers, high schools were progressively included until each segment contained 3% of the high school seniors in the segment. All high school seniors in attendance on the day the questionnaire was administered were included. This sampling procedure resulted in 40 high schools being included with 1074 seniors. A 56-item questionnaire, employing a five-point Likert response scale was administered to all seniors in the school by either the principal of the school or a member of the faculty. All schools chosen agreed to participate. Only 784 students were available to complete the instrument or 74.9% of the original sample. The analysis was based on three levels of family income defined as follows: Low (LFI) less than \$15,000, Medium (MFI) \$15,000 to



\$25,000, and High (HFI) above \$25,000. The analysis of variance statistical test was used for inference and the .05 probability level was used to determine significance.

Research Findings and Conclusions

MEAN PERCEPTIONS OF HIGH SCHOOL SENIORS

Item	Family Income Group				SIG.
	LFI	MFI	HFI	ALL	
Sufficient Academic Programs (1=Disagree, 5=Agree)					
College of Education	2.73	3.64	3.57	3.56	yes
College of Business	2.91	3.60	3.46	3.40	yes
Other Colleges	3.17	3.34	3.33	3.32	no
Non-Academic Programs (1=Disagree, 5=Agree)					
Good Cultural Programs	2.53	3.28	3.30	3.27	no
Intl Stu Presence Good	3.38	3.18	3.30	3.26	no
Serves Minorities	2.92	3.30	3.06	3.14	yes
Institutional Accessibility (1=Disagree, 5=Agree)					
Easy to Enroll	3.62	3.62	3.85	3.76	no
Comparatively Expensive	3.23	2.40	2.23	2.33	yes
Good Fin Aid Program	3.77	3.51	3.48	3.50	no
Info From Promotional Channels (1=None, 4=Much)					
Radio	1.30	1.35	1.35	1.35	no
Newspaper	1.32	1.56	1.55	1.54	no
Television	1.26	1.58	1.38	1.45	yes
Institutional Publica	1.60	1.83	1.81	1.81	no
High School Counselors	1.85	2.08	1.94	1.99	no

Recommendations

Several recommendations were made as follows: 1) it was recommended that the various colleges formulate a promotional plan to inform the LFI students of their academic offerings. This promotion should be especially targeted to the BH and MI segments whose average family income is below \$18,000; 2) it was recommended that the university formulate a promotional plan emphasizing services provided to minorities with segmental targeting to BH and WG; 3) it was recommended that the university prepare a promotional plan which highlights its comparative inexpensiveness with its competitors especially in the BH and MI segments; 4) it was recommended that the university provide additional institutional publications and promotional materials to all high school counsellors in the service area. Additional efforts should be made to promote the institution to the school counsellors.

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BANK PATRONAGE DECISION: A CANADIAN STUDY

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Introduction

There is some evidence that all over the world both the academicians and the managers of financial institutions are expressing interest in marketing as a legitimate banking activity. There are a number of factors which account for this global interest. One of the most significant is that over the past decade the demand of consumers and businesses for banking services has literally exploded. As consumers' income increased and businesses grew, so did their demand for the variety of services offered by financial institutions.

Because of these developments in the marketplace, commercial banks started examining their environment more closely and tried to design marketing strategies to combat the threats from other financial businesses. Now marketing officers appreciate that their previous competitive advantage is being lost, often because of poor marketing planning and inadequate marketing strategy.

Purpose of the Study

With this in mind, then, the purpose of this study is to report the findings and implications of a survey undertaken in Halifax, Nova Scotia, Canada. More specifically, the study was designed (1) to determine the importance of selected patronage factors in choosing a commercial bank and (2) to determine the perceived usefulness of several services offered by commercial banks in a Canadian setting.

It is hoped that the information to be presented in this paper will provide Canadian bank executives with insights into the kinds of services customers find most appropriate to their banking needs. This, coupled with an understanding of salient criteria used by customers in choosing a bank, should help bankers to develop more precise marketing strategies to attract a larger number of customers and to cater better to the needs of both present and potential customers. Without such knowledge, it is only wishful thinking that the gap between the buyers and sellers of banking services will be closed.

Methodology

The data for the study were collected through self-administered questionnaires. Questionnaires were hand-distributed to a sample of 250 households in the Spryfield area of Halifax, Nova Scotia (population 267,990). The city, in 1978, was served by a variety of financial institutions, including 58 commercial banks. These banks cashed checks of a value of 22.7 billion dollars in 1977.

An adult member of the household was asked to complete the questionnaire. After a one-week period, questionnaires were personally retrieved. Up to two call-backs were made where no one was at home. The sampling procedure used is satisfactory for the purposes of the study, and it has been used successfully in other countries. A total of 204 usable questionnaires were obtained.

To achieve the purposes of the study, respondents were asked to answer two sets of questions. First, they were asked to indicate on a four-point Likert type scale, ranging from very important to not important, how important they viewed a series of factors in choosing a commercial bank. The factors which were adapted from similar studies were related to: location near home or work, fast and efficient service, available parking space, recommendations of friends or relatives, bank reputation and image, friendliness of personnel, availability of credit with favorable terms, lower service charges on checking accounts and other services, lower interest charges on loans, higher interest payments on savings accounts, confidentiality of bank, range of services, confidence in manager, counselling services, and overdraft privileges on checking accounts.

The second set of questions was designed to generate data concerning the perceived usefulness of several services provided by commercial banks to their customers. The perceived level of usefulness of these services was measured on a five-point Likert scale. The cues ranged from "very useful" to "useless." During the analysis stage, the adjacent categories on the two extremes of the scale have been combined and reduced to three. The services surveyed are: savings accounts, checking accounts, night depository, traveller's checks, money orders, credit cards, foreign exchange, Canadian savings bonds, automatic bill paying, safety deposit boxes, banking by mail, loans, mortgages, and savings plans (i.e., RRSP and RHOSP).

Discussion

The high ranking of fast and efficient service and friendliness of personnel as patronage motives suggest that banking industry needs to place emphasis on personnel training. The training should first be in the area of interpersonal communication skills. Secondly, it should focus on increasing the efficiency of completing banking transactions.

The expression of convenience as a highly salient factor leads to another strategy implication. Canadian banks must allocate some of their marketing funds into branch office expansion and into those areas with high concentrations of people.

The perceived usefulness of banking services indicate that banks should follow a market segmentation strategy. In other words, the data suggest that, while every bank needs to offer the most services of savings and check accounts, some may entrench themselves in the minds of the consumers as a bank offering loans; another may stress the availability of transaction facilities at any time of the day; yet still others can emphasize availability of financial services.

CONSUMER PERCEPTIONS OF A
PRODUCT - THE MICRO-WAVE OVEN - AN ANALYSIS
BY SELECTED SOCIO-ECONOMIC VARIABLES
- IMPLICATIONS FOR MARKETING STRATEGY

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Abstract

The study examines consumers' perceptions (both owners and non-owners) of the micro-wave oven as a product in an effort to determine why this product has such a low degree (10% of American households in 1980) of market penetration. An investigation is conducted to determine if there are any significant differences between owners and non-owners based on selected socio-economic variables, i.e., age, sex, marital status, family multiple employment status, number of individuals in household, occupation and family income.

Background of the Study

Approximately twenty-five years after its introduction in the late 1950's, the microwave oven has achieved a market penetration rate of slightly less than 10% of the homes in the U.S. This study focuses primarily on trying to identify the causes for the relatively low degree of market penetration by this product. Some specific objectives of the study are (1) to determine consumers perceptions (both owners and non-owners) regarding the microwave oven as a product, i.e., its functional role; (2) what factors motivated buyers to purchase a microwave oven; (3) what factors have discouraged consumers from purchasing the microwave oven; (4) non-owners' purchase intentions during the next 12 months; (5) determine if there are any significant differences between owners and non-owners based on selected socio-economic variables, i.e., age, sex, marital status, family multiple employment status, number of individuals composing household, occupation and family income.

Hypothesis

There are significant differences between owners and non-owners of microwave ovens based on selected socio-economic variables, i.e., age, sex, marital status, family multiple employment status, number of individuals composing household, occupation and family income.

Methodology

The findings of the study are based on a primary research survey. A reasonable literature search did not turn up adequate current information that would specifically answer the questions posed by the study.

Research designs employed were essentially exploratory in character and to some degree descriptive research has been utilized. The data location area was restricted to the Newport News-Hampton SMSA, an urban area in Eastern Virginia of about 400,000 people.

Based on a sample of 234 respondents that were selected on a random basis, personal interviews were conducted in a regional shopping center mall in the Newport News-Hampton SMSA during an eight-day period in May, 1982. From this randomly chosen sample, 234 usable questionnaires were secured.

The Statistical Package for Social Sciences (Pittsburgh Version) was employed in data analysis to determine if there were any significant differences based on the selected socio-economic variables of age, sex, educational level, occupation and income, etc. In this study, only several data areas are examined as to significant differences.

Data Findings

1. In the market area surveyed, approximately one out of every five (22.2%) respondents currently own a microwave oven, a higher degree of market penetration than the national average.
2. The two most important purchase rationale cited by owners of the product are time-saving and convenience - two-thirds of respondents listed these two reasons as being primary motivating purchase factors.
3. Four out of five respondents indicated they were satisfied or very satisfied with the product.
4. Only 18% of consumers (non-owners) expressed a positive intention to purchase a microwave oven during the next 12 months.
5. Almost six out of ten respondents stated they do not intend to purchase a microwave oven during the next 12 months.
6. As perceived by non-owners, the two major problems deterring the purchase of this product are: the product is unnecessary; the product is too expensive.
7. There were no significant differences between owners and non-owners of microwave ovens based on age, sex, marital status, family multiple employment status, and the number of individuals composing household.
8. There was a significant difference between owners and non-owners based on occupation. The major difference in ownership versus non-ownership was found to be in the professional/managerial occupation category compared to other occupation categories.
9. There was a significant difference between owners and non-owners based on education. As education achievement of respondents increased, a higher proportion of ownership of this product existed.
10. There were significant differences between owners and non-owners based on the socio-economic variable of family income.

Conclusions

1. It can be concluded that the microwave oven has a relatively low rate of market penetration given the length of time the product has been in the market and the volume of marketing/promotional efforts by manufacturers and retailers.
2. Based on the data findings in this study, it can be concluded that the low degree market penetration by this product is the result of several factors, i.e., a significant proportion of consumers have not been persuaded that the product is necessary or that the product possesses the functional features that justify its acquisition. It may also be concluded that a relatively high proportion of respondents have not been persuaded that this product possesses the "utility" that justifies its price.

A FRAMEWORK FOR AN EMPIRICALLY BASED
PUBLIC POLICY DECISION MODEL...AN INTEGRATED RESEARCH APPROACH
TO THE PRESCRIPTION DRUG INDUSTRY

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Abstract

The authors' contend that problems associated with consumer legislation can be attributed to the normative perspective utilized in their development. Thus, a public policy decision model is proposed which emphasizes empirical market testing as a key input to the decision-making process. Specific reference is made to the model's potential use in evaluating such legislation as the FTC's proposed Generic Drug Substitution Model Law.

Introduction

There are those who generally believe government's consumer advocacy role is most appropriate, but seriously question its evaluative and implementation capabilities relative to new public policy legislation. While considerable debate is almost certain on the first point, few would contest the latter issue. Indeed such evaluative and implementation concerns have been well documented.

It is the authors' contention that the preponderance of the problems associated with recent consumer legislation can be attributed to the narrow normative perspective utilized in their development. Few laws are based on actual data gathered by consumer testing in the marketplace and fewer still are based on the collection of interactive data i.e., data which reflects the regulations impact on the consumer vis a via other relevant groups...manufacturers, wholesalers, retailers, etc. Thus, had integrative empirical consumer/channel research efforts been undertaken prior to the enactment of such decisions, many of the problems associated with previous public policy decisions could have been alleviated, or most certainly mollified.

Recognizing this need the authors' describe a proposed public policy decision model which incorporated and integrates consumer/channel research features. Specifically, the paper reviews the FTC's proposed model generic drug substitution law within the context of the proposed analytic framework.

Proposed Empirically Based Model

The first step in the proposed model is to identify relevant groups potentially affected by the proposed public policy decision. This includes manufacturers, channel intermediaries, as well as consumer groups.

The second step suggests a normative approach to the evaluation of the proposed decision i.e., it would evaluate the costs and benefits likely to accrue as a result of the proposed action under specified "desired" conditions...a normative scenario.

The third step focuses on identifying the information needs of the relevant groups, the amount and quality of information currently available, and how it is likely to be used in the decision-making environment. Based on these findings, hypotheses would be formulated regarding the benefits/costs accruing to each of the relevant groups. In turn, these hypotheses would form the basis for structuring the research design associated with the next step in the model...the market testing to the proposed public policy decision.

The market test step attempts to generate needed information regarding the impact of the proposed policy on the relevant groups involved. Thus, if benefits exceed costs based on this empirical analysis, the policy would be recommended for adoption. A final step in the model reflects concern as to the actual measurement and evaluation of the policy once implemented i.e., post-decision evaluation. (Mazis, 1981).

Potential Model Application - The FTC's Proposed
Generic Drug Substitution Model Law

In 1979 the FTC issued its model drug law regarding generic substitution, and a companion Approved Drug Product List with Brand name Rx drugs and generic equivalents. Its primary objective was the reduction in the number of situations where consumers paid a premium price for brand name drugs when lower-priced products that were "therapeutically equivalent" were available.

While the nature and scope of the empirical research suggested by the authors' model is only verifiable through government research efforts, an opportunity does exist to examine and estimate its basic potential. This evaluation could be achieved by overlaying the empirical findings of various states relative to drug substitution laws onto the framework of the authors' proposed model. While such an overlay procedure restricts the scope of issues likely to be explored under the model, it does demonstrate the general value of its empirical approach. It is in that spirit that an attempt was made within the context of the proposed analytic framework to selectively review states' past experiences with drug substitution laws.

Based on this review, the authors' demonstrate that an apparent innocuous normative formulation such as the FTC's proposed model drug substitution law could be better analyzed and usefully reformulated within an integrated empirical research framework.

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ENVIRONMENTAL PLANNING AND CONTROL FOR THE 1980s
AS PERCEIVED BY SUPERMARKET EXECUTIVES

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Abstract

This study examines supermarket executives' perceptions of the problems confronting them in the 1980s. A survey including 134 chains was undertaken to determine anticipated adjustments resulting from rising energy costs, spiraling inflation, and high interest rates. The executives placed emphasis on reducing energy costs associated with operating stores, more stringent inventory control measures, and increasing the number of lines carried to encourage one-stop shopping.

Objectives

The objective of this study was to examine anticipated problems relating to supermarket executive planning and controlling within the environmental framework of the 1980s. Emphasis was placed on anticipated adjustments resulting from rising energy costs, spiraling inflation, and higher interest rates.

Research Methodology

The sampling technique was that of total universe enumeration as determined by a listing of 390 food chains contained in the 1979 Progressive Grocer Marketing Guidebook. In February 1980, questionnaires were mailed to each of the respective firms' headquarters offices with attention being drawn to the president. Useable responses included 134 executives or over one third of those contacted.

Findings

Energy Costs

First, second, and third choices were computed as a percentage of the total responses in each rank classification. The three percentages were then added together to determine an overall expression of importance.

The executives first anticipated the most important adjustments resulting from rising energy costs. The greatest expression of importance was attached to reducing energy costs associated with operating stores (87.9), expanding the number of merchandise lines carried to encourage one-stop shopping, second (53.7), and reducing transportation costs as a main consideration in selecting sources of supply third (45.7). To combat higher energy costs, it appears that the executives are considering new merchandising strategies along with appropriate cost-cutting measures. In the future, shoppers will have a greater variety of products from which to choose while experiencing fewer conveniences and services than in the past. In addition, it appears that manufacturers will have to work closer with their channels, reassessing sales and distribution methods in light of rising energy costs.

Inflation

The executives then anticipated the most important adjustments resulting from spiraling inflation. The greatest expression of importance was attached to reducing operating costs as much as possible (79.1), with more careful examination of inventory to determine

slow-moving items, second (71.5), and offering more private and secondary brands, third (38.0). Once again the emphasis appears to be on cost and marketing controls. The savings resulting from a reduction in such operating expenses as labor, energy, and inventory carrying costs should allow firms to remain price competitive. Although no major cutbacks are expected, some savings might be possible through better utilization and scheduling of employees. Apart from not wasting energy, the next obvious step is to contemplate better energy savings equipment.

Watching inventories more closely to determine turnover and volume performance will be more important than ever before. Products which fail to make an adequate sales or profit contribution not only add to inventory carrying costs but also take up valuable space that could be used more efficiently. Expanding the shelf offerings of private and secondary brands give supermarket management a means of attracting price conscious shoppers. These brands may serve as a sales stimulant while adding additional profits to offset the increasing pressures on costs.

Interest Rates

Finally, the executives anticipated the most significant problems resulting from higher interest rates. The greatest expression of importance was attached to the need for more stringent inventory control to balance stock with sales (73.1), with the need for more inventory control to uncover slow-moving items, second (54.4), cutting back on expansion programs, third (36.6), and cutting back on remodeling programs, fourth (25.4). Since high interest rates are one of the main causes of the current inflationary trend, the executives once again expressed concern over improving turnover and sales performance. High interest preclude credit purchases of slow-moving items as well as purchases of more inventory than needed to meet sales requirements. The rising cost of financing was also viewed as a factor curtailing expansion and remodeling plans.

The rapid rate of inventory turnover in the supermarket industry as compared to other industries has apparently helped to alleviate such problems as cash flow, the need for longer repayment periods on loans, and suppliers demanding cash or faster payment.

THE ROLE OF CONSUMER
TRAVEL TIME AS IT RELATES TO
SHOPPER TYPE, STORE IMAGE, AND FUTURE PURCHASES

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Abstract

The purpose of this research is to analyze the role of shopper traveling time on retail store patronage. Two primary questions of the research are (1) how well do shopper type, store image, and future purchasing behavior explain store traveling time, and (2) what are the relationships between travel time, shopper type, store image, and future purchase behavior. A structural model will be developed and validated which characterizes the interrelationships of the four types of variables in the development of store patronage. The research attempts to offer additional empirical testing of the conceptual models of consumer behavior developed in marketing.

Previous Research

Research relative to shopper travel time in the past has focused primarily on "outshopper" profiles, store location models, and consumer uses and perceptions of time. The conclusions of this research have made significant contributions, but neglect to integrate the role of shopper travel time with other patronage-related factors useful in developing retail strategies.

Research Design¹

In the first phase of the paper, the relationships between traveling time and (1) twenty image attributes; (2) twenty shopper attributes; and (3) twenty-eight future purchase likelihoods were found in a large intercept study of a leading discount department store. This is done to profile the role of traveling time with the other sets of the patronage variables. The second phase canonically correlated each part of these four sets of variables to determine the strengths of the interrelationships of the variables with each other. The two phases were repeated by using data collected for a hardware retailer to validate the findings of the discounter.

Report of Findings (Phase I)

Discount Department Store

With the discount department store, shoppers seem to be drawn a distance to the store through assortment selection and employee service. These shoppers, not surprisingly, place a low value on convenient location, and have only a moderate price interest. The future purchasing behavior of consumers traveling a distance is very product specific. These shoppers seem most interested in returning to purchase mens clothing, electronics, footwear, and craft and hobby supplies. A convenient location seems to be extremely important to a discounter competing in products such as hardware supplies and office supplies.

¹We wish to thank Bert C. McCannon, Jr., for the use of data collected by the University of Oklahoma Distribution Research Center.

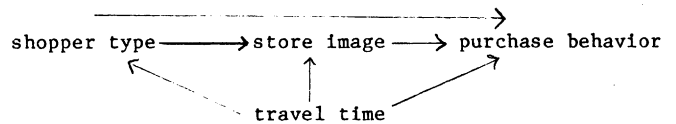
Hardware Store Validation Findings

In general, the loadings in the hardware store findings were higher than in the previous analysis, however, the direction of relationships were relatively consistent across the two studies. In summary, both studies indicate that the shopper who will travel a distance to a store is not concerned with convenient location, but does value a wide assortment of merchandise. The distantly traveled store has a wide assortment image, but employee courtesy fails to be an image advantage.

Report of Findings (Phase II)

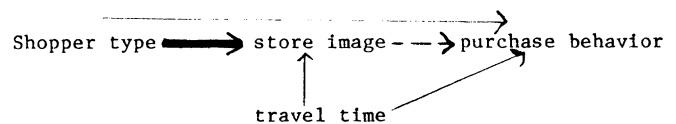
Discount Department Store

With all pairs of variables compared, shopper type, store image, travel time, and future purchases significantly related to each other. However, none of the relationships, with the possible exception of shopper type-store image, demonstrated a high degree of explanatory power. These findings seem to reflect the competitive environment of the discount department store. In other words, patronage may be a function of short-term tactical variables not analyzed, such as price-cutting, couponing, and promotion of couponing. The relationships, based on the strengths of the relationships found with the canonical correlation analyses, might be modeled as:



Hardware Store Validation Findings

Shopper type strongly related to store image, while store image demonstrates some relationship to purchasing behavior. However, in this model, travel time seems to be a relatively important intervening variable explaining purchase behavior. For hardware store retailers, it may be that the type of shopper attracted affects customer store image more than marketing performance. Here, the model appears somewhat different:



Based on the research results, retail management should not consider convenient location to directly explain patronage. In this research, assortment image seemed to be more influential for developing a franchise. Especially for a discounter, short-run, tactical variables might be the most important competitive tools. More specialized retailers can focus more successfully on the strategic variables examined here.

AN INVESTIGATION INTO
THE ROOTS OF SALESFORCE ALCOHOLISM

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Abstract

Research on abusive drinking behaviors of marketing and business students was conducted. Preliminary results support the business manager premise that abusive drinkers are attracted to sales careers. While the research is supportive of management views, there is need for greater analysis in the area of the causes of salesforce alcoholism.

Purpose

The purposes of this research are to explore the literature on salesforce alcoholism, to consider the potential causes of alcoholism in salespersons, and to present the results of an investigation into one possible factor associated with salesforce alcoholism.

Literature On Salesforce Alcoholism

Reports from field studies are suggestive of a high incidence of alcoholism in the salesforce when compared with other professions (ADAMHA News, 1981) but an extensive business literature review yielded no specific alcoholism incidence differences between salespersons and the general workforce (Lowe, et al, 1981).

Curiously, while stereotypes such as that of the drunken salesperson are furthered through the various forms of literature, a basic exploration of existing literary research yielded a lack of material on the salesperson as alcoholic. The research was conducted on alcoholism in general and the salesperson as alcoholic specifically.

The Potential Causes Of Salesperson Alcoholism

The alcoholic salesperson, by virtue of occupancy of a boundary position, has the potential for doing irreparable harm to the firm. Misconduct of an outside salesperson often has direct impact on a firm's revenue. Since the costs to the firm and to the industry from salesforce alcoholism are high, consideration has been given to the question: What causes alcoholism in the salesforce?

There are two views of the causes. The first approach focuses on the job situation. A number of studies have addressed position related attributes of jobs which are associated with alcoholism. These risk factors are thought to aggravate and reinforce alcohol abuse. At least 5 of the 12 risk factors identified (Kinney and Leaton, 1978, pp. 225) are inherent in the field sales structure. Overall it would appear that the salesperson operates in an environment conducive to the development of alcoholism.

The second approach stems from conversations with sales managers in local manufacturing firms and recovering alcoholics in Alcoholics Anonymous. This view is that persons with abusive drinking profiles or tendencies toward abusive drinking gravitate to the salesfield because of the lack of supervision and control over salespersons. Thus views can be found that the position attracts alcoholics.

A Preliminary Investigation

Since a determination of the impact of risk factors on salesforce rests on field studies across industries and time, a study of student abusive drinking was conducted. The investigation was based on the premise that persons with abusive drinking behaviors would be differentially attracted to sales as a profession.

To test one of the two views on the causes of salesforce alcoholism a special abusive drinking questionnaire was constructed. The questionnaire was administered to a student population of 180 upperdivision business school students at a regional university. The sample was comprised of sales-oriented marketing majors (n = 61) and non-marketing majors (n = 119). It was assumed that the marketing majors would enter sales positions upon leaving the university and that non-marketing business majors would not.

The results, $A = 2.26$, $p .05$, were indicative of higher sales oriented student abusive drinking scores on the instrument than for the other business majors. This is suggestive of the premise of attraction of abusive drinkers to sales as a career field.

Concluding Comments

As often happens, we know very little about a large and costly problem. We are unsure of the number of alcoholic salespersons. We wonder is position demands cause alcoholism in salespersons or if alcoholic or alcoholism prone individuals gravitate to such positions. The results of this preliminary research suggest the possibility of a gravitation view.

There is little doubt of the need for both academic and industrial research on salesforce alcoholism.

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DETERMINING CONSUMER PREFERENCES FOR SALES PROMOTION TECHNIQUES VIA CONJOINT ANALYSIS

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Abstract

This article reports the findings of a systematic study involving conjoint analysis, undertaken to evaluate some hypothetical sales promotion techniques for a specific consumer product (beer) catering to a special market segment (students). A fractional factorial design involving three sales promotions at three levels each was undertaken and the ranked preferences of the respondents were analyzed using Kruskal's MONANOVA algorithm.

Introduction

Sales promotions have been defined as those marketing activities, other than personal selling, advertising, and publicity, that stimulate consumer and dealer effectiveness. In 1977, it was reported that thirty-three percent of total promotional dollar went to consumer sales promotions: By 1979, it had increased to forty-two percent (Tarshis, 1980). The primary objective of the present study was to determine the college students, preferences of several hypothetical, but innovative, sales promotion techniques, both singly and in combination, for the beer product.

Methodology

The data base for the present study was the college student market segment. A leading midwestern university with an enrollment of 24,000 students was the test population. The data from 203 completed questionnaires was useable.

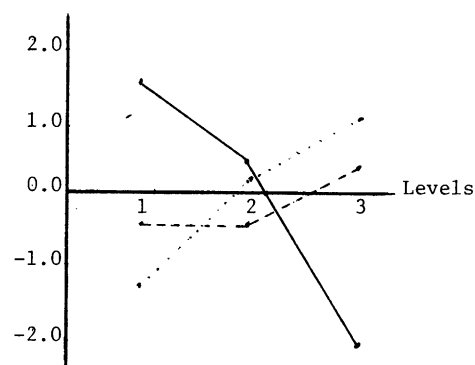
Students' preferences for individual hypothetical sales promotions such as price incentives, premiums, contests/sweepstakes, and sponsorships were determined by inquiring into the importance of such sales promotions in their beer purchase decision. To determine their preferences for several combinations of hypothetical sales promotions, conjoint measurements were utilized (Green and Wind, 1975). A one-third fractional factorial design (Holland and Cravens, 1973), utilizing three sales promotions (price incentive, premiums, and contests/sweepstakes), with three levels each, resulted in nine test combinations. Respondents ranked these in their order of preference.

The respondents' average preference ranking for the test combinations of sales promotions were analyzed using Kruskal's MONANOVA algorithm to estimate component utilities for the composite utilities for the composite combinations of sales promotions and their respective levels.

Results and Conclusions

An additive conjoint measurement model was fitted to the ranked responses using Kruskal's MONANOVA algorithm. The fit was excellent, as indicated by the very low value of the stress (.001). The estimated component functions for each sales promotion technique are plotted in Figure 1.

Figure 1
Sales Promotions' Component Functions from Respondents Ranked Preferences



Legend for Levels

Price Incentives (————)

- 1 = Bonus Pack
- 2 = \$.70 Off (Sale)
- 3 = Rebate

Premiums (-----)

- 1 = Catalog
- 2 = Cooler
- 3 = Free Gift

Contests/Sweepstakes (.....)

- 1 = Mr. & Miss Beer Photograph Contest
- 2 = Star in Beer Commercial Contest
- 3 = Sweepstakes

This study concludes that college students are a viable market segment for the beer industry as a whole. For the beer industry, sales promotions will continue to play an important role. With little significant product differentiation, setting up unique selling propositions may be the only course to survival in a very competitive industry. Consequently, sales promotions both, singly and in combinations, will be a necessity. The additive model of conjoint measurement utilizing Kruskal's MONANOVA algorithm, coupled with the fractional factorial designs, should enable strategic planners to evaluate several combinations of sales promotions. Such evaluations will enable planners to evaluate the relative importance of individual sales promotions, and also to select combinations of sales promotions with maximum utilities.

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TOWARD PROMOTION OF THE MARKETING PLANNING PROCESS

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Abstract

A survey was conducted to determine whether a lack of executive agreement with published theory is a significant impediment to field implementation of formalized marketing planning in various sized firms. There was substantial agreement regarding the adequacy of published statements about the nature of formalized planning.

Introduction

There is a need to better understand how marketing scholars can more effectively promote field implementation of formalized planning procedures. The purpose of this paper is to report a survey designed to enable analysis of executive attitudes toward planning in various sized firms.

Research Methodology

A mail survey was conducted to measure levels of executive agreement with selected statements about the nature of marketing planning. Questionnaires were mailed to a random sample of firms listed in the Dun & Bradstreet Million Dollar Directory.

Analysis of Data

Levels of executive agreement with each item in the questionnaire were tabulated and compared by size of firm. For example, some of the general statements about marketing planning are shown in Table 1.

TABLE 1
Some General Statements About the Nature
of Marketing Planning

1. There is a definite need for formalized marketing planning.
2. There is very little benefit derived from formal marketing planning.
3. Primary responsibility for marketing planning should reside at the top marketing executive level.
4. Marketing planning should be executed so as to be separate from, but compatible with the overall corporate planning process.
5. Marketing planning should be primarily a staff rather than line function.
6. In the marketing planning process, greater dependence should be placed upon external information sources than internal ones.
7. Annual marketing plans should be written documents.
8. Marketing planning, no matter how thorough, probably cannot enhance company profits.

9. At least as much emphasis should be placed on the implementation as is placed on the development of marketing plans.
10. Organizational conflicts and personnel problems prevent the successful development and implementation of marketing plans.
11. Marketing planning will be of limited value to most companies until the planning process is further developed and refined.

Agreement with each of the planning statements was tabulated in association with four different sizes of firms. Agreement levels were then cross-tabulated between statement number and firm size as shown in Table 2.

TABLE 2
Level of Executive Agreement By Size of Firm

State- ment #	Size of Firm							
	Large		Medium Large		Medium Small		Small	
	Freq.	%	Freq.	%	Freq.	%	Freq.	%
1.	37	100	32	94	39	93	104	95
2.	2	5	0	0	2	5	9	8
3.	29	78	30	88	36	88	95	86
4.	26	70	20	59	26	63	74	68
5.	11	30	15	44	22	54	67	62
6.	9	25	16	47	18	43	51	46
7.	36	97	32	94	35	83	100	91
8.	0	0	0	0	3	7	5	4
9.	37	100	34	100	40	95	107	97
10.	22	59	19	56	18	43	58	53
11.	14	38	12	35	21	51	62	56

Both absolute and percentage frequencies were used to designate levels of agreement in the table. The rows and columns of data were systematically compared to determine relationships between sets of responses for all of the statements and firms. For example, analysis of the data indicates substantial agreement among all responding firms regarding most statements about the general nature of marketing planning. However, responses to several statements did vary according to size of firm. Large firms registered less agreement than the others regarding location of the primary responsibility for marketing planning and perceived value of the planning process. Executives of large organizations also believe there should be less dependence on external information sources. As the size of firm increases, there is progressively more agreement that planning should be a staff rather than line function.

Conclusion

Substantial executive agreement regarding most published statements about the general nature of marketing planning indicates that management is receptive for further promotion and field implementation of the formalized planning process.

ADVERTISING AND ECONOMIC DEVELOPMENT:
A CROSS NATIONAL ANALYSIS

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Abstract

Two socially based theories of economic development are examined for their efficacy in explaining variations in advertising expenditures across countries. Statistical analyses support the viability of both theories, but Parsons theory of evolutionary universals performs somewhat better than Lerner's model of modernization.

Introduction

Two social theories which have been operationalized and empirically validated are examined: Talcott Parsons' evolutionary model (Parsons, 1966) and Daniel Lerner's model of modernization (Lerner, 1958).

Parsons theorized that there are "specific continuities in patterns of social change," where a pattern forms the basis for an "evolutionary universal." Parsons believed every country would evolve through ten different evolutionary universals in the course of development. He considered the first four universals necessary to the functioning of any society, before a sequential development process could follow in the other six. The first four are: (1) a mechanism of communication; (2) social organization through kinship; (3) some form of religion; and, (4) at least a rudimentary technology. "The first mark of development is (5) a system of stratification, followed instantaneously by (6) cultural legitimation for such a system. The next emergent evolutionary universals are (7) bureaucratic organizations, (8) money and market complex, (9) generalized universalistic norms and finally, (10) democratic association" (Buck and Jacobson 1968, p. 343).

Parsons' theory was examined by Buck and Jacobson who operationalized the theory in terms of a five-step rating system for each of the universals. Using a Guttman scale analysis, the authors arrayed fifty countries on each of the universals along five-point ordinal scales. This allowed examination of the validity of the theory overall and the proposed sequence of the universals. The authors concluded that the universals do exist and that Parsons had isolated an evolutionary sequence through which most countries have passed. The ratings of the countries developed by Buck and Jacobson served as one set of independent variables in this study.

Lerner's model of modernization was operationalized and validated by Sigelman (Sigelman, 1974). According to this model, a country passes through a sequence of phases starting with urbanization and developing through phases of literacy, media participation and political participation. Sigelman used a Guttman scale to rank countries in their development of the phases just mentioned. Empirical research supports Lerner's model, even though Sigelman found reason to question the importance of "urbanization as a prime mover early in the modernization process..." (Sigelman, 1974).

Research Design

Since the data from the two empirical studies were ordinal in nature, a nonparametric measure of association was needed to assess the relationship between the development scale items and advertising expenditures. Spearman's rank correlation coefficient (r_s) was selected as the appropriate measure.

Each development scale item was correlated with the data available for advertising expenditures (on a per capita basis) for the years 1962, 1964, 1966, 1968 and also for the average of these years. The correlations for individual years allowed for some determination of the temporal sequence involved in the relationship between advertising expenditures and the development scale items and the average provided a control.

Findings

Parsons' "evolutionary universals" (as measured by Buck and Jacobson's composite indicators) and per capita advertising expenditures show a fairly stable relationship during the period of 1962 to 1968. If the average for each variable is compared, communications shows the strongest relationship (where $r_s = .91$), followed by technology ($r_s = .91$), money and market ($r_s = .89$) and bureaucracy ($r_s = .86$). Other variables exhibited moderate correlations: cultural legitimation ($r_s = .89$), stratification ($r_s = .83$), kinship ($r_s = .81$), democratic association ($r_s = .64$), and generalized universalistic norms ($r_s = .51$). Religion shows the weakest relationship of the universals, where $r_s = .45$.

The development indicators for Lerner's modernization model (created in the Sigelman study) also show a fairly stable relationship from 1962 to 1968. Urbanization showed the strongest relationship when comparing the correlation coefficients for the average of the years ($r_s = .82$), and mass communication is second ($r_s = .74$). Economic development and political participation correlated at similar levels ($r_s = .65$ and $r_s = .64$, respectively), while literacy correlated at a comparatively low $r_s = .43$. Political capacity was not statistically significantly related to advertising.

In both Buck and Jacobson's and Sigelman's studies, the relationships between advertising and development indicators appear fairly stable over a six year period. This would seem to indicate that the underlying theories are viable and rely on concepts which have long-term structural significance.

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Abstract

The focus of this study is to develop a marketing plan to increase the amount of home ownership in the Church Hill area of Richmond by middle-class black consumers. Focus group interviews and a telephone survey were employed to determine the target markets' attitudes, priorities, and intentions regarding housing and neighborhood factors.

Data Collection Procedures

Three focus group interviews were held in order first, to explore the priorities that middle class blacks have regarding housing and neighborhood criteria; and, second, to discuss the strengths and weaknesses of Church Hill as perceived by residents and non-residents. The housing and neighborhood criteria discussed by the focus groups included: financial issues, location, aesthetics, safety, nature of population, educational facilities, and nature of housing. Once those in the focus groups evaluated each criterion's relative priority in general, they then indicated their attitudes and perceptions regarding strengths and weaknesses of the Church Hill area.

The strengths of Church Hill, as perceived by the focus groups' participants, include: 1) financial issues - this criterion was perceived as having the highest priority and it was unanimously believed that buying a house in Church Hill represents an excellent investment opportunity; 2) location - since Church Hill is adjacent to downtown Richmond, this criterion was rated very favorably due to Church Hill's proximity to shopping, hospital, and employment facilities; 3) aesthetics - regarding this criterion, Church Hill was rated favorably due to the area's lack of traffic congestion, quietness, lack of air pollution, and improved appearance of streets and parks; 4) safety - police and fire protection were perceived as a positive factor with the feeling that those outside the area think of Church Hill as a high crime area, while those living there do not; 5) nature of population - a high degree of neighborhood stability among residents was felt to exist leading to a cohesive and friendly neighborhood image. Perceived obstacles or weaknesses of Church Hill expressed by the focus groups' participants include: 1) financial criteria - this factor is undoubtedly the greatest weakness regarding achieving the study's objective. The consensus among the participants is that a high demand or motivation to buy a home in Church Hill exists among middle class blacks either currently renting in Church Hill or living outside the area. The means to allow home ownership regarding mortgage approvals (and the prevailing high downpayment requirements and high interest rates) present generally extreme difficulties for this segment, particularly when the rehabilitation cost, which is a necessary expense for most homes in Church Hill, also needs to be financed. In addition, the target groups perceive various risks of rehabilitating by raising such questions as: Will financing terms reward or penalize those who rehabilitate? Will surrounding homes also be rehabilitated? Are the rehabilitated homes going to be energy-efficient or will existing architectural styles be very costly to heat and cool? Will the necessary skills or expertise to rehabilitate be satisfactory? Other concerns expressed, although of a lower priority, included: the need for more neighborhood shopping facilities in Church Hill; the poor condition of many of the homes; suspicion and confusion regarding the plans of absentee landlords and public agencies (such as the

Model Cities Program and highway construction); the negative status associated with the area among those under 35; and, the issue of "displacement" whereby in the past, the lowest-income blacks living in Church Hill have been forced to relocate.

The telephone survey consisted of approximately 100 interviews, among potential and actual black homeowners living both in and outside the Church Hill area. When asked to indicate the items they liked most about their current residences, both groups of respondents mentioned most frequently neighborhood-oriented factors, i.e., the neighborhood or environment, the convenient location, and the neighbors. When asked if there was anything they would most like to change regarding their current home, nearly half of the respondents indicated "nothing", and the non-Church Hill residents who preferred a change were much more likely to favor general neighborhood improvements as compared to the Church Hill residents. The factors about Church Hill that appeal most to the non-residents are in order, the renovation possibilities of the older homes, the convenience to downtown, and the historic nature of the area. The favorable aspects of the area perceived by the residents are the neighbors, the convenience to downtown, and the renovation possibilities. The key items disliked about Church Hill by the non-residents include crime, the general deterioration of the houses, the high unemployment, and the area's reputation. The residents' major concerns are regarding crime and the condition of the houses.

Marketing Plan

In addition to focusing on bringing middle class blacks currently living outside Church Hill into the area as homeowners, the market targets should also include first, converting those blacks who are currently renting in Church Hill to homeowners; and, second, expanding the marketing process to consider not just consumers, but also suppliers (e.g., offerings by bankers, real estate agents, land development, highway construction, and public housing agencies). Since the key obstacle to blacks buying a home in Church Hill is financially related, a thorough and comprehensive assessment of creative or innovative home financing plans, e.g., Graduated Payment Mortgages, Shared Appreciation Mortgages, neighborhood-sponsored "Mortgage Banks", Variable Rate Mortgages, and Reverse Annuity Mortgages, is required. The appropriate promotional and educational strategies depend on which consumer target is the focus. If the target consists of current Church Hill residents/renters, then the promotional objective should be to educate these residents regarding housing values, financing means, and rehabilitation methods and procedures. If the target consists of homeowners and renters currently living outside of Church Hill, then the promotional emphasis should be first, to counter existing negative attitudes regarding the Church Hill crime/safety conditions and neighborhood appearance, and second, to emphasize the historic nature of the area, the location, and the friendly and cohesive neighborhood spirit.

In addition, an organizational structure linking Church Hill residents and city officials should be formalized by organizing subcommittees or task forces regarding such areas as finance, security, housing, rehabilitation, promotion/education, recreation/social, and liaison activities.

MORE ABOUT THE AVOIDANCE
HYPOTHESIS IN STORE LOYALTY

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TABLE 2
TYPES OF STORES IN ACCEPTANCE
AND REJECTION SETS

Store Types	Acceptance Set		Rejection Set	
	N	%	N	%
Department Stores	72	76	23	24
Specialty Stores	46	51	45	49
Discount Stores	0	0	19	100
Variety Stores	0	0	20	100

Chi-square = 64.0; significant as chi-square .001 = 16.3

Apparent from the table is the sample's attraction to department stores. The preference pattern for specialty stores, however, is somewhat confusing. The authors speculate that respondents were generally attracted to "quality" specialty stores as opposed to "budget" specialty stores.

Acceptance-rejection set analysis may provide a means for testing alternative segmentation dimensions by studying the change, if any, in acceptance-rejection sets as shoppers face different buying problems or as various groups of shoppers are compared. For example, a store may wish to see if retired men would constitute a segment. If the store were not in the acceptance set for many retired men, or if the acceptance set for retired men differed little from nonretired men, then retired men would not be logical as a basis for segmentation.

The possibility of segmentation by "shopping basket" could be studied by asking shoppers to identify acceptance-rejection sets of stores for different combinations of items. If some shopping baskets yielded different acceptance-rejection sets, then the mix of goods to be purchased would be suggested as a segmentation variable.

The concept of acceptance-rejection sets may also offer a useful way of identifying competitors (overall, by department, or by individual/combinations of products). Stores in acceptance sets would be competitors; stores in rejection sets would not be. This view of competition reflects consumer choice as the ultimate factor determining competition.

A particular retail store may well be acceptable to a consumer for one purchase, but unacceptable for another purchase. In practice, the retail manager seldom knows why a particular item or line is not selling well. Is his store being rejected initially (rejection set) or is it being evaluated along with other evoked alternatives in an acceptable grouping (acceptance set)? Retail research may play a useful role in clarifying the basis for consumer choice if the store is failing to attract sufficient patronage from a particular market segment.

This paper relates to the controversy centering around Lessig's contention that store loyalty may be established more out of avoidance of certain stores than attraction to others. The specific concept studied by the authors relates to acceptance and rejection sets of stores. Two hypotheses are tested. H¹: The consumer's evoked set of stores is likely to contain stores in which the consumer would plan to shop and stores in which the consumer would avoid shopping. H²: Consumers' attribute evaluations will be significantly different between the acceptance set and the rejection set of stores, being more favorable toward the acceptance set of stores.

Sixty female student respondents were asked to name acceptable and unacceptable stores carrying ready-made women's clothing. The respondents were then asked for preference rankings, store ratings on 29 attributes, and importance ratings for each attribute. The store attribute ratings were importance-weighted and subjected to significance testing.

The first hypothesis, which was intuitively true, was accepted based on the following data:

TABLE 1
NUMBER OF STORES IN CONSUMERS'
ACCEPTANCE AND REJECTION SETS

	Number of Stores in Set						Total
	0	1-5	6-10	11-15	16-20	21	
Acceptance Set	0	1	28	26	4	1	60
Rejection Set	2	43	14	1	0	0	60

In terms of Lessig's avoidance hypothesis, the results of the data support the idea that consumers avoid certain stores.

Having established that consumers definitely think in terms of acceptance and rejection sets of stores, the authors then ascertained consumers' evaluations of stores in the two sets. If differential evaluations exist, then one would expect the acceptance set to receive more favorable ratings. The Friedman test statistic (chi square) was applied to the weighted attribute scores and resulted in significance beyond the .001 level.

The value of exploratory research, such as the present study, can often be enhanced by looking for meaningful patterns in the data. Are certain types of stores more likely to appear in either the acceptance or rejection set when respondents shop for clothing? The stores were roughly classified by the authors through personal knowledge, telephone calls to the stores, and yellow page classifications.

PACIFIC BASIN SMALL BUSINESS NEEDS ASSESSMENT

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Abstract

Specific purposes of the Pacific Basin Small Business Needs Assessment Study¹ were: (1) To inventory and understand the small business needs of the Pacific Island communities of Oahu, Hawaii, Maui, Kauai, Guam, and American Samoa with regard to the desire for additional information and services categorized as accounting, marketing, finance, management, personnel, and other. (2) To gather demographic information related to organizations engaged in or serving small business in the Pacific Island communities studied.

The Study and Results

An opinion survey of thirty-seven questions covering the six information categories was completed by 523 small business respondents from a sample based on population and number of businesses in each island community. If a relationship between the survey results and overall population of the region is assumed, the confidence level for total responses is 95 percent and the error interval is ± 5 percent. In addition, confidence levels were estimated for each island. The importance of having additional information and service provided was defined as: (1) Essential, (2) Above Average, (3) Average, (4) Below Average, and (5) Not Important. A mean average response was computed for each service information category for the total sample and for each island community. A "Critical t Test" was applied to indicate specific information/service items assigned significantly higher priorities by respondents from each island community compared to Oahu respondents.

Oahu respondents indicated additional information/service needs as: (1) accounting (mean = 2.2), (2) finance (mean = 2.2), and (3) marketing (mean = 2.3). Accounting priorities were tax considerations, cash flow analysis, and accounting principles. Obtaining financing, calculating rates of return, and break-even analysis were financial priorities. Marketing needs focused on market opportunities, pricing methods, and target markets.

Like Oahu, Hawaii's needs were: (1) accounting (mean = 1.8), (2) marketing (mean = 2.0), and (3) finance (mean = 2.2). Accounting needs were accounting principles, income statement concepts, and cash flow analysis which, accompanied by depreciation methods, showed significant results. The three prime marketing services were market opportunities, target markets, and customer profiles which, along with market share, showed significant results. Financial priorities include break-even analysis, rate of return calculation, and business financing with break-even analysis as significant.

Kauai's respondents reported needs as: (1) accounting (mean = 1.5), (2) finance (mean = 1.6), and (3) marketing (mean = 1.6). Significant accounting priorities were accounting principles, constructing financial statements, and accounts receivable/payable control as well as depreciation tools. Financial needs were break-even analysis and long-and-short business financing methods with significance for break-even analysis. Of significantly

higher marketing importance on Kauai were determining market opportunities, target markets, and market share.

Maui's second and third priorities differed from previous island results: (1) accounting (mean = 1.8), (2) other (mean = 2.1), and (3) personnel (mean = 2.1). The accounting priorities were accounting principles, tax issues, and accounts payable/receivable with significant results for only accounting principles and depreciation methods. The other category priorities were business/legal considerations, insurance requirements, and governmental programs. Business/legal requirements, insurance requirements, and selection of organizational form results were significant. Labor regulations, employee/employer relations, and personnel/manpower needs assessments were vital personnel issues and, with the exception of manpower needs, were assigned significantly higher priorities than by Oahu respondents.

Guam's priorities were: (1) accounting (mean = 2.2), (2) other (mean = 2.5), and (3) marketing (mean = 2.5). Accounting needs were tax information, accounting principles, and dealing with inflation. Like Maui, the other priorities were regulations, insurance requirements, and government programs. Marketing information sought was target markets, market opportunities, and customer profiles.

American Samoa's results indicated prime concerns for: (1) accounting (mean = 1.5), (2) other (mean = 1.8), and (3) finance (mean = 1.9). Accounting needs were tax considerations, financial statement preparation, and cash flow analysis. Respondents assigned significantly higher importance to financial statement preparation, inflationary techniques, depreciation tools, and tax considerations than did Oahu respondents. Other priorities were organizational structure, insurance requirements, and government programs with organizational structure a significant priority. Financial information/services emphasized break-even analysis, rate of return determination, and financing sources with significantly higher needs for break-even analysis and rate of return determination.

Conclusions

There is a demand for additional information and services to be provided in the Pacific Island small business communities with accounting services as a universal topic area followed by marketing and finance in the more sophisticated communities. In addition, smaller island communities particularly desire more developmental information. Private enterprise, government, and nonprofit organizations should further research the market.

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ON THE TRANSFER OF TECHNOLOGY AND MANAGEMENT KNOW-HOW

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Introduction

Technology transfer and creation as a tool for economic development has gained increased importance after World War II. The countries that were successful in technology creation also became the world's most advanced countries and transferor of technology; whereas other nations unsuccessful in their attempts tried to catch up with their counterparts by means of technology transfers. Those nations that were successful in adapting and absorbing the incoming technologies began to improve existing technologies and create new technologies. Therefore, one of the prerequisites of domestic technology creation is the success achieved in adaptation of imported technology. By increasing the effectiveness and efficiency of technology transfers, the technology base may be widened and a greater number of countries should be able to enjoy its merits.

Studies suggest that the composition and the organizational mode of international technology transfers are powerfully influenced by the level of economic development and the industrialization of the recipient nation. Unquestionably, there is a relation between the content of a technology transfer package and the development of the recipient country. In most transactions between developing and developed countries, the largest proportion of payments is devoted to the technical and management know-how by recipient nations. As a result of this trend, transfer of technology by developing countries takes the form of foreign direct investment which usually offers capital as well as technology and related technical/managerial know-how. U.S. multinationals, being the major creators and transferors of technology, have become key transfer agents by means of direct investment.

Selection of Appropriate Technology

A major concern for the recipient country is the assessment of whether the imported technology is appropriate for the local conditions. Some nations such as Mexico try to assure appropriateness of a transfer through laws. Some researchers propose transfer models structuring the process. But neither of these approaches have proved to be successful in selection of appropriate technology.

What can be done to assure for an appropriate and beneficial technology transfer? Though numerous variables play a role in this context, we are going to focus on the role of management know-how. Management know-how--can be accumulated in a country through various ways such as MNC's training programs for local managers, domestic universities, and graduate or post-graduate education in advanced countries. There is a common belief among scholars and political leaders that industrialization and economic progress in developing countries are hampered by lack of management know-how at all levels. Because management know-how is not usually indigenous to developing countries, it is asserted that such know-how should be transmitted from developed to developing countries. This can be achieved through various channels, including: (a) management contracts; (b) technical aid programs from international organizations; (c) direct foreign investment; (d) training courses provided by foreign companies to their local national managers at company headquarters; and (e) students who pursue an advanced degree program in a country reputed for its management

know-how.

Management know-how can be instrumental in the selection of appropriate technologies. With the aid of managerial know-how it may be possible for a developing country to: (a) identify key industrial areas in which new technologies are required; (b) search alternative technologies; (c) evaluate alternatives in terms of social and economic costs; (d) select appropriate technologies; and (d) actualize adaptation and absorption of incoming technologies and facilitate economic growth.

Since transfers are a burden to recipient developing countries, it is vital for these countries to get adequate results. Management know-how as a tool for proper adaptation and absorption of incoming technologies, has gained an increased importance in recent years. Consequently, developing countries are continuously seeking to accumulate management know-how.

A Socio-Technical Approach to Technology Transfer

In order to achieve best results from management know-how transfer, we should first decide whether managerial procedures and practices are universal or not. The outcome of such a decision is important because the procedures and attempts are going to be different in either case. If its universality is proven, certainly there will be no need for extensive cultural and social adaptation. It seems unlikely to accept such an argument, but in the present state of knowledge neither hypothesis can be accepted or rejected.

The question is: Does a successful transfer mean that the newly industrializing country absorb the new management theory in its entirety or that it is selective in the process of adaptation, absorbing some management techniques and adding some of its own, so that the result is a blend of useful Western practices with some creative achievements inspired by the nation's own genius?

The Japanese seemed to be most successful in obtaining best results from technology transfer. They do import technology more than they export, but they acquire properly trained people to select the necessary technologies and absorb and adopt it. Also, they go one step further by improving the imported technologies and exporting it to other countries (even to those who originally export it) in its improved form. The Japanese example may well prove the benefits of selective and adaptive management know-how transfer.

As was discussed earlier, there are various ways through which management know-how can be transferred and accumulated by a developing country. Both recipient and transferor countries and organizations should realize their roles. The recipient countries have to create or upgrade educational institutions and minimize impeding factors in the environment to avoid lack of linkage between the social environment and change agents trained in certain management or technical principles which have their roots in the industrial culture of U.S. and Western Europe.

NEW DIRECTIONS FOR NON-PROFIT SERVICE MARKETING:
CASE FOR COMMUNITY HOSPITALS

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Abstract

Marketing concept is often a neglected idea in most of the community hospitals. A careful mix of marketing strategies may benefit all segments of patients in the community. To this end a swing-beds concept is developed providing opportunity for long-term care.

Background of the Study

Community hospitals often face decreased occupancy and revenues. Hospitals can meet the needs of communities and help themselves at the same time with the move towards swing-beds. Swing-beds are those that can be used for either acute or long-term care. The swing-bed program increases hospital occupancy, utilization of equipment, and revenues. At the same time, the hospital would better serve the community and the needs for long-term care. The program attracts new physicians and patients. Hospitals establish positive image as providing health care for every segment of the community.

Marketing Strategies

Due to increase in the number of senior citizens, the need for long-term care has increased recently. The use of swing-beds provides opportunity to capitalize on the deficiency of long-term care beds. Among its strengths is the fact that the facility is already built and ready to use. Second, a lot of community hospitals do not have fully-used employees, so the program helps to keep them productive. Third, swing-beds fulfill the needs of local communities for long-term care.

Before implementing the program, the community should be made aware of the swing-bed program. Promotion of swing-beds would consist of local advertising and consumer education. A community survey could determine the attitudes and perceptions toward swing-beds program. The hospital personnel should be trained to serve both short-term and long-term care facilities. In house education programs are helpful and participation from local residents can be encouraged. A thorough audit of current services, complete with costs, utilization, target market, demand, and benefits will help in determining an effective market plan for swing-bed programs.

Conclusion

The swing-bed program can provide new directions for community hospitals. For those hospitals facing decreased revenues and poor utilization, a swing-bed program can help them and the communities they serve. The adoption of marketing perspectives as tools for integration of hospital services can benefit the community as a whole.

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IMPACT OF MEDIA ON THE EFFECTIVENESS OF CORRECTIVE MESSAGES

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Abstract

The medium through which a firm transmits corrective messages to consumers deceived by its previous advertisements may influence how effectively such messages eradicate relevant residual advertising deception. Conceptual literature and empirical results supporting this conclusion are respectively reviewed and discussed in this paper.

Introduction

Both television and print media have previously been used in corrective advertising. However, little has been done to compare their effectiveness in this regard. The implementation of corrective advertising would be facilitated if research could determine whether a corrective message would work better (or worse) when it is transmitted through television rather than through print. Literature suggests that the impact of televised corrective messages on advertising deception is significantly different from that of printed ones. This paper reports empirical documentation of this difference.

The contention that the impact of televised and printed corrective messages differs significantly is based on the following conceptual premises. First, all media have unique influences on the outcome of any communication transmitted through them. Secondly, the interaction between the medium and the message varies uniquely according to the type of message being transmitted. Finally, corrective messages have special characteristics which make them interact uniquely with whatever medium they are transmitted through.

Methodology

This research sought to answer two research questions: 1) Did the corrective messages used in this research reduce salient deception? 2) Did the messages' ability to reduce advertising deception vary depending on whether they were printed or televised?

A repeated measures design consisting of our experimental groups, two control groups, two treatments and two measurements was used to generate data for this research. 165 paid subjects were randomly assigned to six groups. Groups 1, 2, 3 and 4 (the experimental groups) were first exposed to a set of three advertisements one of which was a deceptive Anacin commercial. Salience (importance of the claims made by the advertisements in each subject's purchase decision) and beliefs (perceived truthfulness) regarding all claims made by the above advertisements were measured (M_1). The control groups (5 and 6) were not subjected to the above treatment. However, salience and beliefs of the subjects in group 5 were measured to provide a surrogate premeasurement. This measurement provided a basis for evaluating the effects of the first treatment (deception) on the second treatment (correction). For the second treatment, groups 1, 5, and 6 were shown a televised partly corrective advertisement embedded in a set of three ads like before. Group 3 was shown

wholly corrective advertisements respectively on television and in print. After the second treatment salience and beliefs of subjects in all the groups were measured as before (M_2). The scores of group 6 provided a control for measurement effects.

Scores from the above observations were used to calculate the mean salient deception score. This was the main dependent variable in this research. This score was obtained by multiplying the belief score of each subject on each deceptive claim by his salience score on that claim. Aggregate cell means and claim by claim, cell means were compiled. Analysis of covariance and analysis of variance were used to test the hypotheses suggested by the research questions.

Results

Since there were no significant effects of the interaction between medium and format, the scores of all experimental groups which viewed the corrective messages through each medium were pooled then reanalyzed. This paper reports only the media effects.

The null hypothesis posed in this research were rejected at the .05 alpha level. Accordingly, the following conclusions were reached: 1) Exposing subjects to corrective messages significantly reduced their salient deception; 2) Printed corrective messages were significantly more effective than their televised counterparts.

Implications

One contribution made by this research was increasing informed consent and compliance. This was a positive step in avoiding lengthy, and sometimes senseless court battles between the Federal Trade Commission and the firms charged with advertising deception.

This research also indicated that the medium through which a corrective message was transmitted cannot be dismissed casually. If the commission requires a firm to use an inefficient medium, it would be imposing inefficiency on such a firm. In light of the finding of significant media effect, there is an even greater need for the FTC to gain additional information about other factors that should figure in its decisions regarding media in corrective advertising orders.

This research may be extended in several ways. First, the effects of other media may be included in a broader comparison of the effectiveness of media in corrective advertising. Secondly, the effectiveness of using product packages to transmit corrective messages should be evaluated and compared to other communication alternatives. Finally, the results and conclusions drawn from this research should be confirmed by replicating this study. A worthwhile variation in the research design would be the use of a more natural setting for the experiment.

PREDICTION OF ADOLESCENTS' CIGARETTE SMOKING INTENTIONS:
A TEST OF THE MEDIATIONAL ADEQUACY OF THE AJZEN-FISHBEIN MODEL*

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The objective of this study is to test the mediational adequacy of the Ajzen-Fishbein (1975) model. Triandis has proposed a competing model for the prediction of intentions. Intentions are predicted by the person's affect (A) toward the behavior, social factors (S), and the value of perceived consequences (C), according to the following equation:

$$BI = W_1A + W_2S + W_3C.$$

As with the Ajzen and Fishbein model, the relative contribution of the three components is determined by multiple regression procedures.

Although many differences exist in the way each of these terms are defined in each model, the most important difference between the Ajzen and Fishbein model and the Triandis model is Triandis' inclusion of the "C" term in addition to the "A" term.

Whereas Ajzen and Fishbein define the attitude to the act (A_{act}), in terms of all salient beliefs that a person has about the act, Triandis limits his A term to beliefs that link emotions to the act at the moment of action and his C term to beliefs that link the act to future consequences. C is measured by:

$$\sum_{i=1}^n (P_{Ci}) (V_{Ci}) \text{ where}$$

P_{Ci} equals the perceived probability that the act will have the consequences i, and, V_{Ci} equals the value of the consequence i. In effect, Triandis is proposing that affect (A) is determined separately from perceived consequences (C), while Ajzen and Fishbein are proposing that A_{act} is determined by perceived consequences.

Given the similarity which exists between the manner in which A_{act} and A are operationalized (when A_{act} is measured by the semantic differential) and given the similarity between A_{act} and C (when A_{act} is measured by the perceived consequences of all salient beliefs) the purpose of this paper is to determine if Triandis' hypothesis concerning the dual nature of attitude leads to a better theoretical model for the prediction of intentions. If Triandis' hypothesis is correct, then inclusion of both attitudinal terms in the Ajzen and Fishbein model should improve predictive accuracy. This result would imply that the Ajzen and Fishbein model, as presently formulated, is inadequate to mediate both types of attitudinal variables.

Method

A detailed description of the methodology is available in Chassin, et al. (1981).

Results

The Ajzen and Fishbein model was evaluated using four different versions; either the simple semantic differential A_{act} (SA_{act}) or the multiplicative A_{act} (XA_{act}) combined with either normative beliefs alone (NB) or

with the full normative component (normative beliefs X motivation to comply with these beliefs) (NB·MC). All four versions of the model significantly predicted subjects' intentions. The simplest version of the model (SA_{act} -NB) proved to be the most consistently successful; therefore, only data from that version of the model will be reported.

The bivariate correlations between SA_{act} and XA_{act} for each smoking status and each grade ranged from .33 to .51 ($p < .001$). The magnitude of these correlations although relatively high, are not as high as the Ajzen and Fishbein model predict they should be. To determine whether or not the Triandis hypothesis results in superior predictive ability, the test for significance in hierarchical analysis was used. This test was used because the three variable Ajzen and Fishbein model differs from the two variable Ajzen and Fishbein model only in the addition of one term. The inclusion of the third variable significantly increased predictive accuracy among ex-smokers in high school (3%) and among regular smokers in middle school (7%) and high school (3%).

It is perhaps significant that perceived consequences made a significant contribution to the explanation of intentions for those adolescents who had the greatest experience with smoking (i.e., regular smokers and older ex-smokers). This implies that smoking prevention programs aimed at this more experienced segment of adolescents should emphasize the consequences of continued smoking to a greater extent than for the less experienced adolescents.

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TECHNIQUES FOR IMPROVING DIRECT MAIL ADVERTISING EXPOSURE

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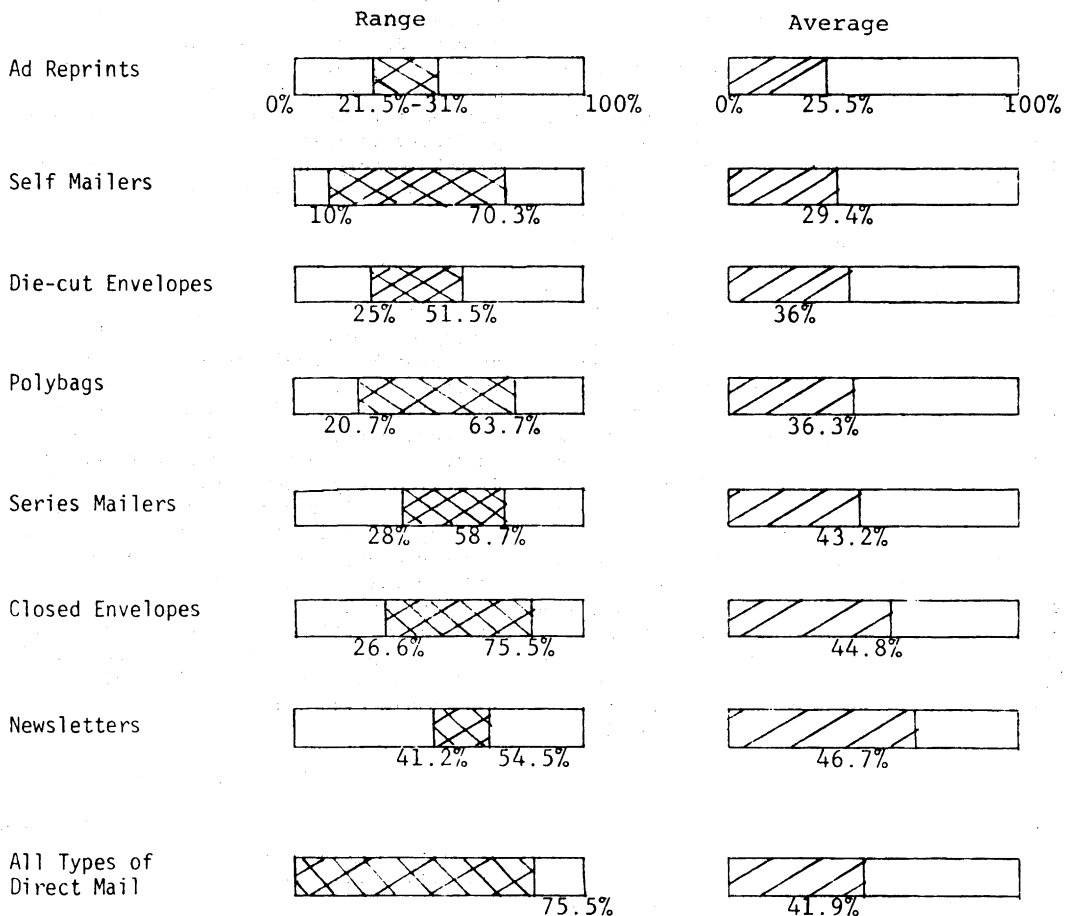
This study summarizes the results of more than 135 proprietary, direct mail advertising tests. Herein, these tests are referred to as Mail Ad Exposure (MAX) tests. The techniques that have been subjected to MAX testing include: (1) mailings of ad reprints, (2) self-mailers (mail with no envelope), (3) polybags, (4) closed envelopes, (5) die-cut (window) envelopes, (6) mailers in a series, (7) news letters, (8) dimensional mail, (9) samples, (10) cassettes, and (11) tubes.

When running a MAX test, a projectable sample of names (n = 400) is selected at random from the mailing list. This sample is then divided into two subsamples: control and experimental. A personalized check for \$5.00 is prepared for each name selected within each subsample. The checks are then glued inside of the direct mail piece so that they can be found only if the ad has been seen. The sample group and balance of the mailing are identical in all other respects.

Cashed checks are returned to a special MAX research account. From the checks, exposure within the experimental and control group are computed. Two types of exposure scores are determined. The first, unadjusted exposure scores, are computed from the total number of checks returned. The second type, adjusted exposure scores, reflect the elimination of those checks which have not been self-exposed. Self-exposure is established by analysis of the answers to two questions on the rear of each check. These questions determine whether the addressee found the check him/herself or whether it was brought to his/her attention. All of the MAX findings reported herein represent adjusted exposure scores.

In most cases, the findings are based on a dozen or more MAX tests of a given technique, and are therefore projectable among the experimental population -- physicians. Where data are scanty and the results may not be quite as reliable, the findings are excluded from **Figure 1** below.

Figure 1: Summary of Projectable MAX Test Results*



*Source: MAX tests

HEALTH CARE MARKETING BY HOSPITALS: COMMENTS AND CASE STUDY

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Marketing concepts and techniques which have been successfully used by business firms for years are only now receiving recognition by members of the health services profession as ethical management tools (MacStravic, 1977). The issue is complicated by the fact that nonprofit organizations dominate the organizational structure. The financial dependency on donor support by nonprofit clinics and hospitals mandates administrators to include these donors in their need satisfying functions. In many instances the satisfaction of contributors changes the mix of services which are available to the patient (Kotler, 1975).

The purpose of this study is to extend our knowledge of effective applications of marketing strategies in the realm of health care services. One incident in which patient care was dependent upon the satisfaction of other publics is examined as a descriptive case study. Implications for future marketing opportunities in this area are suggested.

Marketing a Planned Modernization

A page one headline, "Foote Hospital Closes Deal to Purchase Mercy" in the Jackson, Michigan daily paper on August 29, 1975 was the first public announcement of the plan to merge the two largest of Jackson's three hospitals. W.A. Foote Memorial Hospital, with 273 beds, was publically operated by a board of trustees. Mercy was owned and operated by the Catholic Order of Sisters of Mercy with facilities for 217. A smaller 66 bed Osteopathic Hospital was not involved in the plan. The Foote management hoped to replace obsolete facilities and achieve economies of scale with a merger. Both hospitals were over crowded and inefficient and more than fifty years old. Both were unable to meet current codes and regulations. The two had been cited for a total of more than 146 violations, and were operating under temporary permits pending a reinspection. The survival of the institutions and the safety of their patients were at stake. It was a situation faced by many hospitals (J. Goldsmith, 1980). Despite the deficiencies Mercy Hospital was held in high regard by the catholic community. Substantial contributions had provided furnishings which created an aesthetic beauty that obscured the obsolescence of the physical plant. The news of the sale was viewed as a violation of trust by the vocal and influential patrons. A "Committee to Save Mercy Hospital" was formed and legal action charging the Foote trustees with monopolistic practices and restraint of trade was instituted. The effect of the suite was to delay attempts to obtain financing for the proposed improvements. This opposition forced the board to reconsider their options.

Remarketing the Service

The board had initially considered three alternatives: renovate and continue the two site arrangement, build a new hospital at a new site, or build at one of the two present sites. Now it was recognized that whatever the alternative site selected, it was also necessary to obtain the full support of the community. Although the opposition had received an inordinate amount of publicity and probably favored the first option, the board believed that public backing could be won by convincing the unde-

ecided majority of the value of the best plan. A management consulting firm was engaged to collect data and to prepare a ten year plan for the physical development of the project. A survey was conducted. The next act by the board was to employ a professional fund raising firm to oversee the campaign to raise the public's share of the estimated \$42 million cost. The efforts of the board for the next six years would be directed towards reaching the residents of the primary service area identified by the survey. What was not known at this time was the best approach to use.

Initially ninety interviews were conducted among representatives of the three to five hundred individuals who were identified as community leaders and of the 2500 individuals who constituted the hospital "family", the trustees, administrators, physicians, nurses, support staff and volunteer workers. The information received by these initial interviews were then used as a basis for the solicitation plan. The Foote site was selected for the new facility; both old structures would be vacated. The actual campaign began in January, 1980 and eight months later the goal of four million dollars had been surpassed. During this time the legal concerns had been resolved in favor of the trustees. Opposition was almost nil. Virtually every service organization, club and influential individual had been contacted. Favorable publicity dominated the media, and public opinion was overwhelmingly in favor of the proposed facility. The plan was an outstanding success.

Summary

This case study outlines only one example in which marketing may be used to solve a problem of health care provision. Two levels of decision making were involved in remarketing a service after first determining the most efficient product form. Increasing numbers of health care officials are recognizing that modern marketing is not only compatible with serving patient needs, but is a necessary adjunct to help meet the competitive challenges of our contemporary environment. Facilitating exchanges which satisfy expressed and felt needs of consumer groups, communicating the availability of services and providing economical delivery systems are marketing tasks which are compatible with the most stringent ethical guidelines of professional conduct. Medical and marketing professionals are cooperatively meeting the challenges of complex problem solving in this important and growing industry.

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IMPLICATIONS OF THE GROWING HISPANIC MARKET UPON MARKETING PLANNING IN THE 1980s

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ABSTRACT

This paper finds important demographic differences between Hispanics and other Americans. Although Hispanics depict strong cultural values, these values appear to be similar to those of other Americans. The marketing implications of these findings are explored.

INTRODUCTION

Within the marketing literature, there has been considerable planning for such demographic trends as the baby "boom" to baby "bust" trend, the aging of America and the shifting population toward Sunbelt states. Marketers are also well aware of changing cultural trends such as the declining emphasis of family and religious values and the trend toward improved health and physical fitness. However, these demographic and cultural trends appear to apply primarily for White Americans. Largely overlooked in the marketing literature has been the growing importance of the Hispanic market which appears to show different demographic and cultural trends than those of white Americans.

The purpose of this article is to point out the important demographic and cultural trends of the Hispanic market (Mexicans, Puerto Ricans, and Cubans) and their implications upon marketing planning in the 1980s.

Demographic Trends

The major demographic trends of the Hispanic market are as follows:

1. The size of the Hispanic market has increased by 61% from 1970 and nearly 15 million in 1980. By 1990 or 2010 the Hispanic market will become the nation's largest minority.

2. The Hispanic market is very geographically concentrated with 60% of all Hispanics living in the three states of California, Texas, and New York (Current Population Reports, 1981).

3. The growing Hispanic market can be segmented as primarily youthful compared to the "graying" trend for white Americans. Specifically, 43% of Hispanics were less than age 20 in 1980 compared to 33% for white Americans.

4. Although educational levels are low for Hispanics (only 45.3% over age 25 completed high school), the median income was considerable at \$14,569 in 1979. Indeed, Strategy Research Corporation has estimated the Hispanic market to have a sales potential of 30 billion dollars.

5. Hispanics can be described occupationally as primarily blue collar workers compared to white Americans. The notable exception among Hispanics is for Cubans, who are largely white collar workers.

Cultural Trends

The cultural values of Hispanics appear strong and deep-rooted possibly because of a) strong family orientations, b) close proximity of Hispanics to their native countries and c) the unifying factor of the Spanish language. Although Hispanics have strong cultural values, the (Yankelovich study, 1981) found that both Hispanics and other Americans have similar strong family values and similar values on individualism and being physically fit

and attractive. In fact, Hispanics were found to be more "American" than other Americans by being more upwardly mobile and more materialistic.

Market Planning for Hispanics in the 1980s

The above demographic trends show that the Hispanic market is considerably different than that of white Americans. Specifically, Hispanics are still in the baby "boom" stage which will likely continue in the 1980s. The Hispanic age segment having the most market potential is the youth market, ages 15 to 24. This segment will be important for marketing planners in the 1980s because newly formed families will have need for housing, food, products, and many basic household items. If Hispanics follow the lifestyle of traditional blue collar customers, they should buy primarily from discount department stores, mass merchandisers, and national chains. In short, they should be inflation-impacted shoppers with research (Yankelovich, 1981) suggesting that they are also quality oriented with preference for nationally advertised brands. Marketers, who have effectively planned their messages to Hispanics, have benefitted by enjoying strong brand loyalty. Furthermore, since research shows that Hispanics are very individualistic and open to new styles and products, marketers who plan carefully for this market in the 1980s are also likely to gain effective penetration.

As the large Hispanic youth market begins to form new households in the 1980s, a larger percent of their budget will be spent on food products. In particular, the Hispanic culture is an important factor for their large usage rates for such products as baby food, fruit nectar, malt liquor, and soft drinks (except diet).

Since Hispanics are brand conscious, marketing generics to Hispanics is not likely to be successful. Recent evidence (Marketing News, 1981), however, does suggest that Hispanics do use coupons when they shop in supermarkets.

Beyond the above general cultural patterns, there is little research on the Hispanic subculture upon buying patterns. Detailed lifestyle and benefit segmentation studies are needed on Hispanics in different markets. This information would be especially important for younger Hispanics who are being assimilated into American society.

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MARKET SHARE ANALYSIS OF U.S. EXPORT TRADE

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Abstract

The continued trade deficits of U.S. are causing major concern. U.S. trade performance vis-a-vis its major trading partners, namely, E.E.C., and Japan was analyzed for the period of 1974 through 1977. Market shares of U.S., E.E.C., and Japan were computed for 120 countries and their relative trade performance in world markets was assessed.

Introduction

In 1970 the U.S. lost its traditional position as the world's largest exporter of manufactured goods. In 1971 for the first time since 1893, the U.S. registered a negative balance of trade. While the U.S. had a record trade surplus of \$11.05 billion in 1975, the trade deficits in 1976 and 1977 were \$6 billion and \$30 billion respectively. In 1978 and 1979, trade deficits were close to that experienced in 1977. Despite two dollar devaluations and other favorable developments in the international and national export environment, the country's balance of payment and trade deficit problems still persist. It is now generally expected that trade deficits are going to be a fact of life for some time. By the mid 1970's, industrialized, oil importing nations began to realize that economic survival required an expansion of exports to balance the ever increasing cost of imported oil and petroleum-based products. Many nations, both poor and rich, sought to expand exports. The U.S. was no exception.

Scope of the Paper

In view of the above mentioned considerations it is worth investigating the U.S. international trade performance. Such investigation will be meaningful only if comparisons are made of the relative performance of the U.S. vis-a-vis other major trading blocks of the world, namely the E.E.C., and Japan. More specifically, this paper is concerned with achieving the following research objectives:

1. To evaluate the overall changes in the international trade performance (imports and exports) of the major trading blocks -- the U.S., the E.E.C., and Japan -- 1974-77.
2. To evaluate the relative U.S. international trade performance in terms of changes in balance of trade between 1974-1977.
3. To evaluate the U.S. international trade performance vis-a-vis the E.E.C., and Japan in the largest import markets which accounted for 85 percent of world imports in 1977.
4. To evaluate the relative performance of the U.S., the E.E.C., and Japan during 1974-1977 in the top 20 markets for each of the major trading blocks.

Research Methodology

A nation's exports can be thought of in terms of their share of the world market, in an analogous manner to a firm's share of market in a given industry. In addition for each importing nation, one can analyze the percent-

tage of imports from each country and describe these as each exporter's market share of a given country's imports.

Generally, a share of market analysis is a better measure of relative performance in some period of time than an analysis of gross sales over time. This is because market share analysis adjusts for increases (or decreases) in the total sales in a market. Thus, a given nation is able to improve upon its share of a market only at the expense of its competitors since the total shares in a given market are fixed at 100 percent. Therefore, changes in a nation's share of a market reflect relative, competitive performance within that market. With this perspective, a research project was initiated to compare the competitive performance of the world's three largest traders -- the U.S., the E.E.C., and Japan.

Research Results

From 1974 to 1977, the U.S. did not achieve an increase in exports of the magnitude desired. In fact, that U.S. share of the world market fell from 12.83% in 1974 to 11.64% in 1977. The E.E.C., however, was able to gain a slight increase in its share of the world market. Its share of total imports increased from 33.74% to 34.55% during 1974 to 1977 period. Japan was able to significantly increase its share of the world market during this time period. Japan achieved a 6.17% share in 1974 and increased this to 8.19% in 1977. This absolute increase of 2.02 share points is especially impressive when it is expressed in relative terms. A 2.02 increase over a base of 6.17 represents a 32.74% increase in market share.

Another important perspective for analyzing the overall performance of the three trading blocks is to compare the percentage change in total imports and total exports from each trader in the relevant time period. Obviously in order to improve its balance of trade, each would like to minimize imports and maximize exports. Research results showed that the U.S. was able to increase its exports by only 21.99%, while its imports increased by about twice this magnitude, or 45.09%. Japan, on the otherhand, was able to significantly improve its balance of trade position as its percentage change in exports more than tripled its percentage change in imports. To continue this analysis, the change in each country's balance of trade from 1974 to 1977 was calculated. These values were then ranked. Detailed data showed that Japan ranked first (i.e., they had the most improvement) while the U.S. ranked dead last out of the 120 countries for which data were available.

In product markets, the concept of the 'heavy half' is sometimes discussed. The concept can usefully be applied to world markets. Data for 34 largest import markets were analyzed. These 34 markets accounted for over 85% of all imports in 1977. Detailed data analysis showed that the U.S. trade performance in these markets was far less impressive than either E.E.C., or Japan.

Conclusions

Detailed data analysis resulted in the overall conclusion that the performance of the U.S. in the world markets from 1974 to 1977 was relatively poor. The U.S. held its own in some markets, but in many nations the U.S. lost market share. Obviously, if this trend continues dire economic consequence will result.

A CREDIT SCORING MODEL TO EVALUATE THE CREDIT
WORTHINESS OF CREDIT CARD APPLICANTS

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Abstract

This research develops a discriminant model which identifies good and bad bank credit card risks.

Introduction

One of the largest costs in the bank credit card operation arises from losses on unpaid debt, or chargeoffs. The chargeoff expense can easily change a profitable credit card operation into an unprofitable one. The recent alarming increases in chargeoffs result in large part from two causes, changing bankruptcy laws and the increasing popularity of the debit card. The increase in bankruptcies has translated directly into an increase in chargeoffs, while the debit card is an acceptable substitute for the credit card to the "convenience" credit card user.

Chargeoff expenses are controlled by a subjective screening of credit card applications. The use of a credit scoring model, however, would enhance the screening process by establishing an objective method of evaluating credit worthiness. The objective of this research was to develop a credit scoring model which discriminates effectively between groups of good and bad credit card risks.

Methodology

The population studied was the card base of Union National Bank of Little Rock. The population was divided into two groups, currently good accounts and charged-off accounts. Approximately 150 cases were randomly selected from each group. Data was drawn from the original credit card application and the customer's credit report, run at the time of application. Several stepwise multiple discriminant analyses were used to discover the best combination of variables predicting group membership.

Findings

Of the several analyses, one had interesting and significant results. The good risk and chargeoff groups were significantly differentiated at the 0.05 level, and the discriminant function properly classified 71 percent of all observations. Table 1 shows the relative discriminating power of the predictor variables used. A good credit risk had no dependents, a small amount of high credit, a high credit line, high monthly rental, a high annual income, and lived at his present address for a long period; a poor credit risk was the opposite by the same characteristics.

Table 1--F-To-Remove Values and Associated Variables

Ranking of Discriminating Power	Variable Number	Variable Description	F-To- Remove
1	V21	Length of residence	13.157
2	V38	Annual income	8.772
3	V20	No. of dependents	7.923
4	V 6	Credit line	6.911
5	V25	Monthly rent	6.031
6	V62	High credit	1.156

Conclusions

The subjective credit scoring model can be used to supplement the subjective determination of credit worthiness by the evaluating credit officer. By defining a marginal discriminant score area, attention can be paid to the credit line granted an approved applicant with a marginal score. By using this method, credit risks will be less of a liability if their debt becomes a chargeoff.

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THE PORTRAYAL OF MEN VS. WOMEN IN TV ADVERTISING

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Abstract

This paper reports the results of a content analytical study of 644 prime-time TV ads to determine the present role of women vs. men, and to see if the roles of women have changed. Results indicate a greater awareness of working women in diversified occupational roles and more women are used as product representatives yet the stereotyped housewife role is still predominant.

Background

The predominant use of TV advertising in the U.S. is to inform and persuade people to buy those products or services advertised. With the limited time and high cost associated with television advertising, the use of sex role stereotypes is one way to quickly identify the product with a particular type of individual.

Beginning in the 1960s and escalating into the 1980s the method of portraying women in advertising has come under increasingly severe attack from feminist groups and academic researchers. Both agree that the continued use of negative sex role portrayal of women will, in the long run, not accurately reflect society and will be detrimental to a product's success. A number of research studies have analyzed the content of advertising to determine the use of sex roles in both print and television advertising.

The purpose of this research is to analyze the current sale of prime-time television commercials: (1) to determine the present use of, and roles of, women versus men in commercials and (2) to see if the roles of women in commercials have changed from previous research.

Methodology

To accomplish the purpose of this research, television ads from the three networks (ABC, NBC, CBS) were simultaneously videotaped during prime time (7:00 p.m. to 10:00 p.m. C.S.T.) on the evenings of February 16 to February 20, 1981, and February 23 to February 27, 1981. Additionally, the researchers chose to analyze commercials which could be viewed by the largest and most diverse demographic population, i.e. those commercials shown only during prime time.

Taped commercials were then analyzed as to their content. Six students at Southwest Texas State University were selected to rate the videotaped commercials. In an attempt to achieve valid results, the raters were given an explicit set of instructions and a practice session to become familiar with the analyzing procedure.

The commercials were independently analyzed by each rater and the ratings combined. If any disagreement occurred between raters, the viewing was halted and the disagreement resolved before the next commercial was viewed. Each commercial was analyzed according to origin, product, male and female roles, voice-over, sex of product representatives, use of humor, and setting of the ad. Each category was carefully defined and in cases where a clear distinction between category selections was not apparent the category "other" was utilized.

Results and Discussion

A total of 644 ads were viewed and analyzed by the method described above, of which 94 percent (N=607) were network and 6 percent (N=37) were local in origin. The sex of the voice-over announcer was almost exclusively male while the sex of the product representative(s) was mixed and a large percentage of the product representatives was both male and female (21.3%).

A total of 190 instances were recorded in which the male or female character was portrayed as working (some commercials portrayed multiple working characters of both sexes). Of these, 76 (40%) showed women working and 114 (60%) showed men working. Results indicate that both men and women are shown most often in mid-level business roles. However, men are shown far more in upper-level business roles than women (15.8% vs. 5.3%) and as blue-collar workers (11.4% vs. 5.3%). Women were portrayed as professionals about as often as men but with a higher degree of relative frequency (21.1% for women vs. 14.9% for men) and were shown more often as secretarial/clerical than men (5.3% vs. 0.9%).

Where the commercial depicted instances in which the characters were shown in nonworking roles the male was shown most often engaged in a recreational activity (27.3%) and the female shown most often in a family-related activity (36.8%). Both male and female were shown about equally as decorative (background) or shopping.

In ads that portrayed both male and female characters the researchers attempted to analyze the relative power positions of the female as equal, dominant, subordinate, or merely background. In the majority (60.1%) of the ads (N=323) the male and female characters appeared as equals, i.e. neither seemed to dominate the other. However, in 26.6 percent of the instances analyzed the dominant character was female. In only 8.4 percent of the instances was the female subordinate to the male and in only 5 percent of the ads was the female a background figure only.

Analysis of products advertised and the sex of product representatives indicates that commercials for food products were shown most often (28.7%) followed by personal hygiene products, auto/gas/oil, household, institutional, and drugs/medicine. Males as product representatives appeared most often in food commercials (25.4%) while females appeared most often in personal hygiene commercials (38.9%).

Results of this study are mixed as to the changing roles for women in televised commercials. There is a greater recognition that working women are now found in a variety of occupations, yet less than 12 percent of the commercials actually showed working women. Women are still cast predominantly in family situations with the voice of authority male. Yet women are just as likely to be the product representative and the woman is much more likely to be dominant or equal to the male. Women still seem to be confined to promote a narrow range of products, although there is a modest move into more traditionally male-oriented products. The emphasis on youth is still apparent with the majority of both male and female characters younger than 35 years old. However the female is far more likely to be younger than the male and indicates that the older, wiser male is instructing the younger female in product use.

DEVELOPMENT OF CONSUMER TYPOLOGIES FROM APPROPRIATENESS RATINGS

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Abstract

This study was designed to determine whether consumers could be grouped on the basis of their perceptions of the appropriateness of various food-use combinations, and, if so, whether these categories replicate across subject sets. Results indicate there are at least three, and possibly five, stable people groups vis-à-vis food attitudes.

Introduction

For the last 25 years, market segmentation has been an important concept in consumer research. Previous studies of food products exemplify how different typologies are developed for different purposes in the same product area. However, as far as the present authors have been able to determine, the work by Baird and Schutz (1976) is the only published research concerned specifically with typing people on the basis of their attitudes toward a variety of foods. In their study, Black, Anglo, Mexican, and Chinese homemakers participating in a nutrition education program were asked to rate the appropriateness of 20 foods with respect to each of 25 uses or characteristics. These data were factor analyzed to group the subjects into types. Approximately two-thirds of the homemakers fell in negative groups such as the Hostiles, Social Isolates or Unhappy Eaters and one-third fell in positive groups such as the Sociables and Confident Independents. Because of possible implications not only for nutrition education, but also for such areas as food product development and taste panel research, the present authors decided to conduct a similar study of a less specialized group of subjects evaluating a broader group of foods and uses. They also investigated whether a typology would replicate across subject sets.

Method

The chunk sampling method was used to select 200 female respondents, 50 each in Los Angeles, Chicago, Atlanta, and Boston. These respondents were asked to rate every combination of 56 foods with 48 uses. Separate foods and uses factor analyses were done for each city and for the total group (see Schutz *et al.*, 1975). Each of the foods analyses resulted in five factors, whereas the uses analyses all produced four factors. The two variables that loaded highest on each food factor and the three variables that loaded highest on each use factor were selected as representative of those factors.

Next, 160 questionnaires were randomly drawn and assigned to one of two subsamples. For each subsample, the 120 food-use ratings served as the basis for calculating the scaled distance between profiles for each pair of people (Rummel, 1970). The scaled distances for each subsample were then factor analyzed.

Results and Discussion

Each factor analysis produced five factors, accounting for 67% of the variance in subsample 1 and 66% of the variance in subsample 2. Subjects were categorized as being in one of the five factor groups on the basis of their factor loadings. For each subsample, the means for each of the 120 food-use combinations were compared with corresponding factor group means.

In both subsamples, Factor 1 is noted for higher-than-average mean ratings for both liver and chili in several situations, i.e., "with friends," "as a main dish," and "when I want something easy to prepare," and higher ratings for just liver "for teenagers" and "for dinner". These data, together with the high rating for jello "at parties" and cottage cheese "for dinner," suggest that these homemakers are self-assured creative cooks. This group seems similar to Baird and Schutz's Confident Independents.

Subjects in the Factor 2 group are negative about food. Their negative ratings tend to show up most with respect to "social" uses, i.e., "with friends," "at parties," and "for guests". These people seem to have much in common with Baird and Schutz's Social Isolates.

Factor 3 subjects have higher-than-average ratings for a variety of foods crossed with one use, "when unhappy," and a variety of uses crossed with one food, "cottage cheese". One gets an impression of women who use food for emotional support and hence are apt to gain weight. Then they use diet foods such as cottage cheese to reduce. These women seem similar to the Unhappy Eaters.

Factors 4 and 5 are minor factors in terms of both number of subjects falling in these groups and proportion of variance accounted for. The only distinguishing feature of Factor 4 is the lower-than-average ratings for liver and chili. The people in this group seem to be food conservatives. For Factor 5, there are a cluster of lower-than-average ratings for cottage cheese and higher-than-average ratings for candy bars. These ratings suggest a group of people who do not want to lose weight or have given up trying.

In summary, this research indicates that item-use appropriateness ratings can be used to type consumers in a meaningful manner. Although this study dealt with food, the method could obviously be used for other products. With respect to food, the research suggests that there are three, and possibly, five, relatively stable types. The composition of a given group in terms of these types could have implications for the outcome of a variety of food and nutrition programs.

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DEVELOPING ALTERNATIVE RETAIL MARKETING STRATEGIES: AN EVOLUTIONARY ORIENTATION

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Abstract

This paper maintains that there are four key retail marketing strategies. These are: mass retailing, differentiating, segmenting and positioning. Positioning is considered to be one of the most widespread retailing strategies. At the present time it is only gaining momentum. It is likely to follow the patterns product marketing has been setting. Product marketing strategies have included positioning as one of the key alternatives for a decade or so. It is maintained that retailing follows product marketing strategies with a time lag of 5 to 10 years.

Mass Retailing

Retailers, as manufacturers, have exploited the market aggregation strategy. The mass retailers start basically similar marketing mixes as their competitors. They assume that the market is large enough and they could capture a portion of it by imitating others. They thrive on convenience and ease of shopping. Examples of this include the general trading stores of the 1800's and early department stores. These retailers attempted to serve the total market by having a wide assessment of products. For them, advertising played an informative role by emphasizing such items as store location, variety of products carried, etc. Advertising messages were the same for all segments as the retailer attached the total market. They assumed that all customers are basically alike.

Differentiating

As retailers faced increased competition (such as chain store operations) and declining profits, which stemmed from price cutting, as well as large scale more efficient retail operations, they began using the product differentiation strategy.

This strategy starts with marketing mix differentials (Figure 1). Its goals is to develop better mixes for the mass market and hence to develop competitive advantage. Several examples of this strategy primarily come from the department store. In striving monopolistic competition in their retail trade areas, the department store frequently added such features as credit granting, gift wrapping, delivery, expanded store hours, restaurants with fashion shows and several other such extras. These retailers used advertising in form of these new features. Most importantly, their advertising programs attempted to create and promote the store image which distinguished from its competitors.

The differentiator views the market as all customers are basically alike. They eventually differentiate their marketing mix. He tries to offer something for everyone, however, what is offers is different than its competitors. This is the stage where store images start to emerge.

Segmenting

In time, retailers realized that their customers were not really alike and their trade areas were not homogeneous. Further realizing that their trade areas were comprised of several heterogeneous submarkets within

FIGURE 1

RETAIL MARKETING STRATEGY ALTERNATIVES

	Starting Point	Goals
Positioner	Starts with a specific market position aiming at a specific competitor	Attempts to take away a good share of the market from a well-established competitor
Segmenter	Starts with market segmentation	Attempts more precise adjustment of supply to heterogeneous demand
Differentiator	Starts with marketing mix differentials	Tries to develop better mixes for the measurement
Mass Retailer	Starts with basically similar marketing mix as the competitor's appeals through convenience or ease of shopping	Tries to capture a part of the market by not doing anything different than competitors

which there was homogeneity of needs, motives, etc. some retailers attempted to employ the market segmentation strategy. This stage of the retail marketing evolution followed, by a considerable amount of time, that of the manufacturers. This is illustrated by the literature development concerning these topics. Generally, the pace of retail store market segmentation research has tended to be somewhat slower and somewhat less sophisticated than that for product/market segmentation. To this day, market segmentation is a "new" strategy to several retailers.

As for manufacturers, advertising plays a key role in determining the effectiveness of a retail segmentation strategy. Advertising programs are directed at specific market segments with unique needs which means that retailers have to be cautious about media selection and scheduling as well as message construction.

The segmenter starts with identifying variable segments. His goals is to adjust the supply to heterogenous demand (Figure 1). He views the market as all customers are being different. He tries to offer a few select market mix to satisfy specific needs. Many of the specialty stores can be shown as examples of segmentation in retailing. I. Magnins, Tom McAnns or Robert Hall's are all examples of specialty retail chains appealing to some carefully defined market segments. Some department stores also have segmented Bloomingdale's, Marshall Fields or Kmarts are examples.

At best, the evolution of marketing strategy development for retailing is still in the segmentation stage. Accordingly, the most significant contrast between the manufacturers' and retailers' evolutions exists at positioning stage. It is here that we see that the retail evolution is incomplete. The literature concerning manufacturer (product) positioning first appeared in the early 1970's. It was not until 1977 that similar recognition was given to the concept of retail positioning. Since segmentation is still the major practice and research area, it is treated specially in the following chapter.

"TOFI MANAGEMENT, INC.": AN EXPERIENTIAL EXERCISE REGARDING THE
LONG-TERM IMPLICATIONS OF SOME TECHNOLOGICAL INNOVATIONS

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Abstract

There have been some technological developments during the past few years, which will have a significant impact on marketing and management practices only a decade or two from now. This exercise is intended to provoke thought and discussion about the long-term social and managerial implications of such innovations. The case is one that captures the interest because of its unique setting, and induces lively discussion. The debriefing session at the end of the exercise is used to create awareness of the different points of view that emerge during the discussion.

Introduction

The purpose of the paper, which is summarized below, is to illustrate: (1) The utility of a case based in the future, to construct hypothetical scenarios of what may well happen 20 years from today. This is intended not as a prediction, but as a "straw man" to force participants to think of the long-term future, construct their own scenarios and develop appropriate strategies. (2) An experiential exercise with role-playing, debriefing sessions, etc. Unfortunately, neither of the above objectives can effectively be fulfilled without the benefit of the complete case and experiential exercise, which is impractical within the existing space constraints. (The interested reader is referred to ICCH Case Nos. 9-579-634 and 5-579-635).

In general, experiential exercises and class discussions tend to revolve around an immediate problem or a crisis situation. This is perhaps reflective of the "real world", because most problems in society, government, business, etc. are immediate ones. Without detracting from the utility and relevance of such exercises, the present work recognizes the value of a careful look at the long-term future of marketing in particular, and social communications in general. The most pragmatic and down-to-earth individuals should be encouraged to emerge, even if briefly, from discussion of immediate problems, and think about the future. This case exercise attempts to do just that.

The format of the description of this exercise is similar to, though not exactly the same as, the one used by Pressley [79]. The major differences include a section on debriefing, using some suggestions of Warrick et al [79]; and a brief discussion on validation techniques.

Summary of the Case: TOFI MANAGEMENT, INC.

This case is set in the year 1998. It traces the "history" of the preceding 20 years, during which interactive TV and electronic funds transfer became commonplace for purchasing and marketing research (the former) activities. In addition, a "consumer information system" (similar to Consumer Reports) rating was available for most product categories at the touch of a button on a TV console. This enhanced the role of the "product concept", and made pricing the major decision variable. The decline of marketing and the retail distribution system as we know them today, followed. An "efficiency" or "information" orientation tended to replace a "people" orientation.

The case is not intended to foretell doom, but to force individuals to think of the long-term future and the "information revolution." In that context, cases such as these, although "soft", may serve to illustrate the role of "management fiction" (of which the title is an anagram) in management education.

Purpose/Learning Objectives

This case discussion exercise is intended to get participants to think of the implications and long-term future marketing applications of some of the technological innovations of the 1970's.

This purpose is accomplished by role playing and, to some extent, by observation. As Confucius and, later, DeLozier, said: I hear and I forget; I see and I remember; I do and I understand [79].

The case may also serve to illustrate various marketing concepts such as: (i) the marketing mix; (ii) the hierarchy of effects, and intervening variables; (iii) the interaction of marketing with other disciplines, such as Management Information Systems, Economics, Psychology, Sociology, etc.

Experiences With the Exercise

Discussion tends to get quite heated between the "task"-oriented and the "people"-oriented groups. The roles are assigned after the case is read so as to enable participants to choose or request their own roles--this makes for livelier discussion.

Again, the questions are intended to force the participants to make (implicitly) their own predictions of the long-term future, and to justify them.

Tests have been done to examine the utility of this exercise by administering a questionnaire before and after the exercise, designed to measure: (1) sensitivity to the implications of these technological developments and (2) recognition of both sides of the issue: "efficiency-orientation" versus "people-orientation." The hypotheses were that the sensitivity will increase, and that participants will tend to be less dogmatic, after the exercise. The above hypotheses were supported by the data in undergraduate and graduate classes. Another question that was asked before and after the exercise was designed to record the participants' belief that the more information provided, the better it is for the consumers' decision-making. Scores on this question tended to decrease after the exercise, indicating that participants became less hungry for "maximum possible" information.

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VALUE ANALYSIS FOR SMALL MANUFACTURERS

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Abstract

The four-step value analysis process presented is designed specifically for smaller businesses. The purpose of the process is to provide a simplified, but practical, format for performing value analysis. The primary contributions of this approach include organization of tasks and providing a more efficient way of thinking about requisitions.

Introduction

Small business owners often feel that they are not large enough to benefit from sophisticated techniques and procedures used by big business. Unfortunately, this conception is often true, especially when small businesses attempt to apply the techniques just as they are applied by big business. Often, however, small businesses can actually apply these techniques successfully by either modifying the technique or stripping the technique of its sophistication until the core concept can be redirected to small business problems.

What is Value Analysis?

In general the term "value analysis" refers to various value improvement efforts; the basic purpose of value analysis is to somehow lower production costs. Value analysis focuses on the cause of price in an attempt to reduce these causes and, therefore, reduce costs while maintaining desired performance.

There are many definitions of value analysis; the following is sufficient for our purposes: value analysis is the study of the function, design, and cost of material, equipment, facilities, etc. for the purpose of reducing total costs while maintaining performance, reliability, quality, and maintainability.

For large businesses, value analysis can take a great deal of time, special attention, and special talents. Although the small businesses may not have the specialized training, most do know their products well enough to benefit from devoting some attention to the value analysis process.

A Simplified Value Analysis Process

The stepwise value analysis (VA) process presented below was designed specifically for small businesses. Each of the four steps are critical to the overall process.

Step 1: State the General Function to be Performed

Although this first step is rather simple, it is at the same time somewhat difficult to do in that it can involve a different way of thinking. Almost always the first step in buying is to specify the item desired. Not with VA; VA actually precedes and leads to the product or item specification.

VA focuses on buying a "performance", or "benefit", or "function", rather than on buying an "item". For example, consider the idea of buying a lawnmower. What the purchaser is really interested in is obtaining the lawn-

mower's performance. Perhaps the easiest way to specify performance is to always use a noun and a verb. In the case of the lawnmower's performance, the simple statement might be "cut grass". Other might find it easier to answer the question, "What do I want done?". The answer might be, "I want the grass cut".

Step 2: List Alternatives

Listing alternatives that can achieve the desired performance is also simple, but takes some thought to do properly. The objective of this step is to construct a list of all items or classes of items that are capable of achieving the desired performance stated in Step 1. The desired performance "cut grass" stated above might yield the following list of alternatives: push mower, power lawnmower, self-propelled mower, riding mower, tractor, Kaiser blade, line trimmer, shears, sheep, green cement, fire, and chemicals. Although this list is not intended to be exhaustive and complete, it does illustrate an important aspect of this step: Do not evaluate each alternative until all alternatives are listed. For example, consider one alternative above, sheep. Sheep are not practical for most businesses, but are useful in some situations. Oil companies have found sheep effective in certain storage areas where sparks are dangerous.

Step 3: Compare Specific Function with Alternatives

The general, two-word function stated in Step 1 is obviously inadequate for choosing a specific item and must be expanded. Other information such as financial and operations factors must be considered.

A key point is that those alternatives listed in Step 2 will accomplish the performance objectives effectively. For example, assume that you have five acres of grass that needs cutting every ten days. A push mower would be effective, but would be extremely inefficient due to time and labor cost factors. A tractor with a 16-foot mowing machine would also be very effective, but would be inefficient due to the large investment required.

Step 4: Choose a Specific Alternative

Now that the general list of alternatives has been pared to those relatively efficient ones, a specific alternative can be chosen. Remember that VA is not designed to arrive at the cheapest alternative. Rather, VA is designed to arrive at the best value in terms of adequate performance at a reasonable and acceptable cost. In fact, seeking value by balancing performance and cost will often lead to buying something other than the lowest priced item.

In the "cut grass" example, the final comparisons could be between a large riding mower and a more expensive small tractor. Any number of reasons might cause a company to view the tractor as delivering greater value, despite its higher cost.

VA is used to arrive at the alternative that yields the greatest value. In the preceding example, the alternative chosen was a product category, small tractors. At this point, "normal" purchasing procedures can be employed to finally select and buy a specific brand and **model** of small tractor.

A NEW PROJECTIVE TECHNIQUE TO MEASURE A PERSONALITY
CHARACTERISTIC: APPLICATIONS IN MARKETING

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Abstract

This paper describes a theoretical model of human behavior which helps to isolate a factor which has been shown to predict a quality of human behavior associated with the cooperativeness, friendliness and positiveness of interpersonal behavior. It's called the Others Concept and can be applied to various marketing functions.

Introduction

One of the fundamental problems in human relations is determining what factors influence behavior. Many attempts have been made to provide a framework from which to view these factors, but equally many have fallen short of the ultimate goal of any science of behavior: to explain, predict and ultimately be able to influence behavior in a positive manner.

In marketing, as in any business function in which people must work cooperatively together, the practical goal of providing an atmosphere in which people can work cooperatively and positively together is paramount. Thus, the importance of identifying the factors which contribute to cooperative and positive behavior are a concern to marketers and managers alike.

A new theoretical model of human behavior, which helps to isolate a factor which can and has been shown to predict a quality of human behavior that is intimately associated with the cooperativeness, friendliness and positiveness of interpersonal behavior, has recently been discussed in psychological literature.

The understanding of this factor or theoretical construct which is called the others-concept, can be used to explain, predict and ultimately influence behavior in positive directions. The others concept is defined as a person's general expectations and perceptions about other people. It is measured along a friendliness - to - hostility continuum.

A person's others-concept can be measured by means of briefly administered psychological test, known as the Paired Hands Test, which is available in published form. This test is a projective technique which relies on the belief that people will often reveal things about themselves, in this case, their perception of other people, even when asked to do a task which does not specifically ask them to tell how they might feel about other people.

The purpose of the present study, was therefore, to examine the others-concept of people who are employed in a particular occupation in which their others-concepts would be thought to influence their performance on the job. The Paired Hands Test, Adult Form, was administered to 323 people in the greater Ann Arbor, Michigan trading area.

Method

The Paired Hands Test was administered to a convenience sample of retail salespeople in various types of retail stores including independent specialty stores, chain stores and department stores.

The test consisted of 20 photographs, in color, depicting a black hand and a white hand in various positions.

These pictures were shown to all respondents who were asked to identify a statement that best describes each photograph.

An attempt was made to utilize demographic features to ascertain whether respondents could be clustered into groupings based on these features: among these were the classifications according to sex, age, urban-rural setting, dwelling type and whether they rented or owned their dwelling. The mean PHT scores for each group were compared and differences were tested for statistical significance.

Analysis

The analysis in terms of demographic data failed to yield any findings which were highly significant statistically, but some trends occurred which may be worth noting. Females tended to score higher than males (P . 10). The mean score for females (N=145) was 93.67. Another trend was that salespeople under age 25 tended to score higher than those above that age. Also, the analysis revealed a tendency for sales people who live in a more suburban setting (i.e., county or township) to score higher than those who live within the city. The factor of whether the salesperson lived in an apartment or house, and whether it was rented or owned, was not related at all to test scores.

The sex difference which was found, though it was only of questionable statistical significance, takes on meaning by virtue of the fact that in almost all prior research with the Paired Hands Test, females have scored significantly higher than males. It thus appears that among retail sales personnel there is more homogeneity between the sexes with respect to their attitude toward other people than among the general population, though females tend to be a little more positive, as has been true in the case of most groups tested to date.

The information yielded by this research would take on more significance, of course, if the sample tested could have been evaluated in terms of their capability as salespeople. It would be desirable to know if the best (most successful) salespeople obtained the higher scores, or if there is some optimal score which best describes them. Perhaps there is such a thing as too high an others-concept for successful saleswork. Such people may be overly trusting, perhaps in naive idealistic sense, and therefore they may not be best suited for work involving a realistic and competitive approach to people. This question can only be answered by future research. Other areas for research utilizing the adult form of the Paired Hands Test which would enable the researchers to generate more data to test validity are as follows: Industrial and Commercial Salesmen; Bank Tellers; Fund Raising; Marketing Research Interviewers; Employment Counselors or Interviewers; Service Repair people; Teachers; Lawyers; Newscasters; Internal Revenue employees; TV actors and actresses; Attorneys; Physicians and others who interact on a daily business or professional basis.

The unabridged paper can be obtained by writing to Professor Spitz.

Promoting with Cents-Off Coupons in the Early 1980s

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Abstract

The number of coupons almost doubled between 1976 and 1980 amounting to some 90.6 billion coupons issued in the latter year. The purpose of this study was to review the State of the Arts for coupon promotions and then to identify relevant promotion recommendations for the future.

Situation

Trying to cope with rampant inflation, money-tight consumers welcome opportunities to stretch their dollar through coupons offered by sales-strapped vendors. Since coupons meet the needs of buyers along with the needs of sellers, marketers are expected to continue to use them, albeit more selectively.

In the United States, according to the A.C. Nielsen Company, the number of coupons almost doubled between 1976 and 1980. In the latter year some 90.6 billion coupons were distributed. Their assessment is that newspaper, magazine, and direct mail coupons are helpful in encouraging trial purchases; whereas on-pack or in-pack coupons encourage repeat buying, and cross or co-op coupons are used primarily to encourage purchases of a different product.¹

More Selective Use Warranted

As media costs go up, postage rates escalate, and coupon face values and handling costs increase, more emphasis must be placed on strategic cost efficiency. Consider the following coupon promotion by General Electric:

A package of four soft-white GE bulbs was purchased for \$1.74 (marked down from a regular price of \$2.97). An on-package coupon was good for \$1.00 resulting in a reduction of 75% on an item that usually sells at list.

Can the proceeds of this promotion be cost effective for the manufacturer.

Experimental research of the A.C. Nielsen Company tested whether increasing the face amount of coupons from 21.6 cents (average) to 23.5 cents will raise the redemption rate. Counter to expectations, the redemption rate slightly declined. Next they tested the importance of a small decrease in face value, and more stress was given to the advertising ideas and messages. The approach was to develop couponing as a communication device linking consumer and product. This time there was an increase in redemption rates. Higher face values can increase costs of couponing but by itself the cost efficiency is open to question.² Confirmation

of these assumptions seemed evident from a study reported in *MARKETING NEWS* by Gerald Eskin, Chairman of Information Resources, Inc. Further tests seem to imply that high-value coupons work best when coupled with high advertising. There obviously are other possible sales determinants besides coupon value and advertising.

Strategic Reason for Using Coupons

Despite communication clutter manufacturers and retailers find strategic value in coupons. Mal Sims, head of trade relations for Procter and Gamble, outlined in a speech some reasons for using coupons;

1. Couponing is the second most effective way of introducing a new or improved product. Sampling is first.
2. Couponing is an excellent device for rewarding present users, winning back former users, and encouraging larger quantity purchases.
3. Procter and Gamble found that coupons are seven times more effective in getting new users than price packs. Also two out of three coupons redeemed on their brands were not redeemed by regular users.
4. Coupons reach almost any group of target customers, geographically as well as by other demographic characteristics such as type of dwelling and large family households.
5. Couponed products that retailers display or feature can make sales gains six times higher than stores that do not tie in with redemption levels.³

Future Implications

Some manufacturers use coupons to force distribution, say critics, pressuring retailers into stocking for which regular demand from consumers is low. If a manufacturer completes a mass mailing of coupons and then informs the retailer that all of those faithful coupon clippers will be in to redeem those coupons, what is the retailer likely to do, especially if the coupons have an expiration date several months hence?

Modern technology offers many retailers a new source of information. The Universal Product Code checkout technology arms the retailer with the capability of measuring retail sales, stock turn, and margins. This device lets retail management look beyond the coupons and screen out the slow moving less profitable items.

Waste, fraud, and cost considerations might well be other factors contributing to cut-backs in the wide use of coupons in the future. If one assumes that only 5 percent (average) of all coupons are redeemed. Profit minded marketing executives of the future are expected to use coupons more selectively.

¹David J. Rachman, *Marketing Strategy & Structure*, Prentice-Hall, Inc., 1974, pp. 296-297.

²All statistics in this paragraph from Richard H. Aycregg, "Coupon Distribution & Redemption Patterns," *NCH Reporter*, A.C. Nielsen Co., #1, 1971, p. 3.

³Louis J. Haugh, "Will High Cost of Couponing Force More Product Samples," *Advertising Age*, March 6, 1978, pp. 56-57.

THE IMPACT OF INTERVIEWEES' DEMOGRAPHICS ON INTERVIEWERS'
PERCEPTIONS OF THEIR TASK PERFORMANCE¹

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Abstract

Age, sex, race, education and income are examined as possible determinants of interviewers' perceptions of interviewees' task performance. Race, education and income are found to have significant effects on the perceptions of white interviewers.

Introduction

This research project investigates the influence of interviewee demographics on interviewers' perceptions of interviewees' task performance. This is a topic of concern in survey research because the mental state of the interviewer has been shown to influence the responses of the interviewee (Singer and Kohnke-Aguirre, 1979; Bailer, Bailey and Stevens, 1977).

Data Collection

The subjects in this study, a sample of 444 adults in Austin, Texas, were selected by a two-stage cluster-sampling procedure. The resulting sample was highly representative of the city's population based on several demographic variables.

The subjects were asked to participate in a personal interview which took 20-50 minutes. After completing the interview session the interviewers were instructed to evaluate the interviewee based on: honesty in supplying answers, interest in the topic, level of cooperation, patience with the interviewer, and an overall impression of the quality of the interviewee as a helpful and reliable subject.

Analysis and Results

The primary focus of the analysis is on the issue of whether interviewee demographics influence the perceptions of the interviewer. To explore this idea the following demographic variables were related to interviewer evaluations of the interviewee: age, sex, race, education and income.

The findings from the analysis indicate that race, education and income have significant effects upon interviewer evaluation of the interviewee. The results with respect to interviewee race indicate that interviewers perceive white interviewees as more honest, interested and worthy of higher overall evaluation. There were, however, no perceived differences in the level of cooperation and patience between white and non-white interviewees.

For income the differences in evaluation were non-significant for honesty, cooperation and patience.

¹Copies of the complete paper can be obtained by contacting the senior author at College of Business, Dept. of Marketing, Florida State University, Tallahassee, Florida 32306.

However, individuals in the high income category were perceived as more interested and got a higher overall evaluation than the low or middle income categories. Finally the analysis for education revealed that individuals with high education are perceived as more honest, interested, and cooperative. They are also given a higher overall evaluation by the interviewer.

It seems apparent from these findings that the attitudes of the interviewer are influenced by the demographics of the interviewee. However, it is possible that some of the differences in evaluation could be attributable to sources other than the demographics of the interviewee.

One such source of variance could be the sex of the interviewer. A comparison of evaluations by male and female interviewers revealed an insignificant relationship between sex and interviewer evaluation, although it appears that female interviewers were uniformly more positive in their evaluations.

Another factor which could have influenced the evaluations of the interviewer was the length of the interview. In fact it was found that the length of the interview is significantly related to the demographics of the interviewee and the sex of the interviewer. Thus an alternative explanation for the differences in evaluations (which were attributed to interviewee demographics) would be that they are a function of the length of the interview. However, when the length of the interview was related to the evaluations given by the interviewer (with interviewer sex as a covariate), no significant relationship was found. Thus it seems that the differences in evaluations are actually a function of interviewee demographics.

Summary and Conclusions

The race, income, and education of interviewees have significant effects upon the evaluations given to them by interviewers. Interviewees who are white, have high education, or high income tend to receive higher evaluations by the white interviewers. Since it has been shown that the expectations and attitudes of the interviewer can induce response bias it seems wise to take into account the demographics of the interviewee as a factor which may contribute to the interviewer effect. Until more evidence is gained, researchers should follow the old rule of matching the characteristics of interviewers with the characteristics of the interviewees in the sampling area. In this way biases due to demographic factors are likely to be minimized.

References

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Singer, Eleanor and Kohnke-Aguirre Luane (1979), "Interviewer Expectation Effects: A Replication and Extension," Public Opinion Quarterly, 43, 245-260.

TARGETING PUBLIC RELATIONS ACTIVITIES

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Abstract

This paper examines traditional definitions of Public Relations (P.R.) and who the "publics" or targets for P.R. activities have been. An explanation of "publics" to encompass the "stakeholders" is suggested as a universal definition and operational guide in order to pinpoint the appropriate groups which should be targeted for P.R. activities.

Confidence in Public Relations

Many managers view P.R. as an integral part of the promotional mix, and the communications efforts of the firm. They believe P.R. functions must be included within marketing planning and that P.R. activities must be co-ordinated into the development and implementation of marketing strategies. Recently, however, some organizations have reassigned to line department managers' activities which previously had been the responsibility of P.R. departments, (Fronrath and Durocher, 1978) (Cantera 1979). These line department managers have little time, energy or interest to devote to P.R.. Other organizations have created new departments such as "Consumer Affairs", "Public Information Officers", "Investor Relations", or Government Relations" (Lesley 1979) (Growley 1979) (Gelineau) 1979). Does this represent a lack of confidence in P.R.? The answer may be yes--because of past P.R. ineffectiveness.

Traditional Definitions of P.R. and Publics

The traditional definitions of P.R. utilize terms such as: "maintain sound relations; secure mutual understanding and goodwill"; establish and maintain public understanding and acceptance". (Cranfield and Moore, 1973) (Lesley 1971). Frequently these vague phrases have been operationalized by P.R. practitioners in a muddled manner which results in unclear and imprecise P.R. objectives and activities. Use of the term "publics" to categorize those targeted for P.R. activities may be inappropriate because there is no universal definition of "publics" and therefore it is not an operationally function guide for targeting P.R. activities. These factors contribute to vague P.R. department goals, and objectives which are difficult to communicate to management and which contribute to low levels of confidence.

Stakeholder Concept

The term "stakeholder" which Robert F. Stewart defines as any group or individual that: has an interest in the success of an organization; provides something of importance to that organization; and/or legitimately may expect something in return from the organization (Vincze and Mattison 1980) is suggested as a beginning universal definition for "publics" and as an operationally feasible guide for P.R. activities.

Stewart suggested six broad "stakeholder" groups exist in any uncomplicated organization are represented in Figure 1. He envisioned Owners, Suppliers, Financial Institutions, Customers, Employees and Society-at-large all interacting with Management. However, these six stakeholder categories are just the basic groups for uncomplicated organizations. For

organizations which are large and complex in design and/or operation those six basic stakeholder categories would have to be re-examined for appropriateness and likely increased in number.

Bank Example

In order to test this Stakeholder Concept it was applied to a bank, (A detailed explanation is omitted because of space constraints) and the following Table 1 represents the expanded list of stakeholders established thereby:

Table 1 - Expanded List of Bank Stakeholders

1. Managers	16. Operations Employees
2. Stockholders U.S.	17. Loan Officers
3. Stockholders Foreign	18. Investment Trust Offic
4. Board of Directors	19. Credit Employees
5. Holding Company Board	20. Security Employees
6. Federal Reserve System	21. Other Employees
7. Federal Regulator	22. Special Interest Group
8. State Regulators	23. Religious Groups
9. Individual Depositors	24. Local Business Agency
10. Commerical Depositors	25. Residents-Neighborhood
11. Commercial Borrowers	26. Residents-County
12. Consumer Borrowers	27. Competitive Banks
13. Trust Customers	28. Education Institutions
14. Investment Customers	29. Media
15. Other Customers	30. State Bankers Assoc.

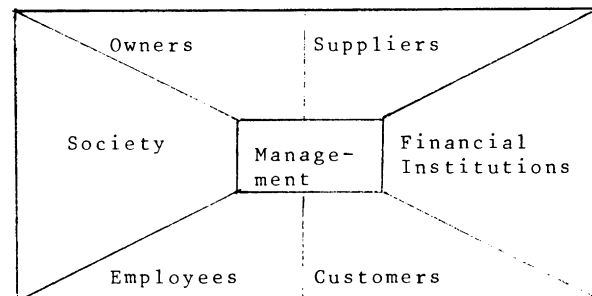
By applying the stakeholder definition rather than a vague "publics", management is assured that important groups are not overlooked. Each new stakeholder groups is evaluated for importance and assigned a rank-in-order-of-importance based on some predetermined criterial. By following this procedure management not only understands and agrees to the targets for P.R. activities but also insures more effective P.R. because objectives are understood and the planning, implementation, evaluation and control functions of management are more readily performed.

Conclusion

The application of the Stakeholder Concept to create categories to be utilized in targeting P.R. activities is a workable concept. The resultant rank order of importance for each stakeholder category is the first step toward establishing more effective P.R. management.

References - will be supplied on request by the author.

Figure 1 Stakeholder Concept



AN EMPIRICAL BASED STUDY ON BECOMING A PUBLISHED MARKETING EDUCATOR

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Introduction

It is axiomatic that many marketing educators are beseeched to do publishable research. In numerous institutions, a professor's educational responsibilities fall in the domain of teaching, community/university, and research. The administration and type of collegiate institution will usually dictate the degree of emphasis for each responsibility. With certain academic pressures of AACSB requirements, promotion-tenure requirements, job mobility or security, merit pay, and an advanced technological society, published research requirements may be either an opportunity or nemesis for many marketing professors. To make it more palatable, it is essential for academicians to learn and adopt the "tricks of the trade" of becoming published--especially in referred journals.

An Empirical Base Study

Both Twedt (T) and Woodside (W) offer some suggestions and guidelines on writing.¹ The major ones are enumerated as follows:

- develop card file of marketing publications like a prospect list of publishing alternatives (T, W)
- maintain an idea file (T)
- participate in professional associations (T, W)
- first "query" an editor with an idea (T)
- avoid footnoteitis (T, W)
- rewrite and resubmit (T, W)
- write with clarity and precision (T, W)
- move away from a subject in trend (W)
- develop a writing habit (T, W)

Despite some excellent ideas, the two writers drew from personal experiences instead of empirical data.

To overcome a major void in the marketing literature, the authors of this paper sent a mailed questionnaire to experienced marketing writers who have previously published in the Journal of Marketing and Journal of Marketing Research within the years of 1977 and 1979. The universe was arbitrarily selected by the researchers. However, it was felt that the authors from these two journals would probably be more prolific, experienced, and recognized as leading published scholars. With our definition and assumptions of the universe, there were 285 published authors that we were able to locate. We received 121 usable responses which resulted in 42% rate of return. Given the busy time constraints of these particular professors, our rate of return was a pleasant surprise. Due to the limited budget, there was no follow-up to the first mailing.

The results of our survey provided some interesting insight on the strategy of writing publishable manuscripts. Therefore, the purpose of this presentation is to identify some research strategies that have been utilized by some successful marketing educators.

¹ Twedt, Dick, "A Marketing Strategy for Marketing Knowledge - On How to Publish and Prosper," Journal of Marketing, April 1977, 69-71; and Woodside, Arch G. "Writing Articles for Marketing Journals," SMA Newsletter, Fall 1979, p. 1 and 8.

Conclusions

The empirical data in this paper illustrates the significance of adhering to certain procedures in order to become a successful published educator. Although some of the suggestions herein may appear to be axiomatic, they are still helpful for educators who want to be more efficient in the writing process. The respondent's insight presents a clearer and more systematic approach for marketing educators. Of course, as one respondent wrote, publishing takes "applying the seat of the pants to the seat of the chair for extended period of times or just damn hard work." In fact, seventy-eight percent of the respondents stated that they spend three or more hours of straight writing time without doing anything else. To publish, one must make a strong commitment that becomes quite time-consuming. In fact, some professors--including ourselves--will frequently plead for straight writing block time by having no classes or committee work on certain days during the work week. From our experiences, this arrangement of class scheduling enhances one's productivity in writing and publishing papers.

To avoid the tedious and exhausting trial and error method, marketing educators need to make writing and publishing a habit. It becomes ingrained as part of our lifestyle. Hopefully, the data herein will enable all of us to make writing an easier process and much more "enjoyable."

PRODUCT DIFFERENTIATION AND MARKET SEGMENTATION
IN GRADUATE MANAGEMENT EDUCATION

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ABSTRACT

This paper presents a general theory of strategic management defined in any institutional setting as a process of resource deployment based on the managerial assessment of organizational needs. The theory is applied to the specific case of strategic competition in the graduate management education industry through use of the concepts of product differentiation and market segmentation from marketing science. The strategic competition among graduate management programs occurs in significant degree along these two dimensions. We argue that there are four basic models of graduate management education. These models are different strategies for image formation and faculty management, built around curriculum design as the central linchpin.

Strategic management in any institutional setting is a process of resource deployment based on the managerial assessment of organizational needs. Such strategic management is a process of assessing and responding to organizational needs, which are determined jointly by an organization's internal state and its external environment. Strategic management is a process of aligning the organization with its environment by changing either the organization's internal state or its external environment. The principal strategic function of managers is to assess the internal state and external environment of an organization, and then to plan for whatever organizational changes are deemed necessary. In general, the strategic planning for deployment of resources will search for opportunities to utilize strengths, while minimizing threats against weaknesses. Organizations may avoid opportunities which would require resource deployment from relatively weak areas, or may exploit such opportunities as a means of shoring up their weaknesses. They may be indifferent to threats against areas of internal strength, or may confront such threats as a means of enlarging the base of strengths.

One approach to strategic management lies in the exploitation of opportunities for product differentiation and market segmentation. This paper argues that much of the strategic management of this nature engaged in by graduate management programs (as an example of educational units) occurs in significant degree along these two specific dimensions. The paper applies the concepts of product differentiation and market segmentation to strategic competition among graduate management programs.

The critical dimensions shaping academic competition are curriculum, faculty, students, organizational structure, and patterns of resource allocation (financial, physical, and human resources). Schools of management differ along these dimensions, together with geographical location, university setting, and general reputation or "image" -- the latter being a result of the other dimensions.

External sources of influence include the potential entrance of other universities into the management education market. In terms of faculty supply, universities are under great pressure to continue attracting high-quality faculty. The same thing holds true for stu-

dents, who are under severe pressure to take jobs as tuition costs and starting salaries rise. Two other sources of pressure come from employers and from post-educational agencies which put severe limitations on what management schools can do. What one wants students to know has impact on the curriculum which then has impact on the faculty, student body, resource allocation practices, and organizational structure of the school. Accreditation requirements, such as those imposed by the American Assembly of Collegiate Schools of Business, and professional standards, such as those required for students to be able to sit for and to pass the CPA examination, also shape curricula. This analysis should give the reader an idea of pressures that impinge on schools of management.

There are four basic models of graduate management education: the first two are separable on the basis of pedagogical methods and philosophies, the second two on the basis of curricular content. All four are "ideal types;" many schools of graduate management education mix the four basic models in their teaching philosophies and choice of subject matter. The first model may be called the case method approach, which is most fully exemplified by Harvard and Virginia. The second model may be called the analytical approach and is exemplified by any number of prominent schools including Stanford, Chicago, MIT, Dartmouth, Pennsylvania, UCLA, and Michigan. The third model may be termed the industrial management approach, most fully exemplified by Carnegie-Mellon, Purdue, and Georgia Institute of Technology. The final model, the generic school of administration, may be found at Cornell, Northwestern, Yale, Rice, and Willamette.

In contrast to the other models, the generic schools of administration tend to neglect functional applications in the areas of marketing and production. Yale, however, has not followed this pattern. These schools heavily emphasize the policy and environment areas, as shown particularly by Yale, California-Irvine, and Rice. The industrial management schools tend to emphasize quantitative methods; Georgia Tech has also invested heavily in production and operations management. Compared to the case method schools, the analytical schools exhibit a relative neglect of the policy and environment areas, which are emphasized at the former. Carnegie-Mellon's approach to business policy is relatively unique; four of the six modules in this area are based on a computer simulation game. (Harvard has a short exercise of this sort; Chicago permits a choice among case method, analytical, and simulation approaches). Each model is a different strategy for image formation and faculty management, built around curriculum design as the central linchpin. Product differentiation and market segmentation occur systematically along these lines.

ATTITUDES OF BUSINESS LEADERS TOWARD COLLEGES OF BUSINESS

Robert Carter, Columbus College
Larry Patterson, Southwest Texas State University
Robert Swerdlow, Lamar University
Edward Walker (student), Southwest Texas State University

The increase in demand for business administration courses has had quite an impact upon colleges and universities throughout the nation. As the demand for business administration courses has skyrocketed during the past 20 years, the increase in resources available to business college administrators has generally not kept pace with the ever-increasing number of students. Terminal degree granting institutions are graduating only about 760 new business doctorate holders a year, down 250 from 1975. The result has often been larger classes and less opportunity for students to receive individual attention from their professors. Parallel to the development of this problem has been the considerable change taking place within the business disciplines themselves. Disciplines such as management, marketing, finance, economics, and accounting have made major advancements over the past 20 years, and these changes have created additional problems for college of business administrators. Administrators have been forced to keep a watchful eye on business curricula to keep them current. Courses that were appropriate 10 years ago may no longer be in the 1980's. As these trends merge in the 1980's, business college administrators need guidance from leaders to evaluate the effectiveness of current programs and to plan for programs to meet the future needs of the business community.

OBJECTIVES AND METHODOLOGY OF THE STUDY

The basic purpose of the study was to gain some insight into how business leaders in a Southwestern state perceive the state supported colleges and schools of business. Data for the study were gathered by a mail questionnaire sent to the presidents of 480 chambers of commerce in the sample state. Approximately 27% (130) of the presidents returned the questionnaire within 21 days. Specifically, the study was designed to examine the opinions of business leaders concerning:

1. The training of students in business schools.
2. The responsiveness of business schools to the dynamic needs of the business community.
3. The quality of the job being done by business faculties.
4. The administration of funds by school administrators, and
5. The variation in quality across business schools in the state.

FINDINGS

A Demographic Profile of the Respondents

A large majority was male, and seventy-one percent of the returned questionnaires came from relatively small cities with populations below 25,000. The ages of subjects were dispersed fairly evenly over the age groupings of 0-35, 36-50, and 51-65. Forty-four percent of those responding had a bachelors degree, 26% had a masters or doctorate degree, and 23% indicated they had taken at least some college level work. Thirty-five percent had business experience 6-15 years, 27% had 16-25 years, and 24% had 26 or more years of business experience.

Preparation of Students

Respondents' opinions show a positive image of colleges of business. The majority thought graduates were better prepared than 10 years earlier and that course content was relevant. Essentially equal percentages agreed and disagreed that students are well trained in practical skills and that colleges prepared students well for higher levels of management. Most respondents thought the current mix of liberal arts and business courses was best and the largest portion of respondents, 43.8 percent, called for more emphasis on entry level skills such as salesmanship and accounting. Seventy three per cent agreed that teaching should be emphasized over research and 52 percent said administrators should place less emphasis on research. Administrators got good marks as they were perceived to be responsive to community needs, responsible with state resources, and deserving of additional funds from the legislature.

CONCLUSIONS AND IMPLICATIONS

While most business leaders believe business graduates are better prepared than in the past, they offer a number of suggestions for possible improvements. There was a clear message to place more emphasis on practical, entry level skills but not at the expense of preparing students for middle and top management. One-third of the respondents did not believe that business instructors were highly qualified to teach students which seems to call for greater faculty community interaction. Additionally, business leaders believe faculty members should place more emphasis on teaching than on research.

MAJOR CONSUMER MARKETS BASED ON 1980 CENSUS DATA

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ABSTRACT

Criteria for defining the boundaries of consumer markets were established in an earlier paper. Since that time several changes have been made in SMSA's, SCSA's and NECMA's and 1980 census data are available. In this paper new rankings of the major consumer markets are established based on the revisions and the new data. Growth rates for these major markets are examined and the size of 1985 major markets are estimated.

INTRODUCTION

An Associated Press article out of Houston (Houston, 1981) speculated that Houston had finally passed Philadelphia in size as measured by population and was now the number four city. The article left the impression that this was important to some people in Houston and in Philadelphia. Is it important to us in marketing? Basically no because the cities are not the major markets.

As discussed in an earlier paper (Cooke, 1980) the significant consumer market (for most situations) is the SMSA or SCSA or NECMA. The actual situation between Philadelphia and Houston as shown in [Table 1](#) illustrates the point. On the basis of the population of the two SCSA's Philadelphia (ranked fourth) is still a much larger market. It will probably continue to be larger when the results of the next (1990) census have been tabulated. Of course Houston (ranked eighth) is obviously a better market for those products which do well in an area with a sharply increasing population such as housing but overall Philadelphia is and will continue to be the larger consumer market for many years.

PURPOSE

The purpose for this paper is to report the following material (see [Table 1](#) on the next page) on the major consumer markets using the latest information on boundaries and the results of the 1980 census:

- (1) population rank for 1980 and 1985;
- (2) population data for 1950, 1960, 1970, and 1980;
- (3) relative growth rates;
- (4) a forecast of population in 1985.

Criteria for defining the boundaries and the reasons for these criteria were laid down in an earlier paper (Cooke, 1980):

- (1) use SCSA's first then use SMSA's because the SCSA represent a larger homogeneous market than the SMSA's;
- (2) use NECMA's for all New England markets because more data is available more often for NECMA's than for the New England SMSA's and with minor exception the NECMA's are larger than the corresponding SMSA's;
- (3) rank markets only in the continental contiguous United States.

There is no single measure for ranking one consumer market as superior to another. The pro's and con's of various measures have been discussed elsewhere (Cooke 1980). For this paper population will be used to rank the consumer markets because it is the most popular

measure and because the last decennial census is just now being published.

BOUNDARY CHANGES

The major recent changes in SCSA's are that three new ones have been created (Dayton, Providence and Indianapolis) and two have been increased in size (Chicago and San Francisco). The Boston NECMA has decreased in size and three new NECMA's have been created but they are not large enough to be included in the list of major markets in the paper.

As for SMSA's there have been numerous additions and enlargements since 1970. Basically the additions are not relevant to this paper but the enlargements are. Just to cite a few examples the number of counties in the Detroit SMSA increased from three to six, in the Minneapolis SMSA from five to ten, in the Atlanta SMSA from five to fifteen and in the Nashville SMSA from three to eight.

This leads to a very important point about the population data in this report. All data are comparable. If the size of an SMSA etc. increased then the earlier population figures are increased to reflect the added counties. Thus the 1970 population figures cited for Atlanta will not be those reported in the 1970 census for the five county SMSA but will be the 1970 population of the fifteen counties which make up the current Atlanta SMSA and so on for 1950 and 1960.

As noted above for this report New England NECMA's are used instead of SMSA's. This leads to two aberrations because SCSA's are made up of SMSA's not NECMA's:

- (1) the new Providence SCSA consists of the Providence SMSA and the Fall River SMSA. In this report the Providence SCSA will be designated as a SCSA-NEC and will consist of the Providence NECMA and the New Bedford-Fall River NECMA;
- (2) the New York SCSA includes two SMSA's in Connecticut. In this report the New York SCSA will be designated as a SCSA-NEC and will include the Bridgeport - Stamford - Norwalk - Danbury NECMA in place of the two Connecticut SMSA's normally included in the New York SMSA. Finally in all tables and further discussion the markets will be identified by the name of the one principle city. For example the Dallas-Fort Worth SMSA will be called Dallas.

Space limitation do not permit further discussion of the table but the reader will find some interesting comparisons. For example compare the population index numbers for Buffalo and Phoenix or notice the expected 1980-85 shift in rank for Pittsburgh and Atlanta.

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1. Ernest F. Cooke, "The Major (Largest? Best?) Consumer Markets - Where Are They?", in V. V. Bellur, et. al., eds., Development in Marketing Science, Vol. IV, (Marquette, Wisc.: Academy of Marketing Sciences, 1981), pp. 334-9.
2. "Houston Is Now No. 4," The Commercial Appeal, Oct. 6, 1981, p. 25.

TABLE 1

SELECTED DATA FOR THE MAJOR CONSUMER MARKETS, 1950,
1960, 1970 and 1980 WITH A FORECAST FOR 1985

1980 RANK	PRINCIPLE CITY	TYPE OF AREA	POPULATION					POPULATION INDEX NUMBER (1980=100)					1985 RANK
			1950	1960	1970	1980	1985(EST)	1950	1960	1970	1980	1985	
1	New York	SCSA-NEC	13,661	15,780	17,495	16,544	16,300	83	95	106	100	99	1
2	Los Angeles	SCSA	4,935	7,752	9,980	11,497	12,300	43	67	87	100	107	2
3	Chicago	SCSA	5,661	6,869	7,726	7,868	8,000	72	88	98	100	102	3
4	Philadelphia	SCSA	4,203	5,024	5,627	5,552	5,500	76	90	101	100	99	4
5	San Francisco	SCSA	2,681	3,638	4,630	5,182	5,500	52	70	89	100	106	5
6	Detroit	SCSA	3,305	4,122	4,669	4,618	4,600	72	89	101	100	100	6
7	Boston	NECMA	3,065	3,358	3,710	3,663	3,650	84	92	101	100	100	8
8	Houston	SCSA	1,060	1,570	2,169	3,101	3,675	34	51	70	100	119	7
9	Washington	SMSA	1,531	2,109	2,910	3,060	3,150	50	69	95	100	103	10
10	Dallas	SMSA	1,216	1,738	2,378	2,975	3,350	41	58	80	100	113	9
11	Cleveland	SCSA	2,224	2,771	3,003	2,834	2,800	78	98	106	100	99	12
12	Miami	SCSA	579	1,269	1,888	2,630	3,100	22	48	72	100	118	11
13	St. Louis	SMSA	1,791	2,144	2,411	2,355	2,400	76	91	102	100	102	13
14	Pittsburgh	SMSA	2,213	2,405	2,401	2,264	2,200	98	106	106	100	97	18
15	Baltimore	SMSA	1,457	1,804	2,071	2,174	2,200	65	80	92	100	101	16
16	Minneapolis	SMSA	1,252	1,958	1,965	2,104	2,200	60	76	93	100	105	17
17	Seattle	SMSA	1,121	1,429	1,837	2,093	2,250	54	68	88	100	108	15
18	Atlanta	SMSA	864	1,169	1,596	2,035	2,300	42	57	78	100	113	14
19	San Diego	SMSA	557	1,033	1,358	1,862	2,150	30	55	73	100	115	19
20	Cincinnati	SCSA	1,170	1,467	1,613	1,660	1,700	70	88	97	100	102	23
21	Denver	SMSA	616	935	1,240	1,620	1,850	38	58	77	100	114	20
22	Tampa	SMSA	430	809	1,089	1,569	1,850	27	52	69	100	118	22
23	Phoenix	SMSA	332	664	971	1,508	1,850	22	44	64	100	123	21
24	Milwaukee	SCSA	1,124	1,421	1,575	1,495	1,550	75	95	105	100	104	24
25	Providence	SCSA-NEC	1,112	1,176	1,299	1,341	1,375	83	88	97	100	103	26
26	Kansas City	SMSA	865	1,109	1,274	1,327	1,350	65	84	96	100	102	27
27	Indianapolis	SCSA	831	1,070	1,250	1,306	1,350	64	82	96	100	103	28
28	Buffalo	SMSA	1,089	1,307	1,349	1,243	1,175	88	105	109	100	95	31
29	Portland	SMSA	705	822	1,007	1,242	1,400	57	66	81	100	113	25
30	New Orleans	SMSA	712	907	1,046	1,187	1,275	60	71	88	100	107	29
31	Columbus	SMSA	637	845	1,018	1,093	1,150	58	77	93	100	105	32
32	San Antonio	SMSA	542	736	888	1,072	1,200	51	69	83	100	112	30
33	Hartford	NECMA	652	847	1,035	1,052	1,050	77	81	98	100	100	35
34	Sacramento	SMSA	359	626	804	1,014	1,140	35	62	79	100	112	33
35	Dayton	SCSA	684	888	1,041	1,014	1,025	67	88	103	100	101	36
36	Rochester	SMSA	675	801	962	972	975	69	82	99	100	100	37
37	Salt Lake City	SMSA	404	576	705	936	1,100	43	62	75	100	118	34
38	Memphis	SMSA	584	727	834	913	975	64	80	91	100	107	38
39	Louisville	SMSA	599	754	867	906	925	66	83	96	100	102	40
40	Nashville	SMSA	502	597	699	851	950	59	70	82	100	112	39

IMMOVABLE PROPERTY ACT, (1981) OF THE BAHAMAS: A COMMENTARY

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The Government is implementing a new land policy. As a matter of policy, the Government has decided that Bahamian land will not be sold to foreigners. It is envisaged that there will be exceptions to this policy when land is to be used for residential purposes by approved residents, and then only so much as is necessary for that purpose, and also where land is to be used for approved industrial or other developmental purposes having regard to the contribution that may be made to the development of the Bahamian economy and in accordance with Bahamian development goals. Although discretion is allowed in a wide area, land may not be sold to foreigners in the following cases: (A) Where land is adjacent to or near existing settlements or towns in the Family Islands as this will stand in the way of future expansion of such settlements; (B) Where land is being sold or otherwise transferred by gift, will, ancestry or otherwise to a foreign government or agency except to the extent that foreign governments having diplomatic relations with the Bahamas will be allowed to acquire land sufficient for their needs; and (C) Where large tracts of land, islands and cays are being sold to foreigners except where prior approval for land use and economic development have been obtained.

The land legislation will also deal with future disposition of land by gift, will or through intestacy or otherwise. The rationale behind this new land policy is the decision to check speculation by foreigners in Bahamian land as well as bring about a more orderly development of the limited amounts of land available in the Bahamas. Under the new legislation, a National Investment Board will be created which will have the authority to issue permits to foreigners granting approval for land purchases. The Ministry of Finance will have the responsibility for monitoring the day-to-day operation of the policy--a responsibility presently carried out through the Central Bank's exchange control mechanism. Real estate operations which encouraged land speculation will end. Deputy Prime Minister Hanna has stated that while housing or land presently controlled by foreigners will generally be available for repurchase by other foreigners, the new land law will inhibit additional sales of traditionally Bahamian owner properties to non-Bahamians. Permits will be required in all cases. Heirs of foreigners who held Bahamian land at their death will have to apply for permission to continue to hold the land or when selling it to non-Bahamians. In some cases, approval for sales to non-Bahamians will be forthcoming, but decisions will be made to enable heirs to dispose of their properties at fair market value. Additional information on this subject may be obtained by contacting the Ministry of Finance, a

reputable real estate dealer of the United States Embassy. A word of caution: investors entering into a transaction involving purchase of Bahamian property should insist on a clause in the contract stating that if government approval to purchase is not forthcoming after a specified period of time, the downpayment made by the buyer shall be returned.

The Constitution Referendum in 1981 and its Effect on Foreign Investment as well as the New Land Law. (The Immovable Property Act, 1981)

A series of amendments to the 1973 Bahamian Constitution dealing largely with citizenship issues, but also providing an underpinning to the new land law have passed the House of Assembly and Senate and will be presented to the Bahamian Electorate sometime in 1981. The Amendments are designed to give the Government final authority in deciding who may or may not become a citizen of the Bahamas. They are the product of a five-year legal battle by the Government to confirm its right to decide citizenship questions rather than the courts. The final chapter of this complicated battle is the "Citizenship Referendum" embodying the amendments. Apparently nothing short of a constitutional amendment will solve the problem satisfactorily.

However, for purposes of American investors, only one of the series of Amendments is important: this is Article 26 (4) (B), which is described by government spokesmen as the underpinning of the new land law. Like the other Amendments, it has been hotly debated by advocates and critics. Briefly, Article 26, as amended, states that "No law shall make any provision which is discriminatory either of itself or in its effect" (From paragraph 1 of Article 26) except "with respect to persons who are not citizens of the Bahamas" (The New (4) (B) Amendment). Thus, in respect to non-Bahamians, discriminatory laws can be made.

Opponents of the Amendment argue that this gives the Government of the day the authority to restrict non-Bahamians' rights across-the-board, but, in fact, this is not the case. It does not abrogate fundamental rights such as freedom of speech, due process, right to property, etc. These apply to both Bahamians and non-Bahamians and, according to the Prime Minister and the Deputy Prime Minister in debates in the House, there is no means of stripping away an individual's fundamental rights through the use of this Amendment. It will instead be used to enable the government to treat non-Bahamians differently from Bahamians as regards land ownership.

SENSORY PROFILES
OF GENERIC TOMATO JUICE
A QDA COMPARISON

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Abstract

An exploratory study was conducted to enable comparing consumer perceptions of the relative importance, plus ideal and actual levels, of selected product attributes. A preliminary experiment was designed to measure these perceptions regarding generic tomato juice associated with two different types of retail suppliers. As part of a Quantitative Descriptive Analysis (QDA) technique utilized in collecting and analyzing the data, graphical profiles of actual and ideal ratings were plotted on polar axes arranged in ascending order of attribute importance. Results were interpreted to indicate that consumers may perceive generic products to exceed ideal requirements regarding attributes of lesser and greater importance when they are associated with discount food stores and conventional supermarkets respectively.

Introduction

Because consumer product perceptions can affect purchase behavior, it could be helpful for marketers to know how these perceptions are influenced by store image. This information should be especially useful to retailers of generic products because consumers might use store image as a primary basis for differentiating between these items. Customers might use store image as one means of determining the acceptability of physically similar product offerings. They could then purchase those items perceived as comparing favorably with their ideal requirements. These comparisons of actual and ideal characteristics could vary with the importance of attributes considered. Because additional information about these variables could aid our understanding of buyer behavior, the purpose of this paper is to report an exploratory experiment designed to facilitate comparisons of actual and ideal product perceptions regarding attributes of varying importance.

Food stores could be in the best position to benefit from comparing sensory perceptions of generic products.^{1,2} There is evidence that generic items are constituting a rapidly increasing share of the food store product mix. Retailing of generic foods has grown into a nationwide marketing effort. These items now constitute approximately five percent of all products in our nation's grocery stores. Nearly half of our country's supermarkets are offering several hundred generic items.^{3,4}

¹Mecredy, J.M., Sonnemann, J.C., and Lehmann, S.J., "Sensory Profiling of Beer By a Modified QDA Method," Food Technology (November, 1974), pp. 36-41.

²"No-Frills Food: New Power for Supermarkets," Business Week (March 23, 1981), pp. 40-30.

³"Plain Labels Challenge the Supermarket Establishment," Fortune (March 26, 1979), pp. 71-76.

⁴Stone, H., Sidel, J., Oliver, Woolsey, A., and Singleton, R.C., "Sensory Evaluation by Quantitative Descriptive Analysis," Food Technology (November, 1974), pp. 26-34.

An ever increasing generic portion of the food store product mix enhances the need to understand consumer perceptions of these products of grocers are to select items most compatible with specific store image. Therefore it seems especially appropriate to utilize food products in exploratory studies of consumer perceptions regarding generics. Tomato juice was selected for the study reported here because it exemplifies a popular generic food.

Study Design

A before and after experimental design was used in this exploratory study. Subjects were asked to taste product samples before and after their retail suppliers were identified. After each tasting, subjects were asked to rate their actual perceptions of selected product attributes. Then respondents were asked to estimate the ideal levels of each attribute. The attributes were then ranked in ascending order of importance for making a purchase decision. The data were collected and analyzed with the aid of a modified Quantitative Descriptive Analysis (QDA) technique. This approach was selected to facilitate visual comparisons.^{5,6,7}

Experimental Materials

Tomato juice was the food product selected for tasting in this experiment. It was chosen because it could be conveniently sampled during the research process and because it seemed to represent a popular generic food. A preliminary survey had indicated that at least eight attributes were readily identifiable in this product: metallic, tart, salty, after-taste, light, aroma, freshness, and flavor.

The measuring instrument was designed around a modified QDA format which allowed each attribute to be rated by marking on a horizontal line between two bipolar adjectives. Because, in its early stages of development, this scale was essentially a modified semantic differential, it was considered to have similar statistical attributes and a similar potential for producing data amenable to parametric analytical procedures.

Methodology

This study utilized a convenience sample of 100 student subjects, with equal numbers of males and females. The total sample was divided into two groups with 25 males and 25 females in each.

⁵Green, Paul E., "A Multidimensional Model of Product Features Association," Journal of Marketing Research (April, 1974), pp. 107-118.

⁶_____. "On the Robustness of Multidimensional Scaling Techniques," Journal of Marketing Research (February, 1975), pp. 73-81.

⁷Jones, Lyle V., Peryam, David R., and Thurstone, L.L., "Development of a Scale for Measuring Soldiers' Food Preferences," Food Research (1955), pp. 512-520.

A university classroom served as a laboratory for this experiment. All respondents were assembled in the room as the same time.

The entire experiment was conducted within a time span of about 15 minutes. The meanings of selected product attributes were first explained to all subjects. Questions were answered until all participants indicated they completely understood the attributes being considered in the forthcoming taste tests. Then they were asked to taste identically prepared juice samples and rate their actual attribute levels without knowing the identities of retail suppliers from which the product was purchased. Next, the two groups of respondents were asked to taste another sample of juice. One group was asked to consider that its juice came from Jewel Supermarkets and the other was told to associate its juice with Aldi Discount Food Stores. These suppliers had been selected as examples of conventional supermarkets and discount grocery stores respectively. Ratings of both actual and ideal attribute levels were then recorded on the QDA scales provided. Three sets of completed QDA measuring instruments were collected during the experiment, one before and two after the retail suppliers were identified. After these data sheets were collected, respondents were asked to rank the importance of each attribute as a consideration in purchasing tomato juice. This information was recorded on another set of forms provided for the purpose. The fourth set of data sheets was then collected and assembled with the other measuring instruments.

Analysis of Data

Four sets of ratings were produced and analyzed for each of eight product attributes. Mean values were computed for before-actual, after-actual, and ideal QDA ratings associated with each attribute. Resulting means ranged from 1.0 to 4.2. Mean values were also computed for the importance rankings associated with each attribute. Using this procedure, a total of four sets of mean ratings were computed for each group of respondents. These were the values used in all subsequent analyses.

Appropriate statistical tests were first utilized for comparing the data. Results were interpreted to indicate no significant differences between ideal ratings, or between importance rankings, produced by the two groups of subjects.

A set of polar axes was then constructed to reflect appropriate data and to facilitate visual comparisons. To determine the labelling of axes, importance ranks were first arranged in ascending order of magnitude. The corresponding ordinal arrangement of attribute labels was then applied to the axes in a clockwise direction. This arrangement was begun with metallic and ended with flavor strength as shown in [Figure 1](#). Ideal attribute ratings were also plotted on the axes as shown in the figure.

A substantial correlation between ideal and importance ratings is visually apparent in [Figure 1](#). Ideal attribute requirements appear to increase in association with increasing attribute importance.

Profiles of actual attribute ratings associated with Jewel were similarly generated and plotted along with the ideal profile as shown in [Figure 2](#). These profiles reflected ratings before and after store identification. The actual profiles were visually compared with importance and ideal ratings. Prior to store identification, actual ratings appeared to increase slightly

FIGURE 1
PROFILE OF IDEAL ATTRIBUTE RATINGS

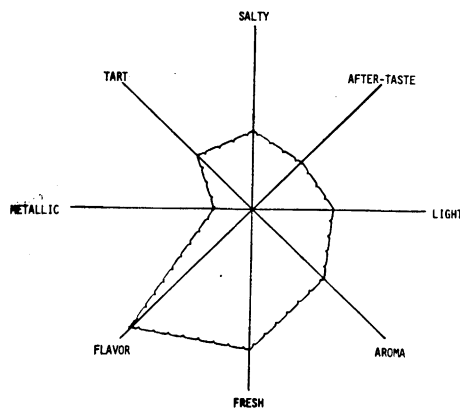
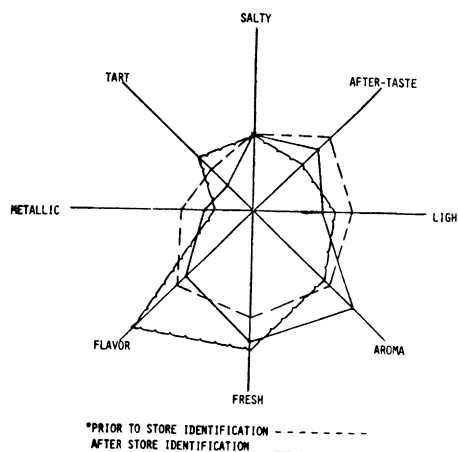


FIGURE 2
PROFILES OF IDEAL AND ACTUAL ATTRIBUTE RATINGS
ASSOCIATED WITH JEWEL*

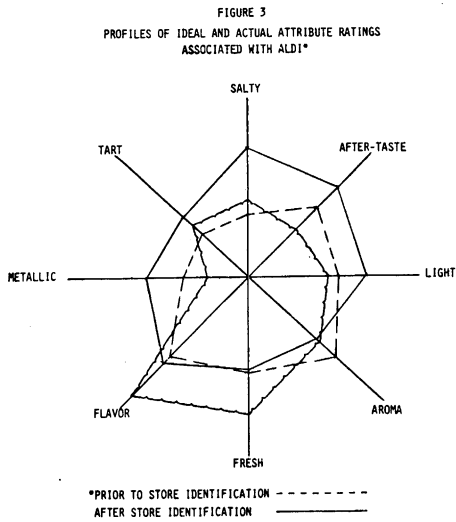


in association with increasing importance. They exceeded ideal ratings for metallic, after-taste, light, and aroma. They fell short of ideal ratings on the most important attributes of freshness and flavor. After store identification, all actual ratings remained constant or declined except those for aroma and freshness. Only the moderately important attributes of after-taste and aroma were judged to exceed ideal levels after Jewel was identified as the product supplier. These are only samples of the many visual comparisons which are possible in association with [Figure 2](#).

It is important to note that all examples of visual comparisons reported here were originally paralleled by appropriate statistical analyses intended for determining correlations and the significance of differences between values. However, the visual comparisons are emphasized for purposes of this discussion. Only selected examples of visual comparisons which are supported by other statistical analyses are reported here. Only a few of the more striking comparisons are included in this discussion.

Similar actual and ideal profiles of ratings associated with Aldi were plotted for comparison as shown in [Figure 3](#). Prior to store identification, actual

ratings are again somewhat higher in association with higher levels of importance.



Actual ratings again exceed ideal requirements for the attributes of metallic, after-taste, lightness, and aroma. However these actual ratings are less than ideal ones for tartness, salty, freshness, and flavor. This means that these prior ratings also exceed ideal levels for only half the attributes under consideration. However, the actual ratings recorded after store identification are greater than prior ratings for a majority of attributes. These actual ratings also exceed ideal requirements for all attributes except the most important ones of freshness and flavor.

Results portrayed in Figure 1-3 could reflect various causative factors and behavioral implications,

Some of the profile patterns are consistent with researcher expectations. For example, the high correlation between ideal requirements and importance ratings indicated in Figure 1 is plausible because consumers might reasonably require the greatest amount of attributes which they consider most important. Some profile changes after store identification as indicated in Figures 2 and 3 are anticipated because respondents might then consider store image in formulating their perceptions of product attributes. It also seems reasonable that before and after ratings on some attributes would be consistently below ideal levels as shown in the figures. This situation would be expected to occur in regard to freshness and flavor because their higher levels of importance and ideal requirements might be more difficult for any product or supplier to meet.

Ratings on some other attributes might be expected to consistently exceed ideal requirements. Emerging profiles indicate that this situation occurs regarding the attributes of metallic, and after-taste, but not in association with other product characteristics. This relationship might be readily explained in the case of metallic because it is ranked lowest in importance and ideal requirements. One might reason that very little metallic taste is desired and therefore it is virtually automatic that products from most suppliers would inadvertently exceed ideal requirements. However, this explanation may not apply to the attributes of after-taste. This attribute is fourth lowest in ideal requirements. It might also be significant to note that the lower ideal requirements regarding tart and

salty are not consistently exceeded by products from both suppliers. Therefore another explanation is needed for after-taste ratings appearing in this study.

Other profile patterns may be contrary to researcher expectations. For example, after store identification, Jewel ratings might be expected to meet or exceed ideal requirements on more attributes than do Aldi ratings. This is because Jewel supermarkets are often considered more affluent and cater to consumers at higher socio-economic levels. Therefore this supplier might be viewed as more capable and accustomed to meeting a more demanding set of buyer expectations. However, an opposite result appeared in the data. Figures 2 and 3 indicate that ratings associated with Jewel tended to change in a negative direction and were lower than ideal regarding flavor, tart, and lightness. Aldi's ratings generally changed in a positive direction and exceeded ideal requirements on five of eight attributes.

Conclusions

Several tentative conclusions can be drawn from this preliminary study. For example, results appear to indicate that consumers may similarly rank the ideal requirements and importance levels associated with selected attributes of generic tomato juice. This could mean that they require a greater presence of the most important attributes. Consumers may also perceive generic items to exceed ideal requirements regarding attributes of lesser importance when these products are associated with discount food stores. However, when these items are associated with conventional supermarkets, consumers may view them as exceeding ideal requirements on only a few of the relatively important attributes.

PERCEIVED RISK: ITS EFFECTS ON INSTALLMENT CREDIT BUYING

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Abstract

This article reports the findings of a field study designed to identify and measure the relationship between consumers' perceived risk and their propensity to finance the purchase of automobiles, furniture, and major appliances. The results based upon personal interviews with 171 men and women indicate that risk perception as measured by Kogan and Wallach's "Choice Dilemmas Procedure" had a significant impact within each product category. A discussion of the findings and the study's implications are presented.

In purchasing durable goods consumers frequently engage in protracted shopping. The decision to buy big ticket items often can be characterized as an approach-avoidance situation. The shopper is eager to attain the desired goal-object, i.e., the product and the benefits which it will provide, but at the same time wishes to avoid the cost and minimize the risks associated with the purchase and/or ownership of the item. As a consequence, the transaction is deferred until the cost becomes affordable and the perceived risks are reduced to tolerable levels.

Recognizing this situation, retailers will frequently employ one or more promotional tactics to induce the transaction. One widely used practice is installment credit. While such credit makes the product immediately affordable, the obligations it imposes in terms of monthly payments and interest rates are likely to effect the buyer's perceived risk.

Perceived risk plays an important role in the buying decision, as a result the concept has been researched by numerous investigators (see Cox, 1967; Woodside, 1972; Schiffman, et al., 1976; Pras and Summers, 1978). Essentially perceived risk is concerned with the uncertainty of making an appropriate decision and the consequences resulting from that decision (Bauer, 1960). This uncertainty may produce one or some combination of the following categories of perceived risk: *viz.*, (1) performance--the selected product or course of action does not provide the expected results, (2) financial--the product is not worth the dollar cost, (3) physical--the product is not safe, (4) social--the action is not approved by others, and (5) psychological--the decision does not enhance the consumer's self-concept (Taylor, 1974). The research has shown further that the extent of the perceived risk varies across individuals, products and services, and purchase situations (Spence, et al., 1970). Therefore, it is probable that individuals will differ in the degree to which they anticipate and experience risk not only in choosing among competing stores (Hisrich, et al., 1972) or alternative products (Bettman, 1973), but also in deciding whether to pay cash or finance the chosen merchandise.

Consumers have developed numerous strategies for reducing risk (Roselius, 1971). These include obtaining information from both friends and commercial sources, reliance upon brand and/or store image, loyalty to trusted brands or trusted stores, and other reassurances such as warranties or money back guarantees. Thus, if risk does affect the decision to finance the selected item, numerous opportunities exist for the retailer and/or finance company for lessening its impact.

Present Study

While attention has previously been directed toward

consumers' use of credit vis-a-vis cash (Slocum and Matthews, 1970; Bellinger, et al., 1979), no study has directly measured the relationship between perceived risk and installment credit. Therefore, the present investigation seeks to identify whether such a relationship exists. More specifically it asks (1) if low-risk perceivers are more inclined to finance durable goods purchases than similar individuals who are high-risk perceivers and (2) if low-risk perceivers are more prone to seek installment credit information for financing durable good purchases than individuals who are high-risk perceivers.

Hypotheses

Three separate empirical hypotheses were constructed to answer the first question. Each focuses on a popular category of durable goods. They are as follows:

- EH 1a: A higher percentage of low-risk perceivers finance automobile purchases than high-risk perceivers.
- EH 1b: A higher percentage of low-risk perceivers finance furniture purchases than high-risk perceivers.
- EH 1c: A higher percentage of low-risk perceivers finance major appliance purchases than high-risk perceivers.

To test each of these hypotheses, the subjects must have the financial capability of paying cash for their respective purchases.

Two hypotheses were derived for answering the second question.

- EH 2a: A higher percentage of low-risk perceivers seek installment credit information more often than high-risk perceivers.
- EH 2b: A higher percentage of low-risk perceivers seek installment credit information from a greater number of sources than high-risk perceivers.

Here, it is postulated that high-risk perceivers will have seen the disadvantages of installment credit and not make a concerted effort to reduce the associated risk as will low-risk perceivers.

Method

Data were collected by means of a pretested questionnaire which was administered in person to 171 men and women who had recently purchased a new medium-priced automobile. The individual subjects were randomly selected from middle income neighborhoods within the Pittsburgh SMSA.

The questionnaire was composed of two sections. The first contained eleven questions that probed the respondent's big ticket durable goods purchases over the past three years, whether the selected items had been financed, and the extent to which information had been acquired in deciding whether to pay cash or use installment credit; demographic classification questions including sex, age, occupation, employment, marital status, and education of the respondent; and a verification question to determine if the individual actually had the ability to pay cash. Subjects who felt they

could not buy the items for cash would be subsequently eliminated from the sample. This was done for two reasons. First, perceived risk is only a concern when the individual is confronted with a choice. Second, the elimination of these individuals reduces the bias arising from the individual's financial condition.

The second portion of the questionnaire contained the "Choice Dilemmas Procedure" (Kogan and Wallach, 1964) and was completed by each respondent. The instrument developed by Kogan and Wallach comprises a series of 12 situations that are likely to occur in everyday life. Each situation presents the subject with a choice dilemma between a risky and safe course of action. After reading each situation, the respondent selects the probability level for the risky alternative's success that would make it sufficiently attractive to be chosen. (Probability levels provided for the success of the risky alternative are 1 in 10, 3 in 10, 5 in 10, 7 in 10, and 9 in 10. If the subject refuses to gamble a 10 in 10 is assigned.) The higher the score the higher the individual's risk perception. Any score above 80 indicates a high risk perceiver, whereas individuals scoring 60 or below are considered as low risk perceivers.

Results

One hundred and seventy-one respondents were contacted during a three-week period. Seventy-one reported that they did not have the ability to pay cash for the automobile, furniture, or major appliances which they had purchased. These individuals were excluded from the analyses.

Table 1 summarizes the durable goods purchase behavior of the 100 subjects and indicates the method of payment which was used for each of the three selected product categories.

TABLE 1

SUMMARY OF DURABLE GOODS PURCHASE BEHAVIOR

Product Category	No. of Subjects Who Purchased	Method of Payment		
		Credit	Cash	Combination
Automobile	100	52%	34%	14%
Furniture	79	29%	51%	20%
Appliance	73	34%	56%	10%

Thirty-two respondents had not sought credit information, twenty-eight "practically never" did, twenty-four reported they did "sometimes" and sixteen sought information "very often." Of those who sought information, thirteen (19%) mentioned one source, twenty-one (30%) named two, seventeen (25%) reported three, thirteen (19%) referred to four sources, with the remainder (7%) stating five.

Subjects risk perception scores measured by the "Choice Dilemma Procedure" ranged from 46 to 108. To test the five hypotheses, simple and partial coefficients of correlation were computed. The latter analysis was performed to control for any possible contamination resulting from significant correlations between selected demographic characteristics of the subjects and either the independent variable, i.e., "Choice Dilemma Procedure" scores or any of the five dependent variables. The results of the analyses are presented in **Table 2** (on the following page). All of the correlation coefficients contained in the table are statistically significant beyond the .005 level. Therefore, each of the five hypotheses is confirmed.

Discussion

It is interesting to compare the incidence of install-

ment buying reported in this study with the usage of installment credit across the United States. One hundred and twenty-three of the 171 individuals interviewed had used some type of installment for financing durable goods at least once during the past three years. Among the 100 who had a choice either to pay cash or use extended credit terms, 52 used the credit option. The findings generally are consistent with national averages.

A closer examination of the data provides a clearer picture and demonstrates the practical significance of the findings. The coefficients of determination (r^2) presented in the far right column of **Table 2** indicate the proportion of variability within each of the five dependent variables that is explained by the independent variable, i.e., risk perception. The computer r^2 for EH 1a reveals that over forty percent of the variability in the method of automobile payment can be accounted for by perceived risk. Comparable values are realized for EH 1b (31%) relating to furniture purchases and EH 1c (40%) for major appliances. This suggests very strongly that when given a choice, low-risk perceivers will finance durable goods while high-risk perceivers will not.

While the correlation coefficients for hypotheses 2a and 2b are statistically significant, the corresponding coefficients of determination are not particularly strong as only eight per cent (2a) and ten per cent (2b) of the variability concerning the acquisition and exposure to credit related information is explained by risk perception. Nevertheless, it is interesting to note that seventy percent of the subjects not exposed to any form of credit information paid cash for each of the three types of durable goods.

While the confirmation of the study's five hypotheses provides useful insights the investigation's limitations should also be noted. First, the size of the sample was comparatively small which precludes any meaningful cross tabulations across the respondent's demographic profiles. Nevertheless, an analysis of conditional correlation revealed that in all selected demographic segments low-risk perceivers were more receptive to installment credit than high-risk individuals. Second, the sample was composed of middle-income residents from one geographic area and there is no assurance that other categories of consumers or those living in different regions would respond in an identical manner. Further, the propensity to finance consumer durables varies with the rate of inflation, level of employment, and consumer optimism. Moreover, in recent months interest rates have been extremely volatile and generally higher than the 12% to 18% levels prevalent when the data for this study were gathered.

For retailers and consumer credit companies interested in expanding their installment accounts, the implications of the study are clear: the prospect's perceived risk toward this method of payment must be reduced. Shoppers must be made more aware of the credit arrangements available and the procedures required to obtain these services needs to be simplified. Awareness can be facilitated through informative advertising, especially direct mail targeted to present customers. Special promotions may also induce the high-risk perceiver to finance durable goods purchases. For example, a finance company may make arrangements with local automobile dealers to enable customers to buy vehicles at a very low price if the prospect purchases through an installment loan. As a result of such promotional tactics, consumers who would normally not use long-term credit may choose to finance their future purchases of durable goods.

TABLE 2

COEFFICIENTS OF CORRELATION AND DETERMINATION EXISTING BETWEEN THE
INDEPENDENT VARIABLE AND THE DEPENDENT VARIABLES

Empirical Hypothesis	Variables		Sample Size	Simple r (Significance)	Partial r (Significance)	Variables Controlled	Determination r^2 (Significance)
	Independent	Dependent					
EH 1a	risk perception	method of automobile payment	100	.6413	.6303	age	.4112
EH 1b	risk perception	method of furniture payment	79	.5563	---	none	.3095
EH 1c	risk perception	method of major appliance payment	73	.6358	.6159	age	.4043
EH 2a	risk perception	frequency that credit information was sought	100	-.2878	-.2658	age, employment	.0833
EH 2b	risk perception	number of information sources used	100	-.3099	-.3146	age, employment, occupation	.0960

NB: Each correlation coefficient is significant beyond .005.

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CONSUMERISM: A NEGLECTED ASPECT OF MARKETING
PLANNING IN DEVELOPING ECONOMIES

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Abstract

The wave of consumerism had been a felt need but not a worded phenomenon in Turkey until 1970. Because of the prevailing sellers' market conditions and the pre-occupation with production problems, consumer issues and consumer related problems were not addressed to. The present paper discusses several consumer related issues in a developing economy and proposes the establishment of voluntary consumer associations to overcome consumer problems.

Introduction

There is something paradoxical about government policy toward consumer protection as found in most less-developed countries around the world, including Turkey. On the one hand, most national economic plans of these countries give little or no attention to the consumer problems, and few public officials would claim that their countries have a specific policy regarding consumer protection activities. On the other hand, the governments of these less-developed countries are inevitably concerned with many aspects of consumer problems and have developed more or less explicit, coherent, and consistent policies toward consumerism (Kaynak 1980). To this end, certain steps were taken by some ministries for the protection of consumers. In 1971, the Ministry of Commerce established a department with the activities towards the protection of consumers. Similar types of steps were also taken by the Ministry of Industry and Technology, such as the establishment of a Price Control Committee which determines the prices of certain industrial commodities. However, due to political reasons, the activities of such ministries were suspended.

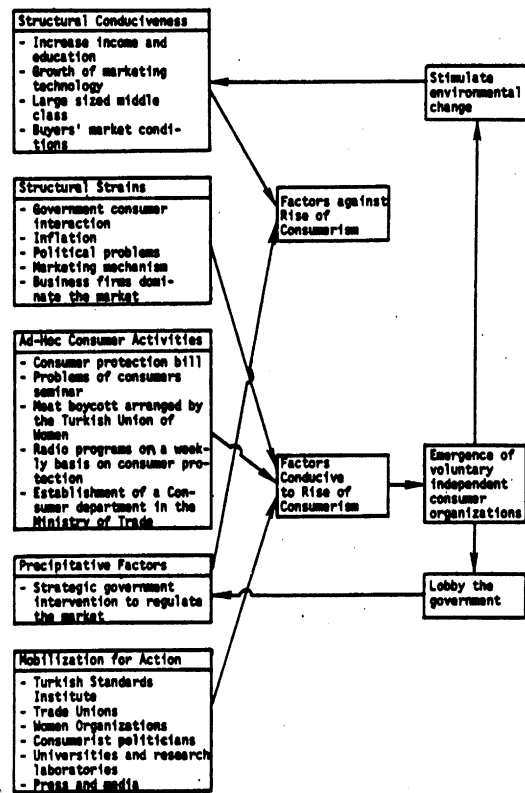
In a less-developed country like Turkey, privileged minority groups of consumers have always been concerned with the quality of the goods and services provided to them by others. But for the majority of the consumers, the primary concern is, and always has been, meeting the basic needs of life - that is enough to eat, a shelter and protection from illness (physiological and safety needs) (Kaynak 1978).

Background

In Turkey producers and channel intermediaries are well organized. They can defend their rights in their best interest through their professional organizations. The consumers, however, despite their sheer size, are not in a position to protect themselves from business malpractices. The reason for this apparent dilemma is that Turkish consumers are not organized as their counterparts in developed countries. Producers in Turkey are never involved in any activity (like Better Business Bureau) to protect the consumer either. Because, there is always less production, and the demand is always high, so the producers manufacture whatever they wish, with the assurance that it will be bought. Only in some fields of production, where supply exceeds demand and there is intense competition, the manufacturers have begun producing better quality products, to meet the needs and desires of consumers (Kaynak and Culpan 1978).

Turkey is getting to the point where there are various private and public corporations playing major roles in the economy; but, in essence, no consideration has been given to the protection of consumers. Polarization of goods and services produced for the markets has brought about an urgent need for the protection of consumers. In this respect, there have been some limited, partial and unintegrated efforts. However, in recent years, there has been some enthusiasm with consumer complaints on a piecemeal basis. It was thought that certain preventive measures need to be taken by both government and private organizations. For this purpose voluntary consumer protection associations are considered to remedy the situation (Kaynak 1978a, 1978b and 1979). Factors leading to the rise of consumerism in Turkey are shown in Table 1.

TABLE 1.
Factors Leading to the Rise of Consumerism in Turkey



Source: Adapted from Philip Kotler, "What Consumerism Means to Marketers", Harvard Business Review, May-June 1972, pp 48-57

Historical Perspective

During the reign of the Ottoman Empire, the consumers were well protected by the Empire State, through organized institutions, then called cliques. Unfortunately, we do not see the same type of protection during the period of the Republic, especially after 1960, no new

Macro-Economic Environment

laws to protect the consumers were passed. At present the existing respective laws are dated back to the 1930's and therefore remain insufficient for present needs. Thus, the producers and middlemen, in most cases, draw their own lines in the marketplace, as they wish. An imbalanced situation between supply and demand pushes the consumers towards standing, at their own will, to some undesired circumstances.

As could be seen from the above explanations, consumer related acts are quite scattered and outdated. All of the acts could have been collected in one body of coordinated and harmonized code. As a result of disorderliness, the authorities and responsibilities are dispersed and collided. Considering the developments and the Turkish economy and trade after 1960, it is obvious that some of these laws are worn out and need to be revised, changed or amended (Asici, Tek and Oktav 1977, p.16).

For the reasons stated previously, the Ministry of Trade has prepared a bill under the title "The Bill of Regulating Trade for the Protection of Consumers" in 1972. This was the only bill mentioning the word "consumer" for the first time in Turkey. Staying for a year in the parliament, this bill did not pass for inexplicable reasons. Later in 1974, the same Ministry prepared another bill under the title "The Bill of Regulating Domestic and International Trade", this time bypassing the word "consumer protection". This bill again was not enacted because the Cabinet was dissolved.

The above bills were prepared in accordance with the principles of consumption and commerce policy, stated for the first time in the Third Five-Year Development plan. The "Consumer Protection Bill" was more encompassing and coordinated than the numerous scattered acts and if passed would have been one of the strong advocates of Turkish consumers' rights.

Developed Vs. Less-Developed Country Practices

There are a number of differences between developed and LDC's in terms of how consumer issues are handled. Consumerism in most of LDC's, including Turkey, is more a matter of legislation and efficient implementation of the legislation than a matter of an engaged public. There has been very little active consumerism in most of these countries. In Turkey, the political parties and the mass media have started and sustained many efforts to protect the consumer and improve his standing in the marketplace.

Consumerism requires a healthy macro-economic environment which is badly lacking in most LDC's including Turkey. There are acute disparities between developed and LDC's in the development of macro-economic environment. That is the reason why present pre-occupations of consumerists in LDC's lie in the area of micro issues (traditional concerns) like package sizes, unit pricing, credit disclosure, product safety, misleading advertising, product quality. Whereas in developed countries, consumerists try to deal with major macro issues (socio-economic, cultural and technological concerns). Major policy issues like pollution, poverty, the welfare system, health care, foreign ownership, and anti-nuclear drive all come under the realm of consumerism movement of developed countries. The different characteristics of the macro-economic environment of developed and less-developed countries are shown in [Table 2](#).

Consumerism activity is more likely to be transferred between the similar and culturally alike environments. Before any transfer takes place, it is first necessary

Low standards of living	High standards of living
Low level of aspiration	High level of aspiration
Sellers' market conditions	Buyer's market conditions
Low information outreach	Actively seek information
Consumers are dominated by decisions of sellers	Consumers make most of the decisions
Lower level of expectation from products	Higher level of expectations from products

to control the other cross-national differences of the two countries. We should also examine the potential and actual frictional consumerism issues, and prescribe the appropriate lubricants or remanage the engineering design at the interface.

Reasons For The Need of Consumer Protection

In a developing country like Turkey, privileged minority group consumers have always been concerned with the quality of the goods and services provided to them by others. But, for the majority of the consumers, the primary concern is, and always has been, meeting the primary needs of life - that is, enough to eat, a shelter and protection from illness.

Variety and complexity in the goods available and complex methods used to finance them have generated a demand from people for help and advice in performing their consumer function. The increasing rents paid by a majority of tenants have forced them to raise their voice to put pressure on the government to arrest this rapid upward trend. Reports of comparative tests prepared by the academic and scientific research laboratories on different brands of consumer products and everyday necessities have revealed some distressing truths (Turkish Daily News 1977, p.2).

Consumption of food expenditure statistics showed that between 40 and 50 percent of the total consumer income was being spent for food. More important than this, however, was the fact that the poorest households typically spend approximately 60 to 65 percent of their income on food. It is possible that a 10 percent reduction in food prices by an efficient consumer protection organization would increase a family's real purchasing power greatly.

The raw milk sold by street peddlers is not pasteurized and it is generally sold in large metal containers. Because of the inadequate control, the quality of the products sold by these retailers is very low indeed. A major deficiency in raw milk retailing by the street peddlers and small dairy shops is the product's low quality arising from adulteration and the lack of sanitation in handling by the time it finally reaches the consumer. According to the estimates of a report, the raw milk which comes into large cities for consumers is often adulterated by more than 25 percent. The milk is usually adulterated with water, and other products such as flour and milk powder. Poor handling methods also contribute to lower milk quality. Most street vendors do not adequately wash and sterilize their milk cans. Covers over the milk containers are usually in poor condition.

Even in the largest cities of Turkey, none of the bakeries sell pre-wrapped bread. A few years ago a survey

was undertaken on the feasibility of pre-wrapped bread production and it was found that the wrapping cost would add an additional 20 percent to the retail price of bread; hence, the project has fallen through due to the inordinately high cost of wrapping paper and the machines to be used. The other reason for the failure of the pre-wrapped bread production project might be the attitude of consumers towards bread. It is a custom in Turkey to buy bread unwrapped as people like their bread warm and fresh; they pick up their own bread from a corner shop or a baker.

Turkish consumers generally would not purchase frozen fish and poultry products because of their inherent habit and tradition. Consumer preferences are highest for fresh fish and poultry products. For instance, most consumers know that the fish products sold in the Corporation shops are frozen and therefore these people are reluctant to purchase from there. Although correctly timed and properly frozen fish is always better than inefficiently packed wet fish, few consumers of Turkey will admit to this fact. No advertising so far has been directed to educating the consumer and persuading them to change their preferences.

Recent developments in the Turkish economy, changes in technology, mass media and mass transportation have created a "consumption culture". As a result of this emerging culture, Turkish consumers are now in expectation of consuming goods and services more in quantity and better in quality. Although it is a natural desire for the Turkish consumers to consume more and better quality goods and, in a sense, consumption is the ultimate purpose of all economic systems; but, the untimely appearance of the consumption culture seems to be more detrimental for the development of Turkey and for the ultimate welfare of Turkish consumers (Asici et al 1977). What does the newly created consumption culture cause in a less-developed country like Turkey?

Surrounded by the untimely created consumption culture, most of the lower and middle income families who live in big cities of Turkey are impelled to spend their money on secondary needs at the expense of their more vital needs and wants. The television has become one of the most important means to facilitate the expansion of the consumption culture. The television is the only entertainment facility of the poor, is also the best manipulating device for the creation of the consumption culture.

While the demand for most products in Turkey is increasing with the force of the prevalent consumption culture, the supply of most products is not increasing proportionately. Then, given the "unequal distribution of income" and lack of adequate production in Turkey, the immediate problem of the majority of Turkish consumers become not of consuming unnecessarily, but obtaining above all something to consume.

The annual household average disposable income in Turkey is around \$2,000 and the personal disposable income is calculated to be approximately \$500 which is still in the lower bracket among the so-called developing countries. Because the majority of Turkish consumers have inadequate incomes and when they are cheated by the deceptive practices of some producers and middlemen, their income becomes insufficient to replace these purchases. Against this, the rich have always had the ability to purchase and their chances of being deceived is less than that encountered by the lower income groups.

What Needs To Be Done

Under the prevailing circumstances, the problem of

"consumer protection" in Turkey and in most other developing countries of the world seems to differ, at least in two angles from the nature of consumer problems of their developed counterparts. First of all, in Turkey, there is an urgent need to increase the quantity of products and services produced and redirect the effort of industrialization selectively toward the long run benefits of the Turkish consumers. This dimension of consumer protection is very negligible in developed countries of the world since they have all solved the problem of production a long time ago.

Secondly, there comes the need to provide an equitable distribution of income as well as betterment of the educational level of most consumers. There are apparent differences in the patterns of private consumption expenditures among different social strata due to mainly changing socio-economic conditions and prevailing unequal distribution of income.

It is apparent that these two conditions are dependent upon the level of socio-economic development of Turkey. Of course, this does not mean that a consumer movement cannot help towards the solution of these problems. To the contrary, a voluntary consumer movement can do a great deal to provide solutions to the above stated problems through various means and methods. From bottom to top type of organized consumer movement in Turkey can show the Turkish consumers not only the sources of their consumer problems but also the ways and means to overcome them.

In developing countries and in Turkey cooperative development could also play an important part in the protection of consumers. Perhaps the urgent need is to collect more information direct from Turkish consumers about their own personal priorities which may be quite different from those of more sophisticated consumers in industrialized countries (Dandapani 1979, p.2). It is not going to be enough simply to transplant into different conditions of developing countries laws or institutions that have served consumers well in industrialized countries.

As it was pointed out before one of the major problems of Turkish consumers is the adulteration of food while another is channels of distribution. It may be that the promotion of consumers' cooperatives in Turkey will prove to be one of the more important ways of protecting consumers; and that as they are at the same time engaged in food distribution, another major obstacle is tackled at the same time.

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THE WORKING OF THE ANTI-MONOPOLY LAW IN INDIA:
AN EXPLORATORY STUDY AND SOME COMPARATIVE INSIGHTS

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Abstract

Comprehensive antimonopoly legislation is still a rarity in the Third World countries. India is one of the few Third World Countries which has a fairly elaborate law relating to monopolies and restrictive trade practices. This paper examines the working of this law by analyzing 29 cases decided in the first four years the law was in operation. Conclusions are drawn about the scope and manner of application of India's anti-monopoly law and its impact on competitive practices. Broad comparisons are made with the antitrust laws of developed and developing countries. The problem of what is an appropriate industrial and competitive policy for Third World countries is placed in a perspective.

Background

The Monopolies and Restrictive Trade Practices Act (MRTP) was enacted in 1969 and MRTP Commission to administer the act was appointed in 1970. The act was preceded by examination of industrial structure and policy by committee on Distribution of Income and Levels of Living, Industrial Licensing Policy Enquiry Committee, and Monopolies Enquiry Committee.

Provisions and Operation of the Act

The MRTP Act of India deals with three basic issues:

1. Concentration of economic power,
2. Monopolistic trade practices, and
3. Restrictive trade practices

Restrictive trade practices, which are the focus here, include full line forcing, exclusive dealing, discriminatory discounts, territorial restrictions, captive production agreements, etc. All agreements between manufacturers and dealers having such clauses have to be registered with the Registrar of Restrictive Trade Agreements (henceforth, "Registrar"). While the Act requires the registration of all agreements which have potentially restrictive features, it does not consider these illegal per se, as is usually the case in the U.S.A. (Shepherd 1979). That determination is done on a case-by-case basis. The Monopolies and Restrictive Trade Practices Commission (MRTPC) acts as a court for all cases relating to anticompetitive behavior.

Analysis of Cases

As a first step, 29 cases decided by MRTPC during first four years of its operation were analysed. **Table 1** shows who originated the complaints. The Majority of Cases (58%) were initiated by the Registrar, followed by Director of Investigation of MRTPC. **Table 2** shows who the defendants were. In the majority of cases (58%), the defendant was an individual manufacturer. It thus appears that law has essentially been directed against restrictive agreements between manufacturers and dealers.

Table 3 shows the nature of restrictive trade practices (RTPs) alleged. 93 RTPs alleged in 29 cases were classified as Restrictions of Price, Products, Distribution and Manufacture. About half of allegations pertained to restrictions on distribution. **Table 4** and **5** show analysis of allegations by product

classification. Majority of Cases belonged to Industrial products category, followed by consumer non durables. It appears that patterns of alleged RTPs are not very different in three product categories, although restrictions on distribution occurred more frequently in the industrial category. **Table 6** shows nature of MRTPC decisions in 29 cases studied, in the overwhelming majority of cases (72%). MRTPC ordered the defendants to cease and desist from all alleged RTPs.

Impact on Marketing Practices

Though 29 cases studied are not sufficient to make definitive assessment, it is possible to discern some interesting trends. All cases pertained to relationships between manufacturers and dealers or marketers and their contractual producers. Secondly, majority of cases were not strongly deferred). Only in two out of 29 cases, the defendants successfully used the "public interest" exemption provided in the law. The impact of judgements would seem to indicate that the control exercised by manufacturers on dealers would have reduced through agreements. It is too early to say what impact this apparent transfer of power from manufacturers to distributors would have on market structure, performance and conduct.

A Comparative Perspective

In economic theory, issues of industrial policy are discussed under the heads of structure, conduct and performance (Stern and Grabner 1971). The ultimate aim of antimonopoly practices is to improve economic performance in terms of allocative efficiency, technical efficiency and technological progress (Shepherd 1979). In the Third World Countries, however, the main "economic considerations might not be maintenance of free competition" (UNCTAD 1974). A variety of social and political objectives may come into play.

Given the more complex rationale for industrial policy in Third World Countries (Vernon 1972), a straight comparison of the Third World policies with the advanced countries may not be very meaningful. Nevertheless, an informed comparison is essential since Third World countries normally base their antimonopoly law on some Western model (White 1974). **Table 7** presents a comparison of U.S., British and Japanese laws relating to restrictive trade practices on several dimensions. The Indian law is based on the British one primarily for historical, political, and Judicial reasons and not because of strong economic or social rationale.

In Conclusion

The impact of the law on competitive behavior as revealed in this study has been marginal and perhaps many explicit restraints on trade have been tacit. In choosing an industrial policy, Third World Countries should consider a larger than usual variety of factors including political, economic performance, welfare and public sector goals.

Table 1
Distribution of Cases by Originator of Complaint

Originator of Complaint	No. of cases	Percent of total
Registrar	20	68%
Director of Investigation	7	24
Dealer Association	1	4
Consumer/User Association	1	4
Total	29	100%

Source: MRTPC Judgments

Table 2
Distribution of Cases by Type of Defendant

Type of Defendant	No. of cases	Percent of total
Individual manufacturer	17	58%
Group of manufacturers	7	24
A manufacturer and associated dealer(s)	3	10
Group of dealers	1	4
Marketer and contractual producer	1	4
Total	29	100%

Source: MRTPC Judgments

Table 3
Distribution of Allegations by Type of Restrictive Practice

Type of Restrictive Practice	No. of complaints	Percentage
Restrictive on price (minimum resale and resale price maintenance)	21	23%
Restriction on product (tied sales and full line forcing)	16	17
Restriction on distribution (exclusive dealership, territorial restrictions, discriminatory discounts)	46	49
Restriction on manufacturer (captive or constrictive agreements)	7	8
Not specified	3	3
Total	93	100%

Source: MRTPC Judgments

Table 4
Distribution of Allegations by Product Type

Product Type	No. of cases	Allegations No.	Percent	Average number of allegations per case
Industrial	15	55	59%	3.7
Consumer Durable	5	14	15	2.8
Consumer Nondurable	7	24	26	3.4
Total	27	93	100%	3.4

Source: MRTPC Judgments

Table 5
Distribution of Allegations by Type of Restrictive Practice and by Product Type

Product Type	Nature of Alleged Restrictive Trade Practice (RTP)							
	Restrictions on price No. (Case)	Restrictions on products No. (Case)	Restrictions on distribution No. (Case)	Restrictions on manufacture No. (Case)	Restrictions on Soc. No. (Case)	Total No.	Total %	
Industrial	11 (100)	9 (17)	29 (53)	3 (3)	3 (3)	55 (100)		
Consumer Durable	4 (28)	2 (14)	5 (43)	2 (16)	3 (23)	14 (100)		
Consumer non-durables	6 (22)	5 (21)	11 (40)	2 (8)	3 (11)	24 (100)		
Total	21 (21)	16 (17)	46 (50)	7 (8)	3 (3)	93 (100)		

Source: MRTPC Judgments

Table 6
Categorization of MRTPC Decisions

Nature of Decision	Cases	
	No.	Percentage
No order (Company agreed to modify contract after complaint launched)	1	4%
Complaint rejected because of insufficient evidence	2	7%
Comprehensive cease and desist order	21	72%
Order requiring modification/cessation of some of the alleged practices	2	7%
Case being contested	3	10%
Total	29	100%

Source: MRTPC Judgments

Table 7
A Comparison of U.S., Indian, and Japanese Laws Regarding Restrictive Practices

Dimension of Comparison	U. S. A.	J. K.	Japan
Basic Philosophy	Pay an illegality of certain practices like price fixing, tied sales. Few exemptions.	Practice illegal if the effect is deemed to be restrictive. Case-by-case determination. Several practices covered.	Pay an illegality of certain. Several exemptions. However, law about other practices.
Enforcing Mechanism	Mainly courts. Law suits brought by FTC, Justice Dept., others	Mainly quasi-judicial. Restrictive Practices (MRP) Board	Mainly quasi-judicial. Fair Trade Commission of Japan (FTCJ)
Control Mechanism	Court decisions. Cease and desist orders.	TRC decisions and orders.	Cease and desist orders. Cease and desist orders. Informal persuasion by overseeing authorities.
Impact on Market	Fairly effective control of pay an illegal practices and influence many other practices.	Selected practices or industries subjected to restrictive. Overall impact not widespread. Public interest exemptions available.	Law implementation and occurrence of restrictive practices. Law, widely exempt segments of economy.
Impact on Structure	Marginal or negative. Increasing concentration.	Marginal or negative. Increasing concentration.	Marginal or negative. Increasing concentration.
Impact on Performance	Average growth progress. Neutral effects on efficiency.	Economic stagnation.	High tech. progress/growth. Increase negative on efficiency.

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IMPACT OF STUDENTS' PERCEIVED ORGANIZATION
ANTISOCIAL BEHAVIOR OR JOB CHOICE

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Abstract

This study examines the impact of marketing students' perceived organization antisocial behavior on their job choices. It examines criteria for job choice and organization antisocial actions that hinder recruiting of students.

Introduction

Even a casual glance at the popular literature suggests that business firms are continually accused of anti-social behavior, ranging from the monopolyization of particular industries to producing defective products or practicing sex discrimination. Has this unfavorable publicity impacted upon student job choices? Are students unwilling to consider positions in firms which, in their opinion, undertake antisocial activities? This subject is of obvious concern to companies who are in the job market and have been, rightly or wrongly, accused of violating ethical or legal requirements. This study was designed to determine if students do, in fact, eschew companies that are suspected of such practice.

Design of the Study

During the Fall of 1980 the authors forwarded packets of 30 questionnaires to 20 marketing colleagues located in colleges and universities throughout the United States. The sample design was stratified, judgmental. The colleges and universities were selected in a manner whereby every geographic section in the U.S. was represented. In turn, institutions deemed to be "typical" were included. The professors from these institutions were asked to administer the questionnaires to 30 of their junior and senior marketing course enrollees. Twelve of the professors participated in the study, producing a total sample size of 489. The institutions participating in the study were:

- University of Texas, Austin
- University of Miami, Florida
- University of South Carolina
- University of Texas at El Paso
- Marquette University
- Suffolk University
- South East Missouri State University
- McMaster University
- University of Maine
- University of Oregon
- Idaho State University
- DePaul University
- University of Wyoming
- Florida State Univ
- Temple University

The questionnaires requested the students to provide answers to a variety of questions related to job choice. The students were not informed as to the precise objectives of the study - only that the authors were "conducting a study of student perceptions of the desirability of accepting employment with businesses known to possess certain characteristics. The following sections set forth the results. In the sample, thirty-six percent of the respondents were marketing majors and forty-one percent were other business majors. The remainder was scattered in various liberal arts, education, and related majors.

Reasons for Accepting Employment

The students were provided with 12 "reasons" for selecting employment, upon graduation, with a particular firm and were asked to rank them in descending order of importance (1=most important, ---, 12=least important). The "reasons" appear in **Table I** along with the mean rank value associated with each reason.

TABLE I

Reasons	Mean Rank
Opportunity for Advancement	4.025
Salary	4.137
Job Security	5.231
Challenge	5.309
Reputation of Firm	6.209
Personal Integrity of Management	6.540
Fringe Benefits	6.663
Training Program	6.773
Location of Firm	6.914
Travel Opportunity	7.877
Time Sepent Away from Home	8.374

An analysis of variance produce significant at the .0005 level, suggesting significant variance between the mean ranks, considered as a whole.

The data in the table reveals that students report criteria that directly benefit themselves - opportunity for advancement, job security, and challenge at the top of the priority list. The criteria which relate to the ethical/social responsibility realm, mainly reputation of the firm and personal integrity of management, appear in the fourth and fifth positions in the rankings - demonstrating some support for these factors.* They, in turn, are deemed to be more important than fringe benefits, training programs, location of firm, travel opportunity, and time spent away from home. In sum, these data indicate that the respondents place some limited weight upon the ethics/social responsibility criteria, but these do not appear to be paramount as determinants of company choice.

Sources of Information

The questionnaire requested that students indicate the extent to which they obtained information about prospective employers from various sources. **Table II** sets forth the results:

* These factors provide a measure, however imperfect, of ethical social responsibility orientation. Further, these issues have been used in previous career studies and make comparisons possible. See Laure M. Sharp Education and Employment (Baltimore: The Johns Hopkins Press, 1970), p. 78. See also: The CPC Foundation, Careers in the Private Sector (New York: The CPC Foundation, 1976), p. 23

TABLE II

Sources of Information About Sources

Source of Information	% of Students Using Source
Discuss firm with peers and credible source	77.3%
Communicate directly with firm	61.6%
Obtain & read articles about company	55.4%
Review job placement file	39.3%
Obtain & read company prospectives	37.4%
Other	4.9%

It appears that students are heavily involved in gathering information about prespective companies. The most important sources are (1) discuss firm with peers and credible sources, (2) communicate directly with the firm, and (3) obtain/read articles about the company. Interestingly, only slightly more than one third utilize the job placement file services of university placement bureaus.

Extent of Knowledge

The students were asked "How knowledgable are you about firms you would consider working for?", on a 3 point scale where 3 = "little knowledge", 2 = "some knowledge", and 1 = "much knowledge." The mean value of this variable was 1.969, suggesting that most students felt that they had "some knowledge" about the prospective employers but not that they were especially under or over informed. Thus, if the students' perceptions are correct, they operate under some degree of uncertainty in choosing the "optimum" firm. It is possible that they might unknowingly select a firm that is not ethically or socially responsible. If they were more highly concerned with the ramifications of such a decision they might exert more effort to become better informed.

Likelihood of Joining Perceived Socially Irresponsible Firms

The questionnaire asked students to specify, "What is the likelihood that you would accept a position with a firm that is suspected of..." a listing of 12 socially irresponsible acts. The acts were rated on a five point scale, (1=very unlikely to 5=very likely). The results appear in [Table III](#).

TABLE III

Likelihood of Accepting a Position With Perceived Socially Irresponsible Firms

Irresponsible Action	Mean Likelihood
Noise Pollution	2.511
Violation of City Ordinance	2.397
Tax Avoidance	2.384
Pollution of Air/Water/Land	2.372
Unfair Trade Practices	2.249
Violation of Antitrust Laws	2.219
Hiring Illegal Aliens	2.025
Products Socially Suspect, e.g., micro genetics	2.010
Sex Discrimination in Positions/ Salaries	2.010
Racial Discrimination	1.924
Producing Hazardous Products, e.g., asbestos insulation	1.759
Fraud	1.532

All of the means above are less than 3 standard errors, less than 3 (the midpoint of the range), indicating

that the students are less than neutral in considering the "socially irresponsible" variables as they relate to choosing a company. Noise pollution, violation of a city ordinance, and tax avoidance are the least likely to exert a negative influence upon the choice. Conversely, fraud, producing dangerous products, and racial discrimination are the most likely to deter students from selecting a firm.

Related to the above mentioned question, students were provided with 10 activities and were asked to rank order them from most offensive (1) to least offensive. [Table IV](#) presents the activities and their mean ranks.

TABLE IV

Rank Order of Offensive Activities

Activity	Mean Rank
Violate Hours of Operation	7.018
Noise Pollution	6.734
Tax Avoidance	6.180
Antitrust Violations	5.632
Hire Illegal Aliens	5.575
Unfair Trade Practice	5.356
Pollute Air/Water	4.472
Sex Discrimination	4.260
Produce Hazardous Products	3.677
Fraud	3.182

The results conform closely to those set forth in [Table III](#). The least offensive practices were, violate hours of operation, noise pollution, and tax avoidance, while the most offensive were fraud, producing hazardous products, and sex discrimination.

Finally, the students were asked, "Please consider your ranking of the offenses in the question above. At what point, giving the severity of suspected violations (scale of 1 to 10) would you consider working for a firm?" The mean value elicited from this question was 4.556, with a standard error of .125. The researchers utilized the 4.556 value as a "cutoff point" - one that distinguishes between offenses that do not impact upon student employer choices and offenses that do. Using this approach, the following offenses would seem to preclude marketing students from accepting a position from a firm: Pollute air/water, sex discrimination, produce hazardous products, and fraud. Unfair trade practice, tax avoidance, antitrust violations, etc., would not restrict job selection.

Summary

This study was designed to measure the degree to which students' perceptions of a firm's perceived social irresponsibility impacts upon their choice of employer. The major reasons for selecting a firm did not include socially responsible criteria, although social issues were given some emphasis. It was found that the main sources of information about firms are interpersonal discussions, communication with company personnel, and articles about the firm. Another finding was that students believe themselves to possess "some knowledge" about companies considered for employment. In terms of socially irresponsible actions that would preclude an employment choice, fraud, producing hazardous products, and discrimination head the list. Antitrust issues, business conduct and tax avoidance were not deemed significant. However, all of the irresponsible actions listed could have a negative influence on job choice.

AN EMPIRICAL EXAMINATION OF VARIATIONS IN CONJOINT SOLUTIONS

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Abstract

The article discusses some basic methodological issues pertaining to alternative approaches of collecting conjoint data. An attempt is made to empirically examine and statistically evaluate conjoint measurement solutions. The findings indicate significant differences and are in sharp contrast to earlier findings.

Introduction

In recent years, market researchers have applied conjoint measurement to assist product and market planners in designing new products/services and in formulating competitive responses. The applications of conjoint measurement to problems and situations in marketing have been illustrated by Green and Rao (1971) and Johnson (1974) among others. According to one estimate, over a thousand commercial applications of conjoint measurement have been made in the last decade (Cattin and Wittink 1981) and interest in the technique is growing in the nonprofit and government sectors.

Even though conjoint measurement has been validated as a useful tool for modelling customer preference functions and in making certain predictions about their behavior toward new products and services, much methodological and empirical work remains to be done in this area. Conjoint analysis has been applied to marketing research problems in several different ways. Some differences arise because of the methods used to gather conjoint data. The two most commonly used methods are known as two-factor-evaluation (TFE, also known as the tradeoff procedure) and multiple-factor-evaluation (MFE, also called full-profile procedure). The basic contrast between the two methods lies in the number of attributes that are being considered simultaneously.

There are different claims being made regarding the "superiority" of competing data collection procedures for conjoint analysis. Proponents of the TFE method claim it is easier for consumers to consider two attributes at a time than all at once, while advocates of the MFE method contend that it is a closer approximation of reality to have respondents evaluating entire product profiles. A few empirical studies have been reported in marketing literature which shed some light on the issue of data collection procedures. Montgomery, Wittink, and Glaze (1977), found that the TFE procedure yielded higher predictive validity than the MFE procedure. Oppedijk, Walle, and Beazley (1977) have also made comparisons on the utility values determined by using the two conjoint methods. They found that both methods produced similar utility values for product attributes in the context of a durable good product category. Since the basis of comparison, problem context and problem size differed from study to study, it is difficult to make any generalizations.

Data Analysis and Results

A convenience sample of approximately 100 subjects was selected for the empirical investigation. None of these subjects were familiar with the use of any non-metric multivariate research techniques in marketing. A symmetric and comparable full factorial design was selected for both data collection procedures (each procedure involved equal number of judgments). Because

of 17 incomplete responses, only 83 were used for complete data analysis.

In order to examine differences in conjoint solutions, all part-worth preference functions were converted into importance weights for the attributes used in the study. All such measures of importance for each attribute and for each subject were computed and standardized into relative importance weights. Statistical tests on the average importance weights indicate that the differences associated with attributes A and C are important. However, the differences associated with attribute B are not statistically significant. Test of differences were also carried out on the high consistency response group. The results were found to be identical with respect to the total sample.

Implications

Based on this exploratory investigation, it appears that different data collection procedures will produce different conjoint solutions. The reason for these variations can be the basis for future research in this area.

References

A list of references and details of empirical results are available from the author upon request.

PRODUCT LIFE-CYCLE EXTENSION:
THE POLYESTER STAPLE EXPERIENCE

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Introduction

Innovation, according to the definition used in this paper, deals with the introduction of any new products and services within a product line. It has been a primary growth contributor to the synthetic fiber industry, and affected the theoretical product life-cycle paths of many fibers (Yale, 1965). An earlier study of nylon filament uses had shown that consumption of this fiber had grown over the years as a result of its continuous entry into new markets (Yale, 1964). As time passed, some of the existing nylon markets lost their significance. If it was not for the continuous addition of new markets, nylon would have reached maturity some years earlier. Growth of nylon, and for that matter of most products, relates to the cumulative effect of entering new markets, while some established markets are diminished or lost. In other words, products grow through a life-cycle extension process.

A hypothesis that describes the product life-cycle process goes along the following lines:

The assumption that the life cycle of a product parallels that of a biological specimen is only partially true. A living organism first is born, immediately begins the growth process, reaches maturity, then ages and dies away. A product, on the other hand, is introduced in the market, subsequently grows or increases in the units of output and then levels off. Some products after reaching this stage may continue to grow but at a reduced rate. Other products may begin to decrease from this level until they go out of commercial existence. Still other products after an initial decline may reverse the declining trend and resume new growth (Yale, 1965).

To further test the above hypothesis an analysis was made of the growth behavior of polyester staple fiber, currently the most important synthetic fiber. The growth of this fiber was not an easy task. During the early phase of its growth, polyester staple went through a difficult technological period. At this early stage its market potential was thought to be limited. As the industry developed innovative programs in both technological and marketing fields, the potential growth of polyester staple was then realized. The innovative experience of polyester staple is discussed below.

Polyester Staple Innovations

The effect of innovation on the product life-cycle of polyester staple is shown in Figures 1 and 2. Figure 1 shows the effect of particular applications or end uses on the total growth. When the individual end uses are grouped in major product lines, they are called Major Trade Areas.

Entry into apparel end uses provided a spring board for the acceptance of polyester staple in various other textile applications. The first commercial shipments of polyester staple were made in 1951. The introduction of the various end-use innovations

are portrayed in Figure 1. The first documented end-use applications were in men's and women's blouses, shirts and dresses. The next end-use entry was made in 1955 with fiberfill (which is a fiber stuffing material). At the same time, polyester staple also entered men's raincoats. The following year, 1956, polyester entered the men's underwear and nightwear markets. The next market entry was made four years later, in 1960, in men's and women's sweaters. Following a gap of two years, polyester staple entered the drapery/upholstery and carpets/rugs markets. The following year, 1964, polyester entered the bedsheets market. In 1966, the use of polyester staple in blankets and sewing thread was initiated. In 1968 polyester staple entered the transportation upholstery market, and in 1969 polyester entered the end use classified as coated and protective fabrics.

In reviewing the total record of market entry and growth of polyester staple, it is possible to isolate a number of forces that have helped its performance. These forces are:

- (1) Market segmentation. This factor is identified with the entry of a product into new end uses. For instance, polyester staple over the years has continuously entered into new end-use markets such as slacks, shirts, fiberfill and many others. As explained earlier, the fiber entry into these new markets had a cumulative effect on its total growth.
- (2) Market diffusion. Expansion in shipments can be accomplished by entering the product into similar or "first cousin" markets. For instance, polyester staple originally entered men's slacks and then entered women's slacks. A similar market expansion developed in raincoats; polyester first entered women's raincoats and then men's.
- (3) Market expansion (or contraction). This factor relates to the growth of a given total market. As a function of many economic variables, such as personal income, population and others, innovative products grow. A number of end-use applications grow, while others decline.

The above three forces are expected to continue their influence on polyester staple, at least for the next few years. Consequently, this fiber is also expected to continue its growth. A number of new end uses (market segmentation) are expected for the period up through 1985. Some of these end uses are: bedspreads and quilts, narrow fabrics, craft and handwork yarns, industrial hose, and others.

There had been also three other innovations that had a significant impact on the growth of polyester. These innovations are the following:

In 1961, the first patent on permanent press was issued. This patent had an important influence on the growth of polyester staple due to the fact it created new product attributes. During the same year,

the basic polyester fiber producing patent (B.P. 578,079) expired in the U.S.A.; as a result, the markets opened up without the fear of infringement. Prior to the expiration of the patent, polyester producers were limited in their end-use applications.

Another major force that had an impact on the growth of polyester was its major price decline. In 1967, the fiber price dropped from 81 cents/pound to 58 cents/pound. This major price drop helped strengthen the marketing position of polyester in many ways. First, it made polyester staple a serious competitor to cotton and rayon staple. Second, it discouraged a number of potential new fiber producers from entering the market, thus preventing a possible quality deterioration due to the increased competition.

Trends identified in Figure 1 suggest that growth for the period through 1985 will be reflective of a combination of two factors, expansion in present markets and additions of new markets.

The influence of innovation can be demonstrated also in terms of trade areas. Major trade areas relate to the method of manufacture of a fabric used in the manufacture of end uses. The trade areas where polyester staple has penetrated are broadwoven, fiberfill, circular knit, industrial (excluding end uses already accounted for in broadwoven) and carpets. The timing and significance of these markets is shown in Figure 2.

The first trade area entered by polyester staple was in broadwovens which by definition include any woven fabric 12 inches and wider. This trade area has maintained its volume significance, and is expected to continue to do so through 1985. Fiberfill was the second market entry. Even though this market is significant in volume, it is expected that its share will drop down to 5.0% by 1985. Circular knits have been a relatively small market for polyester staple. In 1974 approximately 11.5% of total polyester staple were consumed in that trade area. By 1985 the circular knit share is expected to increase to 14.7%. End uses within this trade area are expected to show significant growth. Industrial goods, excluding broadwoven, are expected to increase in absolute volume, maintaining their share of total use at a level of 4.7% through 1985. Carpets and rugs represent a significant trade area; its share of total market is expected to increase to approximately 12% by 1985.

Growth Behaviour

Reviewing the continuous or systematic introduction of various forms of innovation into the life-cycle of polyester staple as well as the life-cycle of a number of other products, the impact has been a net rate of increase. Expressing this performance in terms of a growth model, it can be stated as follows:

Production growth over its life-cycle path is a result of market triangulation.

This phenomenon relates to the ability of marketing management first to identify and then introduce a new innovation into an existing product (line) which would contribute a positive total growth to the product's life cycle, as shown in Figure 3. The net growth contribution is measured by angle θ which describes the net incremental growth attributed to a specific market triangulation.

Conclusion

Our analysis has indicated that polyester staple has grown as a result of management's ability to map an innovative program for its growth, and then executing such a program.

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Figures will be furnished upon request.

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