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

Naresh K. Malhotra *Editor*
Jon M. Hawes *Co-Editor*

Proceedings of the 1986 Academy of Marketing Science (AMS) Annual Conference

Springer

Proceedings of the 1986 Academy of Marketing Science (AMS) Annual Conference

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

More information about this series at http://www.springer.com/series/13409

Naresh K. Malhotra *Editor*
Jon M. Hawes *Co-Editor*

Proceedings of the 1986 Academy of Marketing Science (AMS) Annual Conference

Anaheim, California, USA

April 30-May 3, 1986

Editor
Naresh K. Malhotra
Georgia Institute of Technology
Atlanta, GA, USA

Co-Editor
Jon M. Hawes
University of Akron
Akron, OH, USA

Reprint from Original edition
Developments in Marketing Science, Volume IX 1986 edited by Naresh K. Malhotra and Jon M. Hawes

ISBN 978-3-319-11100-1 ISBN 978-3-319-11101-8 (eBook)
DOI 10.1007/978-3-319-11101-8
Springer Cham Heidelberg New York Dordrecht London

Library of Congress Control Number: 2014951541

Printed on acid-free paper

Springer is part of Springer Science+Business Media (www.springer.com)

To Our Co-Sponsors

A Special Dedication

The planning and coordination of various activities for the successful completion of a major national conference involve considerable effort on the part of the individuals and substantial financing as well. Expenses related to activities such as communication, logistics, facilities, and printing cost must be met even before revenues are realized in the form of registration fees. The personnel, financial, and moral support extended by the co-sponsoring organizations plays a vital role in stimulating quality research and dissemination of knowledge related to marketing theory and practice. The officers and fellows of the Academy of Marketing Science express sincere appreciation for the cooperation and financial support provided by the co-sponsoring universities and colleges and businesses.

Co-Sponsoring Organizations

Georgia Institute of Technology
Rollins College
California State University at Fullerton
The University of Miami

SPECIAL ACKNOWLEDGEMENTS

OFFICERS OF THE ACADEMY

President
Douglass K. Hawes
University of Wyoming

Executive Vice President/Director
Harold W. Berkman
University of Miami

Vice President for Programs
Roger L. Jenkins
University of Tennessee

Vice President for Publications
Irene L. Lange
California State University
at Fullerton

Vice President for Membership/USA
Roy D. Adler
Xavier University

Vice President for Membership/Canada
V. H. Kirpalani
Concordia University

Vice President for Membership/International
V. V. "Kris" Bellur
Niagara University

Vice President for Academic Affairs
Kathleen A. Krentler
San Diego State University

Vice President for Development
David L. Kurtz
Seattle University

Vice President for Publicity & Public Relations
M. Wayne Delozier
University of South Carolina

Vice President for Finance & Treasurer
Glen Riecken
East Tennessee State University

Secretary
Rolph E. Anderson
Drexel University

Chairman, Board of Governors
Jay D. Lindquist
Western Michigan University

Board of Governors
Constance S. Bates
Kent L. Granzin
Paul E. Green
Erdener Kaynak
William Lazer
Robert A. Peterson
Bert Rosenbloom
Saeed Samiee
A. Coskun Samli
Jagdish N. Sheth
Mary Ann Stutts

Immediate Past President
Ivan R. Vernon
Cleveland State University

The Academy of Marketing Science Honors
as its Distinguished Marketer for 1986

Mr. Masaka Ogi
President, Fujitsu America, Inc.

1986
Conference Program Committee

Roger L. Jenkins University of Tennessee	*Vice President, Programs*
Julian W. Vincze Rollins College	*Program Chair*
Naresh K. Malhotra Georgia Institute of Technology	*Program Co-Chair and Proceedings Editor*

Track Chairs

Eric N. Berkowitz University of Massachusetts	*Consumer Behavior*
Michael Morris University of Central Florida	*Sales Force Management—Industrial Marketing*
Sandra M. Huszagh University of Georgia	*International Marketing*
Paul C. Thistlethwaite Western Illinois University	*Marketing Education*
J. S. (Vic) Johar California State University San Bernardino	*Marketing Management—Distribution, Pricing and Product*
Harvey W. Rubin Louisiana State University Shreveport	*Marketing Management—Promotion*
Rebecca M.J. Yates University of Dayton and **David A. Karns** Wright State University	*Marketing of Services*
C.P. Rao University of Arkansas	*Research Methodology*

Other Committee Members

Joseph O. Rentz University of Tennessee	*Chair, Doctoral Dissertation Competition*
C. Scott Greene California State University Fullerton	*Chair, Jane K. Fenyo Student Paper Competition*
Jon M. Hawes University of Akron	*Proceedings Co-Editor*
Irene Lange California State University, Fullerton	*Chair, Local Arrangements*
Richard Teach Georgia Institute of Technology	*Chair, Conference Promotion*
Lowell E. Crow Western Michigan University	*Director of Placement*

THE REVIEWERS

George Abshier
University of Southern Indiana

Roy D. Adler
Pepperdine University

Gerald Albaum
University of Oregon

Yao Apasu
Florida International University

Steve Ascroft
Mount St. Vincent University

Raj Arora
Bradley University

Ramone Avila
Ball State University

Nizamettin Aydin
Suffolk University

Ken Bahn
Virginia Polytechnic Institute and State University

Hiram C. Barksdale, Jr.
Georgia State University

Jonathon Barsky
University of San Francisco

Constance Bates
Florida International University

Douglas Behrman
Florida State University

John Beisel
Pittsburgh State University

Danny N. Bellenger
Texas Tech University

Tony D. Bennedetto
University of Kentucky

Mark L. Bennion
Bowling Green State University

Warren J. Bilkey
University of Wisconsin

Andrew Brogowicz
Western Michigan University

John R. Brooks, Jr.
West Texas State University

Roger Calantone
University of Kentucky

S. Tamer Cavusgil
Bradley University

Terry Chambers
Appalachian State University

Kenneth Chan
California State University at Chico

Terry Childers
University of Minnesota

Gary Clark
Northern Illinois University

Steve Clopton
University of South Carolina

William A. Cohen
California State University

Ernest Cooke
Memphis State University

Philip Cooper
University of Tulsa

Robert Cosenza
San Diego State University

William Crittenden
Northeastern University

Ken Crocker
Bowling Green State University

Joseph Cronin
University of Kentucky

Michael R. Czinkota
Georgetown University

Rajiv Dant
Appalachian State University

Rene Darmon
McGill University

Duane Davis
University of Central Florida

Ellen Day
University of Georgia

Ralph Day
Western Michigan University

Ulrike De Brétani
Concordia University

Peter J. DePaulo
University of Missouri at St. Louis

Rohit Deshpande
University of Texas at Austin

Susan P. Douglas
New York University

Cornelia Droge
McGill University

Jim Finlay
Western Illinois University

Ted Frederickson
College of St. Thomas

Barbara Frew
Rollins College

James Frew
Williamette University

Lowell Geddes
Mt. Saint Vincent University

Kyung-Il Ghymn
University of Nevado at Reno

Peter Gillette
University of Central Florida

Kate Gillespie
University of Texas at Austin

Mary Gilly
University of California at Irvine

George Glisan
Illinois State University

Linda L. Golden
University of Texas at Austin

Steve Goodwin
Bowling Green State University

Robert C. Green
University of Arkansas

Larry G. Gresham
Texas A & M University

Evelyn Gutman
Boston University

John Gwin
University of Virginia

Abdalla Hanafy
St. Cloud State University

Jon M. Hawes
University of Akron

Patricia Hopkins
California State Polytechnic University

Jo Ann Hopper
Southeastern Louisiana University

Roy Howell
Texas Tech University

Wayne Hoyer
University of Texas at Austin

Stephen Hutchens
Creighton University

Subhash C. Jain
University of Connecticut

Johny K. Johansson
University of Washington

Benoy Joseph
Cleveland State University

Mary Joyce
University of Central Florida

L. Lynn Judd
Louisiana State University in Shreveport

Mehmet Karafakioglu
Ball State University

Warren J. Keegan
Pace University

William J. Kehoe
University of Virginia

Bert Kellerman
Southeast Missouri State University

Inder Khera
Wright State University

Allen Khorami
Baruch College, CUNY

V. H. Kirpalani
Concordia University

Elko J. Kleinschmidt
McMaster University

Rustan Kosenko
McMaster University

Vinay Kothari
Stephen F. Austin State University

Kathleen A. Krentler
San Diego State University

E. M. Krishna
University of Arkansas

Erdogan Kumco
Ball State University

Bruce Lammers
California State University at Northridge

Jack Lesser
Miami University

William Lewis
University of Dayton

Marilyn L. Liebrenz
George Washington University

Jeen S. Lin
University of Toledo

Jay Lindley
Suffolk University

David Litvack
University of Ottawa

Robin Luke
Southwest Missouri State University

James R. Lumpkin
Baylor University

William J. Lundstrom
Old Dominion University

Steven Lysonski
University of Rhode Island

Karl Mann
University of South Carolina

Stephen McDaniel
Texas A & M University

Paul McDevitt
Sangamon State University

Daryl McKee
Louisiana State University in Shreveport

Ken McLeary
Central Michigan University

H. Lee Meadow
University of Lowell

Michael Menasco
University of California at Riverside

Ron Michaels
University of Kansas

Alan Miller
Bentley College

Joseph H. Miller
Southeastern Louisiana University

Stephen W. Miller
St. Louis University

William C. Moncrief
Texas Christian University

Russell Moore
Hofstra University

Linda Morris
University of Idaho

Jay Nathan
University of Scranton

James Nelson
University of Colorado

Hale Newcomer
North Texas State University

Jeff Nkonge
North Carolina A & T State University

Dick Nordstrom
California State University at Fresno

Vinay Pandit
St. Bonaventure University

Robin Peterson
New Mexico State University

Sue Petrosius
Bowling Green State University

Kathy L. Pettit
Washington State University

Linda Price
University of Pittsburgh

Jim Puetz
Western Illinois University

Samuel Rabino
Northeastern University

Don Rahtz
College of William and Mary

C. P. Rao
University of Arkansas

William Renforth
Florida International University

Richard Rexeisen
Georgia State University

Gillian Rice
University of Michigan at Flint

Mary Lou Roberts
Boston University

Richard Robinson
Marquette University

Fernando Robles
George Washington University

Ilkka A. Ronkainen
Georgetown University

Bert Rosenbloom
Drexel University

Andrew Ruppel
University of Virginia

John K. Ryans, Jr.
Kent State University

Saeed Samiee
Rutgers University

Deborah Scammon
University of Utah

John L. Schlacter
Arizona State University

Madhav Segal
Southern Illinois University at Edwardsville

Donald Self
Auburn University at Montgomery

Karim Shaikh
Western Illinois University

Mary Jane Sheffet
Indiana University

Jagdish N. Sheth
University of Southern California

M. Joseph Sirgy
Virginia Polytechnic Institute and State University

James H. Sood
American University

Cynthia L. Spanhel
University of Texas at Austin

Richard R. Still
Florida International University

Scott Smith
Brigham Young University

Thomas Speh
Miami University

Wilbur Stanton
Old Dominion University

Jack M. Starling
North Texas State University

William Strahle
Indiana University

Mary Ann Stutts
Southwest Texas State University

Aleta Styers
A.T. & T. Technologies

Cedric L. Suzman
So. Center for International Studies

John Swan
University of Alabama at Birmingham

Peter Tat
Memphis State University

Raymond E. Taylor
East Texas State University

Ronald Taylor
Mississippi State University

Eugene Teeple
University of Central Florida

Hans B. Thorelli
Indiana University

Vinod Thukral
Tulane University

Donna Tillman
California State Polytechnic University

Jeffery Tottef
McMurry College

Rosalie Tung
University of Pennsylvania

Lynette Unger
Miami University

Humberto Valencia
Texas Tech University

Bobby C. Vaught
Southwest Missouri State University

Alladi Venkatesh
University of California at Irvine

Julian Vincze
Rollins College

Harrie Vredenberg
McGill University

Alf Walle
University of Akron

Peter G. P. Walters
University of South Carolina

John Walton
Miami University

Pamela Weaver
Central Michigan University

Richard Weijo
College of St. Thomas

William Weeks
Washington State University

James R. Wills
University of Hawaii

Ugar Yavis
University of Petroleum and Minerals

Valarie Zeithaml
Texas A & M University

Belle Zimmerly
Columbus College

THE SESSION CHAIRPERSONS

Roy Adler
Pepperdine University

Kenneth Bahn
Virginia Polytechnic Institute and State University

Dan Brown
Oregon State University

Gary L. Clark
Northern Illinois University

William A. Cohen
California State University at Los Angeles

Michael R. Czinkota
Georgetown University

Duane Davis
University of Central Florida

Kathy Debevec
University of Massachusetts

Andrew C. Gross
Cleveland State University

Jon M. Hawes
University of Akron

Sandra M. Huszagh
University of Georgia

J. S. (Vic) Johar
California State University at San Bernardino

L. Lynn Judd
Louisiana State University in Shreveport

David A. Karns
Wright State University

Gurprit Kindra
University of Ottawa

V. H. Kirpalani
Concordia University

Julu Kothapa
Morris Brown College

Vinay Kothari
Stephen F. Austin State University

Kathleen A. Krentler
San Diego State University

Charles Lamb
Texas Christian University

William Lewis
University of Dayton

John Lindgren
University of Virginia

Robin Luke
Southwest Missouri State University

Oswald A. J. Mascarenhas
University of Detroit

Lance Masters
California State University at San Bernardino

Allan Miller
Bentley College

Michael H. Morris
University of Central Florida

Dick Nordstrom
California State University at Fresno

Ben A. Oumlil
University of Dayton

Vinay Pandit
St. Bonaventure University

Robin Peterson
New Mexico State University

George E. Prough
University of Akron

C. P. Rao
University of Arkansas

Joseph O. Rentz
University of Tennessee

Harvey W. Rubin
Louisiana State University in Shreveport

Saeed Samiee
University of South Carolina

A. Coskun Samli
Virginia Polytechnic Institute and State University

Robert W. Schaffer
California State Polytechnic University

Theodore F. Smith
Old Dominion University

Richard R. Still
Florida International University

John Thanopoulos
University of Akron

Kenneth Traynor
Clarion University of Pennsylvania

Lynette S. Unger
Miami University

M. Venkatesan
Wright State University

David Wheeler
Suffolk University

Rebecca M. J. Yates
University of Dayton

THE DISCUSSANTS

Roy Adler
Pepperdine University

Nick Anderson
University of Southern California

Steve Ascroft
Mount St. Vincent University

Kenneth Bahn
Virginia Polytechnic Institute and State University

E. Tansu Barker
University of Saskatchewan

Louis Capella
Mississippi State University

Gary Clark
Northern Illinois University

John Considine
LeMoyne College

Joe Cronin
University of Kentucky

Ellen Day
University of Georgia

Kathy Debevec
University of Massachusetts

Jim Findlay
Western Illinois University

Barbara Frew
Rollins College

James Frew
Willamette University

Kyung-Il Ghymn
University of Georgia

Robert C. Green
University of Arkansas

John Gwin
University of Virginia

Ron Hoverstad
Texas Christian University

Mary Joyce
Irwin Memorial Blood Bank

Abdella A. Hanafy
St. Cloud State University

John H. Holmes
Bowling Green State University

L. Lynn Judd
Louisiana State University in Shreveport

David Karns
Wright State University

Pam Kesavan
University of Detroit

Paul Y. Kim
Clarion University of Pennsylvania

Siva Kolla
Clarkson University

Vinay Kothari
Stephen F. Austin State University

William Lewis
University of Dayton

Marilyn L. Liebrenz
George Washington University

Robert H. Luke
Southwest Missouri State University

Lance A. Masters
California State University in San Bernardino

Paul McDevitt
Sangamon State University

Allan Miller
Bentley College

Joseph H. Miller
Southeastern Louisiana University

Stephen W. Miller
St. Louis University

Linda Morris
University of Idaho

Jay Nathan
University of Scranton

Dick Nordstrom
California State University at Fresno

Dan Rahtz
College of William and Mary

Nabil Razzouk
California State University at San Bernardino

Gillian Rice
University of Michigan at Flint

Fernando Robles
George Washington University

Harvey W. Rubin
Louisiana State University in Shreveport

Sandra L. Schmidt
University of Virginia

Vernon Stauble
California State Polytechnic University, Pomona

Margery Steinberg
University of Hartford

Vinod K. Thukral
Tulune University

Lynette Unger
Miami University

THE PANELISTS

G. C. Agrawal
University of Allahabad

Barry Berman
Hofstra University

A. R. Bhatia
California State University at San Barnardino

Herbert E. Brown
Wright State University

Ernest R. Cadotte
University of Tennessee

David C. Carsen
New Mexico State University

Rick Castaldi
San Diego State University

William A. Cohen
California State University at Los Angeles

Ernest Cooke
Memphis State University

David W. Cravens
Texas Christian University

Joe Cronin
University of Kentucky

V. Mukunda Das
Institute of Rural Management Anand, India

Duane Davis
University of Central Florida

Alex DeNoble
San Diego State University

O. C. Ferrell
Texas A & M University

Myron Gable
Shippensburg State University

James Richardson Gonzales
Minority Business Development Agency

Andrew C. Gross
Cleveland State University

Robert W. Haas
San Diego State University

Judy Hedden
Predicasts, Inc.

J. S. (Vic) Johar
California State University at San Bernardino

Thomas Kindel
University of Montevallo

A. Kumar
Punjab University

David L. Kurtz
Seattle University

Peter J. LaPlaca
University of Connecticut

Dale M. Lewison
University of Akron

Harold Lucius
Jackson State University

David Ludington
Saint Mary's College

James McCullough
Washington State University

Michael Menasco
University of California at Riverside

Michael H. Mescon
Georgia State University

Michael H. Morris
University of Central Florida

El-Sayed A. Nagy
Kuwait University

Jay Nathan
University of Scranton

J.A.F. Nicholls
Florida International University

Gordon Paul
University of Central Florida

Kazuhiko Okuda
Senshu University

George Plosker
Lockheed - Dialog

Kanthi Prasad
University of Wisconsin at Milwaukee

George E. Prough
University of Akron

Don Rahtz
College of William and Mary

K. R. Rao
College of India

S. R. Rao
Cleveland State University

Sydney Roslow
Florida International University

Harvey W. Rubin
Louisiana State University in Shreveport

Sharad Sarin
XLRI - Institute of Management & Labor Studies, India

L.V.L.N. Sarma
Indian Institute of Technology

Robert W. Schaffer
California State Polytechnic University

Beheruz N. Sethna
Clarkson University

D. Shah
Foreign Merchants Association of Atlanta

Joseph M. Sirgy
Virginia Polytechnic Institute and State University

Theodore F. Smith
Old Dominion University

Chin Tiong Tan
National University of Singapore

Richard D. Teach
Georgia Institute of Technology

Martin Topol
Pace University

Kenneth Traynor
Clarion University of Pennsylvania

Samuel H. Turner
The Life Insurance Company of Virginia

Alladi Venkatesh
University of California at Irvine

Gopu Venkateswamy
Osmania University

J. A. Vera
St. Cloud State University

Linda Wolfe
Small Business Institute, Indianapolis

Norio Yamagihara
Kyoto Sangyo University

FOREWORD

It has been an honor to edit DEVELOPMENTS IN MARKETING SCIENCE, VOLUME IX, the PROCEEDINGS of the 1986 Annual Conference of the Academy of Marketing Science held in Anaheim.

This volume contains 121 papers on contemporary marketing topics authored or coauthored by 188 individuals. The quality and variety of papers included in the 1986 PROCEEDINGS make it unique in the history of the Academy of Marketing Science. Of these 121 papers, 97 papers were accepted for competitive sessions and 24 for research in progress. The competitive session as well as research in progress session papers were reviewed in the usual double-blind refereeing process by two or more individuals qualified in the given area. Based on the evaluation and recommendations of the reviewers, papers accepted for presentation at the conference have been grouped into relevant marketing areas. For the 1986 Annual Conference, the overall acceptance rate for competitive session papers was about 50%. This reflects significant rigor in paper evaluation.

The format of the special sessions ranges from panel discussion to formal presentations to empirical demonstrations. They encompass a wide variety of topics from around the world. In general, the special sessions, competitive sessions and research in progress sessions complement each other; collectively they result in a balanced conference offering something of interest to virtually everyone in attendance.

Publishing of the PROCEEDINGS depended directly or indirectly on the help and cooperation of many individuals. The program chairman, the track chairman, 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 at Georgia Tech were helpful. Dean, Gerald J. Day and Assistant Dean, Andrew J. Cooper, III of the College of Management provided encouragement and a lot of necessary administrative support. Scott Gabeline and Christopher Kavalec in the graduate program provided excellent assistance. Other institutions also extended their support. In particular the University of Miami, University of Tennessee, and Rollins College provided valuable administrative assistance.

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

In preparing this publication, I have exercised a great deal of care to minimize errors and omissions. My sincere apologies to those who are affected by any mistakes which may still remain.

April 30, 1986

Naresh K. Malhotra, Ph.D.
Georgia Institute of Technology

PREFACE

The Revised Articles of Association of the Academy, approved by the Board of Governors in the Spring of 1984 and by the general membership in the Fall of that year, defines the mission of the Academy as follows:

1. Provide leadership in exploring the normative boundaries of marketing, while simultaneously seeking new ways of bringing theory and practice into practicable conjunction.
2. Further the science of marketing throughout the world by promoting the conduct of research and the dissemination of research results.
3. Provide a forum for the study and improvement of marketing as an economic, ethical, and social and political force and process.
4. 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.
5. Provide publishing media and facilities for Fellows of the Academy and reviewer assistance on Fellows' scholarly articles.
6. 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.
7. Assist Fellows in the better utilization of their professional marketing talents through redirection, reassignment and relocation.
8. 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.
9. Seek means for establishing student scholarships and professional university chairs in the field of marketing.
10. Offer Fellow of the Academy status to business and institutional executives and organizations.
11. Modify the Academy's purpose and direction as the influence of time and appropriate constructive forces may dictate.

The Academy was founded in 1971, held its first national Annual Conference in 1977 (in Akron, Ohio), and has grown and prospered ever since. The relevancy of the Academy's mission and activities to our chosen target market of the marketing professoriate has been a key factor in attracting the discipline's best and brightest from all over the world.

With foreign members and subscribing institutions in excess of 150, the Academy's international thrust and recognition is significant. In order to further our exposure to our colleagues overseas, the Executive Council recently decided that the Academy should hold a biennial "off-shore" Conference. This Conference has been held in Nova Scotia in 1983 and in Scotland in 1985. The site for 1987 will be announced soon.

The *Journal of the Academy of Marketing Science*, edited by Irene Lange, continues to make major strides in its development. A DEST Automatic Document Reader has been acquired to allow the automatic reading of manuscripts into the photo-typesetter and attendant word-processor. This should further speed up manuscript processing and reduce costs and errors. Effective with Vol. 14, No. 1, *JAMS* will be published quarterly in an 8½ × 11 format with a new cover design.

These Conference *Proceedings*, the Academy Monograph Series, the annual Membership Directory, and the (now) quarterly *Newsletter* comprise the rest of the Academy's publications. All of these are vehicles for the dissemination of the ever-increasing knowledge base in the discipline of Marketing and provide a stimulating forum for the Fellows (members) of the Academy for the exchange of new ideas and the rethinking of old ones.

On behalf of the Officers and Board of Governors of the Academy, I want to sincerely thank Roger L. Jenkins, the Vice President for Programs, under whose overall aegis this Conference was developed. Especial thanks for all the long hours and hard work of actually "doing" the Conference go to Julian Vinze, the 1986 Conference Program Chair. In the same breath, equally appreciative thanks for long hours and hard work go to Naresh Malhotra, the Editor of these *Proceedings*. Irene Lange and her staff have done a superb job in overseeing all the local arrangements here in Anaheim.

Finally, congratulations to all the authors whose papers survived the tough screening process and appear in these *Proceedings*. Therein is the very heart and soul of this Conference. All of the track chairpeople, session chairs, panel members and discussants also rate a special salute for their important contributions to the success of this Conference. The Academy is particularly appreciative of all the financial and moral support given to the Conference (and the Academy) by Cal State-Fullerton and our other conference cosponsors.

We hope you have an enjoyable and professionally rewarding meeting, and will participate again next year in Miami Beach, Florida, at the Sheraton Bal Harbour Hotel, May 27–30, 1987.

April 30, 1986
Anaheim, California

Douglass K. Hawes, Ph.D.
President

TABLE OF CONTENTS

CONSUMER BEHAVIOR

CONSUMER VALUES ON THE TEXAS-MEXICO BORDER

Gary E. Popp and Willard B. Platzer, Pan American University

Abstract

This paper addresses the importance of basic cultural values in Anglo-Americans, Mexican citizens, and residents of the United States-Mexico border. The findings indicate that different cultural backgrounds affect values, but that border residents express values which differ from both the United States and Mexican cultures. Implications for consumer behavior and marketing strategy are discussed.

Introduction

Research on the Hispanic cultural influence on Consumer Behavior has become increasingly important given its size and rate of growth. Universal marketing practices have not always been helpful over a variety of economic, cultural and political environments. As a result, a new emphasis on identifying pertinent practices specific to national setting has appeared (Negandi and Roney, 1977). More recent, Adler (1983), in a review of twenty-four major management journals, stressed the necessity of additional cross-cultural studies to keep pace with multinational corporate reality.

There are a few contemporary studies which suggest a correlation between human values and consumer behavior (Vinson & Munson, 1976; Henry, 1976; Vinson, Scott & Lamont, 1977; Omura, 1980). However, there has been a paucity of research which is specifically devoted to human values and resulting consumer behavior. The importance of human value systems in determining differences in subcultures is also sparse (Munson & McIntyre, 1979).

Few cross-cultural behavioral topics have generated more interest than human values, beliefs, and attitudes, and their effects on the motivational process and on resulting behavior. References to human behavior were made by philosophers such as Aristotle and Kant as they discussed aesthetics, and Plato, Hobbes, and Rousseau concerning government and citizen responsibility. Values were contemplated by societal leaders from Alexander the Great to Winston Churchill when reviewing strategies for motivating and leading citizens and subordinates.

In the last twenty-five years a substantial, but at times inconsistent, body of value literature has been explored in psychology, sociology, consumer behavior and organization behavior that support the notion that values do indeed affect subsequent behavior. Clawson and Vinson (1978) have provided a rich historical perspective and review of research of human values by marketers. They conclude that there has possible been more utilization of value concepts in marketing practice than in academic research.

Guth & Tagiuri (1965) found that values influence corporate strategy decisions. Others suggest that differing value systems can result in human relations conflict (McMurray, 1963; Flores and Catalanello, 1983), difficulty in manager-subordinate relations (Munson and Posner, 1980) and Indices of Managerial Success (England and Lee, 1974; Haire, 1966). In recent years international management researchers have increased their interests in cross-cultural effects on value orientation (Hudson and Ruiz, 1983; Catalanello and Flores, 1984; Badr, et al, 1981). Considerable evidence is found in the literature that supports the proposition that personal value systems have an effective impact on actual decision making (Hughes, et al, 1976; Sikula, 1971; Tagiuri, 1965; Senger, 1970; Manley, 1972; England, 1973; Farris, 1973; among others). This reported relationship between personal value structures and decision making is certainly an important factor in the resurgence of interest in cross-cultural research.

The Nature of Values

Value definitions, which at times differ in only minor aspects, are generally consistent in their global meanings. Athos and Cofey (1968) define values as "ideas about what is desirable." Guth and Tagiuri (1965) also suggest values are desirable end states. Kluckholn et al (1962), likewise defines values as "a conception, explicit or implicit...of the desirable which influences the selection from among available modes, means, and ends of action." Conner & Becker (1975) state that "values may be thought of as global beliefs about a desirable and behavioral process." England (1967) contends that "the personal value system is viewed as a relatively permanent perceptual framework which shapes and influences the general nature of an individual's behavior." Perhaps the most widely adopted concept of values is that developed by Rokeach (1973) who states:

> To say that a person has a value is to say that he has an enduring prescriptive or belief that a specific mode of behavior or end-state of existence is preferred to an opposite mode of behavior or end-state. This belief transcends attitudes toward objects and toward objects and situations, idealogy, presentations of self to others, and attempts to influence others.

Present Study and Methodology

To examine possible cross-cultural effects on values structures, two national groups of MBA students and two groups of undergraduate senior students residing along the Texas-Mexico border were included in this study. Most of the MBA respondents were practicing executives or professionals who attended classes part-time in the evenings. American and Mexican nationals comprised the two samples selected. The null hypothesis to be tested was that the value orientations of the sample groups were not significantly different from each other.

The author chose the Allport instrument to measure value orientations. The primary reason Allport was utilized in this study was because the authors had comparable data from other national groups.

The relative prominence of six major values: theoretical, economical, aesthetic, social, political, and religious were measured utilizing the Study of Values: A Scale for Measuring the Dominant Interest in Personality, developed by Allport, Vernon and Lindzey (1960). This self-report instrument was administered to 46 Anglo-American MBA students, and 125 (46 Anglo-American MBA students and 79 Mexican-American) undergraduate students. The graduate group attended a major graduate school of business located in a large metropolitan city while the undergraduates were seniors in a medium sized university located on the border. Calculated scores indicate the relative preference of the individual respondent in each of the six value areas, and usually indicate a clear basis for rank-ordering the preference. The results were also compared to a group of 31 Mexican MBA students enrolled in the National University in Mexico City (Hudson and Ruiz, 1983).

Limitations

Allport, Vernon and Lindzey regard Spranger's work as "defending the view that the personalities of men are best known through a study of their values or evaluative attitudes." They note that: In selecting his six types, Spranger may be said to hold a somewhat flattering view of human nature. He does not allow for formless or valueless personalities, nor for those who follow an expedient or hedonistic philosophy of life. The neglect of sheerly sensuous values is a special weakness in his typology. His attempt to reduce hedonistic choices partly to economic and partly to aesthetic values seems unconvincing. If the present scale appears to the user to take a somewhat exalted view of the organization of personality - neglecting both the "baser" values and values that are not permitted to reach the level of conscious choice - the limitations must be regarded as inherent in Spranger's original formulation.

The comparison of MBA students and senior undergraduate students may be suspect if the measured values are acquired as a result of graduate instruction or the additional maturity associated with graduate students. The authors recognize this limitation, but subscribe to the belief that the basic values which are measured by the chosen instrument are acquired at an earlier age and therefore the groups are likely to be comparable.

Allport, Vernon and Lindzey's description of Spranger's six value types are found in Exhibit 1.

EXHIBIT 1

1. The Theoretical. The dominant interest of the theoretical man is the discovery of truth. In the pursuit of this goal he characteristically takes a "cognitive" attitude, one that looks for identities and differences; one that divests itself of judgments regarding the beauty or utility of objects, and seeks only to observe and to reason. Since the interests of the theoretical man are empirical, critical, and rational, he is necessarily an intellectualist, frequently a scientist or philosopher. His chief aim in life is to order and systematize his knowledge.

2. The Economic. The economic man is characteristically interested in what is useful. Based originally upon the satisfaction of bodily needs (self-preservation), the interest in utilities develops to embrace the practical affairs of the business world - the production, marketing, and consumption of goods, the elaboration of credit, and the accumulation of tangible wealth. This type is thoroughly "practical" and conforms well to the prevailing stereotype of the average American businessman.

The economic attitude frequently comes into conflict with other values. The economic man wants education to be practical, and regards unapplied knowledge as waste. Great facts of engineering and application result from the demands economic men make upon science. The value of utility likewise conflict with the aesthetic value, except when art serves commercial ends. In his personal life the economic man is likely to confuse luxury with beauty. In his relations with people he is more likely to be interested in surpassing them in wealth than in dominating them (political attitude). In some cases the economic may may be said to make his religion the workshop of Mammon. In other instances, however, he may have regard for the traditional God, but inclines to consider Him as the giver of good gifts, of wealth, prosperity, and other tangible blessings.

3. The Aesthetic. The aesthetic man sees his highest value in form and harmony. Each single experience is judged from the standpoint of race, symmetry, or fitness. He regards life as a procession of events; each single impression is enjoyed for its own sake. He need not be a creative artist, nor need to be effete; he is aesthetic if he but finds his chief interest in the artistic episodes of life.

The aesthetic attitude is, in a sense, diametrically opposed to the theoretical; the former is concerned with the diversity, and the latter with the identities of experience. The aesthetic man either chooses, with Keats, to consider truth as equivalent to beauty, or agrees with Mencken, that "to make a thing charming is a million times more important than to come to make it true." In the economic sphere the aesthete sees the process of manufacturing, advertising, and trade as a wholesale destruction of the values most important to him. In social affairs he may be said to be interested in persons but not in the welfare of persons; he tends toward individualism and self-sufficiency. Aesthetic people often like the beautiful insignia of pomp and power but oppose political activity when it makes for the repression of individuality. In the field of religion they are likely to confuse beauty with purer religious experience.

4. The Social. The highest value for this type is love of people. In the Study of Values it is the altruistic or philanthropic aspect of love that is measured. The social man prizes other persons as ends, and is therefore himself kind, sympathetic, and unselfish. He is likely to find the theoretical, economic, and aesthetic attitudes cold and inhuman. In contrast to the political type, the social man regards love as itself the only suitable form of human relationship. Spranger adds that in its purest form the social interest is selfless and tends to approach very closely to the religious attitude.

5. The Political. The political man is interested primarily in power. His activities are not necessarily within the narrow field of politics; but whatever his vocation, he betrays himself as a Machtemensch. Leaders in any field generally have high power value. Since competition and struggle play a large part in all life, many philosophers have seen power as the most universal and most fundamental of motives. There are, however, certain personalities in whom the desire for a direct expression of this motive is uppermost, who wish above all else for personal power, influence, and renown.

6. The Religious. The highest value of the religious man may be called unity. He is mystical, and seeks to comprehend the cosmos as a whole, to relate himself to its embracing totality. Spranger defines the religious man as one "whose mental structure is permanently directed to the creation of the highest and absolutely satisfying value experience." Some men of this type are "immanent mystics," that is, they find their religious experience in the affirmation of life and in active participation therein. A Faust with his zest and enthusiasm sees something divine in every event. The "transcendental mystic," on the other hand, seeks to unite himself with a higher reality by withdrawing from life; he is the ascetic, and like the holy men of India, finds the experience of unity through self-denial and mediation. It many individuals the negation and affirmation of life alternate to yield the greatest satisfaction.

Results

The results of the study is indicated in Table One. This table indicates the mean ranking of each value set for the two national groups. To determine the relationship between the two sets of rankings, Spearman's rank correlation coefficient rho was calculated. This analysis supports the position that the two sets of rankings are significantly different and come from two distinct populations.

A visual examination of Table One indicates that all six values were ranked differently by the Anglo-American sample when compared to the Mexican group. For the U.S group the top ranking value was economic with the political variable ranking second. For the Mexican group the economic ranking was fourth while the political ranking was fifth. The two most important value sets for the Mexican sample were aesthetic and social, respectively. The only shared value ranking for both groups was religion, which was viewed as the least important, ranking sixth. For the Mexican group, the most important values were listed as the aesthetic and social dimensions, respectively. Lastly, the theoretical consideration was ranked third by the Mexicans and fourth by the Americans.

TABLE 1

Values	Anglo American [n=46] Score	Rank	Mexican MBA [n=31] Score	Rank
Economic	45.9	1	37	4
Political	43.3	2	36	5
Aesthetic	43.2	3	47	1
Theoretical	41.4	4	41	3
Social	35.7	5	43	2
Religious	30.5	6	36	6

Spearman's rho = 0.0857, p < .90 (one tail)

TABLE 2

Values	Border Anglo-Am. [n=46] Score	Rank	Border Mex.-Am. [n=79] Score	Rank
Economic	45.9	1	45.9	1
Political	42.7	2	41.3	2
Aesthetic	39.0	4	35.5	6
Theoretical	39.3	3	40.4	3
Social	34.5	6	38.9	4
Religious	38.6	5	38.1	5

Spearman's rho = 0.7714, p < .05 (one tail)

Table Two indicates the mean ranking for the two border groups. Spearman's rank correlation coefficient was calculated to determine the relationship. The value of the coefficient supports the position that the two groups are from the same population.

Visually examining Table Two indicates that the two groups differed only on the ranking of the aesthetic and social values.

The Anglo-American group ranked aesthetic values fourth and social values sixth with the Mexican-American group ranking them just the reverse.

The authors plan to do more intensive analysis on the data in order to get a better measure of the similarities and differences between the groups.

Discussion

Possible implications from this study are very interesting and potentially very valuable to the marketer. From a consumer behavior perspective, cultural differences in personal value orientation may account to some extent for nation and/or region specific purchase behaviors and product preferences. Marketers who are courting the Hispanic market, for example, may wish to alter their strategy in the border regions. It appears that the basic values which are held by the border residents differ in importance when compared with the values held by consumers (either Anglo or Mexican) who reside in the interior of the country.

Further research should help clarify the differences in values which are due to culture and subcultural influences from differences due to regional variations within a dominant culture. The use of a more detailed instrument, such as the Rokeach scale, may aid in pinpointing differences which would allow marketers to employ more effective strategy.

Obviously, care should be exercised in applying these results. Future replications should increase the low sample sizes. Admittedly, no claim is made that the two samples utilized are representative of all students in the sample groups. Difficulties are also encountered when using student samples. The present study adds to the growing body of literature suggesting additional explanations of differences based on cross-cultural factors. More cross-culture research of values is needed with various demographic, professional, and personal values on students, employees, managers, and consumers to determine similarities and differences cultural attributes in various settings. The authors are currently in the process of gathering data in various countries that reflect a wide variety of organizational ranks, cultures, languages, and political, educational, and business systems.

References

Adler, N. J., "Cross-Cultural Management Research: The Ostrich and the Trend," Academy of Management Review, Vol. 8, No. 2 (1983).

Allport, G. W., Philip E. Vernon, and Gardner Lindzey. Manual Study of Values: A Scale for Measuring the Dominant Interest in Personality." Boston: Houghton Mifflin Company, 1960.

Badr, H. A., E. R. Gray, and B. L. Kedia, "Personal Values & Managerial Decision Making: Evidence From Two Cultures," Management International Review, Vol. 22.

Conner, Patrick E. and Becker, Baris W., "Values and the Organization: Suggestions for Research." Academy of Management Journal, 18:3-4 (September 1975), pp. 550-551.

England, G. W and R. Lee. "The Relationship Between Managerial Values and Managerial Success in the United States, Japan, India and Australia," Journal of Applied Psychology, Vol. 59, No. 4 (1974), pp. 411-419.

England, G. W., "Personal Value Systems and Expected Behavior of Managers--A Comparative Study in Japan, Korea, and the United States." Management Research: A Cross-Cultural Perspective. Edited by Desmond Graves. San Francisco: Jossey-Bass, Inc., Publishers, 1973.

England, G. W., "Personal Value Systems of American Managers." Academy of Management Journal, 10 (1967), p. 15-27.

Farris, Martin T., "Purchasing Recirpocity and Antitrust." Journal of Purchasing (February 1973), p. 15-27.

Flores, Luis G. and R. F. Catalanello, "A Comparative Analysis of Personal Values Be tween Managers and Non-Managers: The Case of Peru," Academy of International Business, Mexico City (April, 1983).

Guth, William D. and Renato Tagiuri, "Personal Values and Corporate Strategy," Harvard Business Review (September-October 1965), pp. 123-32.

Haire, M., E. E. Ghiselli and L. W. Porter, Managerial Thinking: An International Study (New York: Wiley, 1966).

Hudson, D. R. and J. Q. Ruiz, "A Personal Values Assessment of Mexican MBAs," Academy of International Business, Mexico City (April, 1983).

Hughes, G. David, Vethala R. Rao, and Henry A. Alker, "The Influence of Values, In formation and Decision Orders on a Public Policy Decision." Journal of Applied Social Psychology, 6,2 (April-June 1976), pp. 145-158.

Orders on a Public Policy Decision." Journal of Applied Social Psychology, 6,2 (April-June 1976), pp. 145-158.

Kluckholn, C., et al., "Values and Value Orientation in the Theory of Action." Toward a General Theory of Action, New York: Harper & Row, 1962.

Kelley, Lane and Reginald Worthley, "The Role of Culture in Comparative Management," Academy of Management Journal, Vol 24 (1981), pp. 164-73.

Lee, Ramand, "The Relationship Between Managerial Values and Managerial Behavior: A Cross-Cultural Cross-Validation Study." Unpublished Ph. D. dissertation, University of Minnesota, 1975.

Manley, Tomas Roger, "Personal Value Systems of Managers and the Operative Goals of Organization: An In-Depth Analysis of One firm." Unpublished Ph.D. dissertation, Renselaer Polytechnic Institute, 1972.

McMurray, N. N., "Conflict in Human Values," Harvard Business Review, Vol. 40, pp. 130-145.

Munson, J. M., and S. H. McIntyre. Developing Practical Procedures for the Measure ment of Personal Values in Cross-Cultural Marketing. Journal of Marketing Research 16 (1979):55-60.

Munson,J. M. and B. Z. Posner, Concurrent Validation of Two Value Inventories in Predicting Job Classification and Success of Organizational Personnel," Journal of Applied Psychology (1980):536-542.

Negandhi, A. R. and D. Robey, "Understanding Organizational Behavior in Multi- national and Multicultural Settings," Human Resource Management, Spring 1977, pp. 16-23.

Ouchi, William G., Theory Z (Reading, Mass.: Addison-Wesley, 1981).

Rokeach, Milton, The Nature of Human Values. New York, Free Press, 1973.

Senger, John, "The Religious Manager." Academy of Management Journal, 13(June 1970), pp. 179-186.

Siegel, S., Nonparametric Statistics for the Behavioral Sciences (New York: McGraw-Hill, 1956).

Sikula, Andrew F., "Values and Value Systems: Relationship to Personal Goals." Personnel Journal,50 (April 1971), pp. 310-312.

Spranger, Eduard, Types of Men. Translated from 5th edition of Lebensformen by Paul J. W. Pigors. Halle: Max Niemeyer Verlag, 1928.

Tagiuri, Renato, "Value Orientations and the Relationships of Managers and Scientists," Administrative Science Quarterly, June 1965, pp. 39-51.

Whiteley, W. and G.W. England. "Managerial Values as a Reflection of Culture and the Process of Industrialization," Academy of Management Journal, Vol. 20, No. 3 (1977), pp. 439-453.

DUAL CAREER HOUSEHOLDS AND CONSUMER SOCIALIZATION

Lucy L. Henke, University of Lowell

ABSTRACT

This exploratory study examined differences in consumer socialization by household income type. Personal interviews were conducted with 81 children from fifty single-income, one and one-half income, and two-income households. Discriminant analysis revealed a significant function which distinguished among the three household types on the basis of children's 1) consumer skill behaviors, 2) consumer nonskill behaviors, and 3) related media use and psychographic data. Children from dual career households demonstrate higher levels of brand differentiation, rely more on trusted stores in making purchase decisions and have higher educational goals.

Recent studies of the family consumer decision making process have focused on the increasingly common phenomenon of the working wife in attempts to determine the effects of wife's employment status on purchase influence structure, family expenditure patterns, household management style, and consumption of various time-saving products and services [2,3,4,5,6,8]. The concept of the working wife as working mother, however, has not played a central role in the conceptualization of such studies; thus the effect of wife employment on children's consumer socialization has been studied only as a peripheral issue, viewed largely in terms of household production and the sharing and execution of household chores. The present study is an exploratory study of the effects of second spouse employment status on consumer socialization.

Previous research suggests that the wife's employment status will have an effect on consumer socialization. Ward, Wackman and Wartella [7], for example, propose that children's consumer learning is related to parental behavior in at least two ways: children observe parents' consumer-related behaviors and parents determine the extent and nature of the child's direct consumer experiences. Both of these variables -- parent's consumer experiences and children's direct experience -- have been shown to be related to wife employment status. Nickols and Fox [3], for example, found that employed wives differ in household management and product consumption because they purchase meals and other goods and services away from home and use child care services significantly more often than unemployed wives. In another study, Reilly [4] found that a wife's employment status was related to purchase and ownership of time-saving durables. Given the unique consumption characteristics of working - wife households, children's observations of parent's consumer behavior, children's experiences with products, and, therefore, children's consumer learning will differ with mother's employment status.

Previous research provides little evidence to suggest which consumer learning variables will be affected, in what way, by mother's employment status. Development of brand differentiation among children was found to be one of the variables affected by a more varied consumption environment [1]; but other variables related to consumer decision-making might be expected to vary as well. The consumer-learning variables included in the present study were chosen to represent three distinct categories: 1) consumer skill behaviors and 2) consumer nonskill behaviors (as identified by Ward, et. al) [7]; and 3) related media, psychographic, and other classification variables.

Previous research helps to clarify the way in which mother's employment should be defined. Past studies of the effects of second spouse employment have resulted in conflicting findings, which may be explained in part by the failure to distinguish between part-time jobs and full-time careers. Many studies which use a dichotomous measure of employment report no relationship between second spouse employment and consumer-related variables [8]; while researchers who adopt more sophisticated measures often find those relationships to be significant [2,4]. The present study, therefore, distinguishes between part-time and full-time employment.

Specifically, the purpose of the present study is twofold:

1. To assess consumer skill behaviors, consumer nonskill behaviors, and related media, psychographic, and other classification characteristics of children from single-income, one and one-half income, and dual income households.

2. To differentiate between children in single income households, children in one and one-half income households, and children in dual income households on the basis of three categories of consumer-learning related variables.

Based on current theoretical perspective and previous research, the following general hypothesis was generated:

H: A statistically significant function can be derived which will discriminate among children from three types of households: single income, one and one-half income and dual income households.

METHOD

Personal interviews were conducted with children from fifty families, yielding a convenience sample of 81 children between the ages of seven and fifteen. Parents of each child were also interviewed, to develop a measure of independence of children's brand and store preferences. Questionnaires included roughly 75 questions designed to assess consumer skills in decision-making;

consumer nonskill behaviors and preferences; and media use and plans for educational achievement. In addition, demographic data, including number and status of wage earners, were collected for each household.

Consumer Skill Variables

Children rated seven factors for their importance in helping to decide what to buy, on a five point scale, with 1 being "not at all important" and 5 being "very important."

Consumer Nonskill Variables

Parents' responses were used to identify children's independent brand and store preferences. Children were asked to name their favorite brands and retail stores for the purchase of each of 31 different product categories. The product categories included personal items, such as soaps and shampoos, fast food meals, and consumer durables, among others. Responses which differed from the child's parents' responses were identified as independent brand or store preferences and were coded as "1". Responses were summed across the 31 measures to create an independent preference index for brands as well as for stores.

Media Use

Respondents rated frequency of readership of newspapers and magazines, as well as frequency of viewing network news and other television programs, using a five point scale, with 1 being "never (read/watch)" and 5 being "(read/watch) every day it's available."

RESULTS

The results of the study are reported in two parts:

1. Overall results of aggregate responses, and

2. Discriminant analysis of a set of classification variables to differentiate among children from single, one and one-half, and dual income households.

Consumer Skill Variables: Influence Factors

Among the most important factors in a child's decision making was "a store you can trust." Other considerations deemed important included having a well-known brand, having the lowest price, and purchasing from a knowledgeable salesperson. Means are reported in Table 1.

Consumer Nonskill Variables: Brand and Store Preference

Of the 31 product categories tested, children in the sample identified an average of 12.43 brand preferences different from their parents. In addition, children's favorite retail outlets differed from their parents' stated favorites an average of 7.98 times, per child.

TABLE I

Importance of Influence Factors in Consumer Decision Making

	Group Means*
From a store you can trust	3.80
Having a well-known brand	3.53
Lowest Price	3.43
A knowledgeable salesperson	3.41
Information in ads or commercials	2.71
Being able to charge it	2.12
Being able to have it delivered	1.73

*On a scale of 1 to 5, with 1 being "not at all important" consideration in helping you decide what to buy.

Related Media and Psychographic Variables

Newspapers and television programs were given highest ratings for frequency of use, averaging 3.80 and 3.70 on the five point scale. Network news viewing, at 3.51, and magazine readership, at 3.31, followed. Means are reported in Table 2.

TABLE II

Media Use

	Group Means*
Daily newspaper readership	3.80
Television program viewing	3.70
Network news viewing	3.51
Magazine readership	3.31

*On a scale of 1 to 5, with 1 being "never read/watch" and 5 being "read/watch every day it's available."

Children were asked to indicate the highest level of education they intended to achieve. Intention to graduate from high school was coded as a "1", college, a "2"; and to do post graduate work, a "3". Mean score for the total sample was 1.74.

Household Income Classification: Discriminant Analysis

Depending on parent's employment status, children were categorized as members of single income households, one and one-half income households or dual income households. Results showed that 45% fell into the single income category; 41% the one and one-half income; and 13% the dual income. Membership in one of the three household income categories became the focus for an analysis of which product decision making variables, media variables, or achievement variables would best predict group membership.

A stepwise discriminant analysis was conducted using the consumer skill variables of ratings of influence factors in consumer decision making; consumer nonskill variables of brand and store preference; media use variables, and plans for education. Seven of the variables were included in the solution. For inclusion in the solution, a variable had to produce a change in the selection criterion (via Wilks' lambda) that was significant at the .05 level.

The results of the canonical discriminant analysis produced one function which was statistically significant beyond the .001 level, thus confirming the general hypothesis. The function is composed of seven predictor variables, each contributing to the function's discriminant ability (R^2=.399).

Standardized canonical discriminant coefficients are presented in Table 3. They are listed in order of their relative contribution to the overall solution. By interpreting the sign and magnitude of the coefficients and examining individual group means, one can assess both the relative contribution of the variable and its directionality.

TABLE III

Standardized Canonical Discriminant Function

Coefficients: Three Household Income Groups

Variable	Coefficient
Availability of delivery	.889
Independent store preferences	-.781
From a trusted store	.689
Plans for educational achievement	-.475
Network news viewing	-.462
Independent brand preference	.304

Contributing the most to the discriminant function was the rating of the importance of being able to have delivery of the purchased item (.899), favored by children from one and one-half income households. The next variable making the greatest contribution to the function was the independent store preference index (-0.781), highest among children from one income households.

The third most significant contributing variable was the importance of buying from a store you can trust (.689); children from dual income households rated a trusted store more important than children from one and one-half income households, who rated it higher than those from one income households.

Plan for educational achievement was the fourth contributing variable (-0.475), highest for dual income household children (mean score 2.5). Network news viewing (-0.462) and independent brand preferences (.304) made the final contributions to the function, each highest among dual income household children.

When the resulting discriminant function was applied to the data set to test its classification power, the overall figure for correct classification was 76%.

The discriminant analysis thus revealed a series of classification variables which helped to differentiate among the children from three household income categories.

DISCUSSION

The results of the study suggest that differences in consumer socialization are related to the number of household wage earners. Specifically, children from households with two full-time wage earners: 1) rely more on trusted stores in making consumer decisions; 2) have greater brand differentiation and brand preference levels, 3) view network news with greater frequency, and 4) have higher educational goals.

In addition, the study findings distinguish between part-time and full-time wage earners. Children from households with one full-time and one part-time wage earner differ from others in that: 1) availability of delivery is a more important consideration in making consumer decisions, and 2) differentiation between retail outlets is low.

The first implication of this study is that one must distinguish between types of employment in constructing any wage earner typology. Working wives, working mothers, or working spouses should be further defined and more clearly operationalized to enhance the utility of the variable as a predictor of consumer socialization.

The second major implication is that advertisers and those who market goods and services to children might be well-advised to consider the wage earner typology of the household. Number of household wage earners predicts the ways in which differences in information acquisition, consumer decision-making, and achievement orientation will combine to form three distinct consumer market segments. Marketing campaigns must recognize the distinction and employ focused and qualitatively different approaches in appealing to the three separate types of consumers.

Finally, while not conclusive in these data, the study results imply the emergence of a new class of consumers -- brand-wise children from dual-income households who are more affluent, more sophisticated, and more cosmopolitan in orientation. Evidence for this argument can be found in the higher brand differentiation levels, heavier appetite for national news, and higher personal goals among children of dual-income households. Perhaps given greater latitude in purchase decisions, they develop brand preferences and a purchase decision-making style of their own. A new breed of young consumer may provide interesting challenges for marketers, challenges which become increasingly important as the number of dual-income households grows.

REFERENCES

Belk, Russell, Robert Mayer and Amy Driscoll, "Children's Recognition of Consumption Symbolism in Children's Products," Journal of Consumer Research, 10 (March), 386-397, (1983).

Bellante, Don and Ann C. Foster (1984), "Working Wives and Expenditure on Services," Journal of Consumer Research, 11 (September), 700-707.

Nickols, Sharon Y. and Karen D. Fox (1983), "Buying Time and Saving Time: Strategies for Managing Household Production," Journal of Consumer Research, 10 (September), 197-208.

Reilly, Michael D. (1982), "Working Wives and Convenience Consumption," Journal of Consumer Research, 8 (March), 407-417.

Rosen, Dennis L. and Donald H. Granbois (1983), "Determinants of Role Structure in Family Financial Management," Journal of Consumer Research, 10 (September), 253-258.

Spiro, Rosann L. (1983), "Persuasion in Family Decision-Making," Journal of Consumer Research, 9 (March), 393-402.

Ward, Scott, Daniel Wackman, and Ellen Wartella, How Children Learn to Buy: The Development of Consumer Information Processing Skills, Beverly Hills: Sage Publications, 1977.

Weinberg, Charles B. and Russell S. Winer (1983), "Working Wives and Major Family Expenditures: Replication and Extension," Journal of Consumer Research, 10 (September), 259-263.

THE CONCEPT OF CONVENIENCE IN MARKETING: A DEFINITION AND SUGGESTED APPROACH IN THE STUDY OF HOUSEHOLD TIME-SAVINGS

Carol J. Kaufman, Rutgers University

Abstract

The concept of convenience forms an integral part of the study of the changing household. This paper suggests that clear definition is needed from the perspective of the consumer, rather than that of the researcher or the product manufacturer. Product use in a time-saving situation is often inferred based on the simple purchase of a convenience-related good, rather than actual report by the consumer. A systems perspective is adopted to relate the notion of convenience to input-output tradeoffs within the household productive process. Suggestions are given for extending these notions for future research.

Introduction

Over the last several years, marketers have recognized the increasing importance of studying the household as a decision-making unit (Roberts and Wortzel 1984). While members may act together or individually in their purchasing behaviors, a multiperson context provides a realistic setting for analysis and research.

Sweeping changes in the fabric of United States society, however, have affected household composition and behavior. For example, growth in divorce rates, increased female labor force participation, and acceptance of egalitarian norms have altered traditional methods of household organization. As a result, research has attempted to identify whether households have also modified their use of goods and services. Studies have investigated household responses such as the use of time-saving durables (Nickols and Fox 1983; Strober and Weinberg 1977, 1980; Weinberg and Winer 1983), convenience products (Reilly 1982; Schaninger and Allen 1981), and services (Bellante and Foster 1984). The findings, in general, have been mixed, with expected differences, such as those between working and nonworking wives' behaviors, receiving little or weak support (Strober and Weinberg 1980).

This paper suggests that one problem may be the terminology adopted in some household research. Definitions may originate from common use in society, such as "convenience food," or from designation by a product manufacturer, such as "time-saving." Difficulties may result when terms such as these are used to describe inventories of consumer products, in ownership or frequency of usage research. Unless the respondent is explicitly asked why certain items are being used, it cannot be reliably inferred whether the household motivation is time-savings, or some other reason, such as taste preference, compatibility with skill levels, or availability of alternatives.

For instance, a packaged cake mix may be considered to be a convenience food. It is more quickly prepared than a cake recipe, which requires the collection of certain ingredients and, quite possibly, a more elaborate method of preparation. Some consumers, however, may not purchase it for this reason; they may simply prefer the product based on taste. Others, possessing limited culinary skills, may use a mix when they want to bake a home-produced cake, as opposed to purchasing a ready-made product at a bakery. Finally, a packaged cake mix may be used as an ingredient of a complicated recipe, adding little to the preparer's time savings.

This rather intuitive example suggests that "convenience" products may not always be used to save time. As a result, research which simply counts the number of purchases or frequency of use may not be accurately measuring a strategy to reduce time pressure. Instead, several consumer usage situations may be unintentionally combined, which may yield confusing or counterintuitive findings.

The purpose of this paper is to outline an approach for the study of household time-savings which explicitly includes the usage situation of the household. First, the household is conceptualized as a productive system to provide the setting for the discussion of time use. Next, existing research is considered and evaluated to suggest a definition for convenience usage in consumer research. Finally, specific recommendations for further investigation will offered.

The Household Productive System

Several writers have proposed that the household may be modeled from a systems perspective (Beutler and Owen 1980; Dixon and Blois 1983; Grashof and Dixon 1980). Households may be organized around four related processes, labor force participation, purchasing, household production, and consumption (Dixon and Blois 1983). Within each process, behaviors are selected to attain household objectives. The behaviors convert inputs to desired outputs, and are called production functions. The inputs of human and material resources are chosen by establishing a "division of labor, mutual commitments, and the discharge of responsibilities, internal communications, and the functional relationships with the environment (Alderson 1957, p. 175)." The attributes of the outputs, their "characteristics," contribute to the satisfaction gained by the household (Lancaster 1974).

The household may interact with the environment to meet its needs. Two processes, labor force participation and purchasing, occur in the marketplace, and require some exchanges with other productive units. A household utilizes inputs obtained from employment and converts the raw materials acquired into semi-finished and finished goods, which are then consumed. Thus, the outputs of one process become the inputs of the next, also adding additional inputs from household stocks as necessary. Market goods and home-produced goods are balanced to meet future needs within the time constraints and abilities of husband and wife (Beutler and Owen 1980).

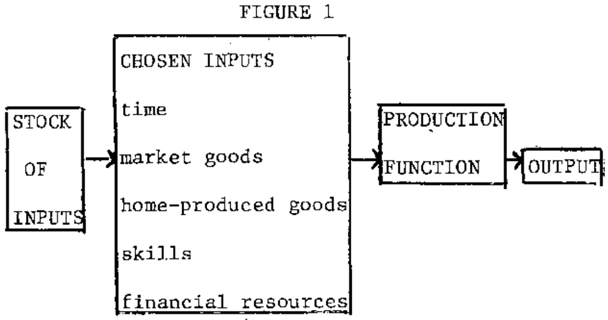
Outputs are chosen to achieve satisfaction, and inputs, in turn, are chosen to obtain those desired outputs. The inputs include time and market goods (Becker 1965), home-produced goods (Gronau 1977), and skills and financial resources (Grashof and Dixon 1980). The inputs, however, are interrelated, in that they may be substituted for each other within the production functions chosen. For instance, if a working wife places a higher value on her time in employment than on her time spent in housework, she is more likely to use products which are less time-consuming but more expensive (Becker 1965). Thus, "spending more time on career-oriented activities results in less time available for both home-oriented activities and leisure activities," and inputs must be adjusted as a result (Arndt, Gronmo, and Hawes 1981, p. 9).

A Definition of Convenience within the Systems Framework

The previous observations may provide a conceptual starting-point for defining the concept of convenience. In response to a specific need, the household may select time, market goods, home-produced goods, skills, and financial resources from available stocks as inputs to purchase, production, or consumption behaviors. The occasion may arise, however, when the household desires to reduce an input. As a result, other inputs may be increased to compensate for the change.

Several components may be part of the consumer's decision process: the type of convenience or input reduction desired, the tradeoff strategy to accomplish the household goal, and the production function to be used. The decision is made within the limitations of the available stock of inputs. Figure 1 gives a simple illustration.

FIGURE 1



Examples of input tradeoffs are addressed more specifically in a frequently-cited study of time pressure on working and nonworking wives by Strober and Weinberg (1980). In their research context, the goal of the working wife is the reduction of time pressures. Five possible strategies are suggested which incorporate the tradeoffs of other household inputs. For instance, capital equipment or the labor of others may be substituted for the effort of the wife. Alternately, the quality or quantity of household production may be reduced. Moreover, the wife may reduce volunteer time, community work, leisure time, or sleep.

A more general treatment, however, may describe a convenience goal as one aimed as reducing one or more household inputs through the increase of other inputs from household resources or market opportunities. Different types of convenience may be desired by the household members, such as time convenience or skills convenience. Table 1 illustrates the input tradeoffs from the perspective of a food-related decision.

For example, a household may establish a goal of consuming a nutritious main meal each day. The goal is chosen and meal standards are set in terms of the existing stock of available inputs. Specific situations, such as employment demands, may induce the household to want to reduce food purchase time as a desired type of convenience. Some of the possible tradeoffs include purchasing ready-made meals from a fast food outlet or ordering groceries by telephone for delivery. Additionally, the other household members may assist with the purchasing, or purchasing trips may be reduced by increasing the quantities bought per trip. The strategies are evaluated and chosen in terms of household member preferences.

TABLE 1
CONVENIENCE GOALS IN A SYSTEM OF HOUSEHOLD INPUTS

Desired Convenience (input reduction)	Possible Strategy (input tradeoffs)	Means (increased inputs)
purchase time	choice of retailer (fast food outlet)	market goods financial inputs
	non-store retailing (telephone ordering)	purchasing skills
	substitute labor of others	shared effort or labor of others
	purchase larger quantities	market goods financial inputs
purchase goods	home production (home gardening)	time skills
purch. expenditure	home production (home gardening)	time skills
purchase skills	purchasing services (food orders)	financial inputs
production time	processed goods (frozen foods)	financial inputs purchased goods
	substitute labor of others	shared effort or labor of others
production goods	market goods (restaurant meals)	expenditure use of services
prod. expenditure	home production (home gardening)	time home-produced goods skills
production skills	processed foods appliance use	market goods
consumption time	schedule of meals	shared effort
consumption goods	change of production functions	skills
cons. expenditure	home consumption	time home production
consumption skills	training services	financial input

Similarly, the use of processed foods is one possible strategy when the convenience desired is the reduction of meal production time. Processed foods may also be used as a possible alternative for reducing necessary production skills. A research focus on the purchase or usage frequency of convenience-related foods, however, without identifying whether some aspect of convenience is desired tends to infer the decision process from the limited information. The reason for selecting those goods must also be verified.

The study of convenience-oriented household strategies requires that the researcher first describe the decision process of the household in terms of the input-output relationships which exist. For example, respondents may be asked to report acceptable input tradeoffs when convenience is desired. Next, the type of convenience goal can be identified and related to household characteristics. Finally, the actual tradeoffs which are chosen must be accounted for.

Some earlier studies adopt a more restrictive approach than the framework described in the present study and consider only one type of convenience decision, such as time-savings. Within those investigations, the issue of convenience goods usage within a convenience goal surfaces. This will be considered next.

An Implicit Assumption: Does "Convenience" Product Purchase Imply a Convenience Motive?

Recent interest in the changing household has prompted several investigations into the purchase and frequency of use of convenience-related products. The studies appear to associate certain types of products with time-savings, however, although the motivation for purchase or use is not clearly reported by the responding households. The food consumption area has been studied in great depth, and will be used here as an example of ongoing research in time pressure response.

Because of their time spent in employment, working wives are expected to adapt their methods of household production, using products such as "TV" dinners, frozen entrees, and frozen pizza with greater frequency than nonworking wives (Strober and Weinberg 1980). However, this relationship is only found to hold in the low income groups of their sample. A similar result is expected and demonstrated between the use of prepared foods and increased income, wife's employment, and the number of children in the household (Redman 1980). In this latter study, however, Redman defines prepared foods as cake mixes, canned goods, and frozen foods.

A later work expands on this view by considering occupational status of the wife as a time-related factor (Schaninger and Allen 1981). The food categories are broadened to include the notion of preparation alternatives within a given food type, such as fresh, frozen, or instant versions of the same food. Some significant relationships are found. For example, low-status working wives more frequently used foods such as canned pasta in their households than high-status working wives.

Finally, Reilly (1982) links the concept of role overload to the working wife's use of convenience foods. In a causal model which treats time-saving durables as alternatives to convenience foods, some weak support is found. Convenience consumption in this study was assessed in terms of the frequency of use of prepared foods, such as "TV" dinners.

In each of these studies, it appears that an underlying assumption has been made. That is, that the purchase or use of "convenience" goods, as defined by the researcher, implies that a convenience motivation formed the basis for the consumer decision. In other words, the use of the product is being associated with the need to save time. No data is given to support this contention, however, as the studies do not appear to explicitly ask whether the foods are a response to time pressure.

Schaninger and Allen (1981) report that low-occupational-status working wife "families consumed more of such convenience foods and beverages as instant breakfast, teabags, Tang, bottled juice, frozen pizza, TV dinners, and canned ravioli and spaghetti (p. 192)." Their argument may strengthened if given in the context of desire to save time. Even though the nature of some products, such as TV dinners, may suggest time savings, other products may have quite different alternative purposes. For example, instant breakfasts may also be used as a dietary supplement, whereas teabags may be argued to be a time-intensive alternative to instant tea mixes.

Additionally, the identity of the user may also help to explain whether skill tradeoffs form an additional factor in the product use decision. Roberts and Wortzel (1980) argue that this information is useful in understanding food preparation behavior. They caution that husbands who prepare dinner may use different preparation methods and different items than women, based on their own skills, experience, and preferences. Consistent with their view, husbands may also identify different items as providing time convenience to the meal preparation process.

The studies cited suggest that a relationship exists between the types of food which households purchase and the time constraints which those households experience. While the proposition is intuitively logical, the connection does not appear to have been empirically demonstrated. The reason for purchase of the convenience goods is not explicitly addressed, and possible covariates such as brand preferences or nutritional needs are not measured.

A Systematic Approach to the Study of Household Time Convenience

The present discussion has argued that existing research in household time savings or convenience product use has been limited by the tendency to consider some, but not all, of the household's available input alternatives to time. Additionally, the use of researcher- or producer-defined concepts of convenience may also impute consumer motives which are not explicitly reported.

A broader approach is recommended, framed in systems theory, which considers the relationships among ongoing household processes as well as the tradeoffs among household inputs. Consumers themselves may instead be asked to identify products used particularly for time-saving purposes and their frequency of use in this context. In other words, the research focus begins with the household's definition of time convenience.

An expanded research format may adopt the following steps, after selecting the type of convenience to investigate and the sample of households to be studied. For purposes of discussion, the study of time convenience related to food preparation will be assumed.

1. First, the respondents may be asked to indicate their need for time convenience, using an instrument such as Reilly's index of role overload.

2. Next, they may be asked to describe a meal or meals which they prepare when they are under time pressure. Open-ended responses may be given, or a list of predetermined meals may be provided. The identity of the preparer may be recorded.

3. Respondents may list or check off the ingredients used, also giving the frequency of use of each ingredient or main dish.

4. Measures may also be taken on the time spent on each meal alternative, the cost of the ingredients, and the method or appliances used for preparation.

5. The household may be asked to indicate the situations in which a time-saving meal is needed.

6. Finally, classification information, such as income, occupational or social statuses, education, number of children, and work involvement may also be included.

With a slightly different local flow of questioning, the household members may define the need for time convenience as they experience it. Additionally, since measures are gathered on the additional inputs of time, financial expenditure, and skills, the household may be analyzed as a productive system from the perspective of tradeoff behaviors. Several possible hypotheses may be tested, such as

Hypothesis 1: The use of convenience foods is directly related to the need for time convenience as reported by households.

Hypothesis 2: The types of foods designated as "convenience" foods depends on the households' stock of other available inputs. That is, factors such as available time-saving appliances, are expected to act as covariates.

Hypothesis 3: Foods typically labeled as convenience foods by researchers or industry may also be used for other reasons, not related to time savings.

Summary and Implications

This paper has investigated some of the conceptual bases for the use of the notion of convenience in the household literature. Caution is advised in interpreting studies which do not assess whether a convenience situation accompanies the purchase of a convenience-related good. Recommendations are given to offer further explanation of the use of time-saving strategies in the household context. The addition of a consumer-verified time-saving usage may add to the prediction of behaviors oriented toward reducing the time pressures of household change. First, it may enable a researcher to separate out the confounding influence of convenience products when they are used for reasons other than convenience. Secondly, other household inputs, such as appliances or income, may be associated with particular types of convenience goods. Finally, the usage situations also may be found to affect the type of convenience food selected.

References

Alderson, Wroe (1957), Marketing Behavior and Executive Action, Homewood, Ill.: Irwin.

Arndt, Johan, Sigmund Gronmo, and Douglass K. Hawes (1981), "The Use of Time as an Expression of Life-Style: A Cross-National Study," Research in Marketing, vol. 5, 1-28.

Becker, Gary (1965), "A Theory of the Allocation of Time," The Economic Journal, 75, 493-517.

Bellante, Don and Ann C. Foster (1984), "Working Wives and Expenditures on Services," Journal of Consumer Research," 11 (September), 700-707.

Beutler, Ivan F. and Alma J. Owen (1980), "A Home Production Activity Model," Home Economics Research Journal, 9 (September), 15-26.

Dixon, D. F. and Keith J. Blois (1983), "Services Marketing and Household Production," in Proceedings of the Twelfth Annual Conferences of the European Marketing Academy, 611-630.

Grashof, John and Donald Dixon (1980), "The Household: The Proper Model for Research into Purchasing and Consumption Behavior," in Kent B. Monroe (ed.), Advances in Consumer Research, Vol. VIII, 486-490.

Gronau, Reuben (1977), "Leisure, Home Production, and Work - the Theory of the Allocation of Time Revisited," Journal of Political Economy, 85:6 (December), 1099-1123.

Lancaster, K. A. (1966), "A New Approach to Consumer Theory," Journal of Political Economy, 74, 132-157.

Nickols, Sharon Y. and Karen D. Fox (1983), "Buying Time and Saving Time: Strategies for Managing Household Production," Journal of Consumer Research, 10 (September), 197-208.

Redman, Barbara J. (1980), "The Impact of Women's Time Allocation on Expenditure for Meals Away from Home and Prepared Foods," American Journal of Agricultural Economics, May, 234-237.

Reilly, Michael D. (1982), "Working Wives and Convenience Consumption," Journal of Consumer Research, 8 (March), 407-418.

Roberts, Mary Lou and Lawrence H. Wortzel (1980), "Husbands Who Prepare Dinner: A Test of Competing Theories of Marital Role Allocations," in Jerry C. Olsen (ed.), Advances in Consumer Research, Vol. VII, 669-671.

-- (1984), "Introduction," in M. L. Roberts and L. Wortzel (eds.), the Changing Household, Cambridge, MA.: Ballinger Publishing Company, xv-xxv.

Schaninger, Charles M. and Chris T. Allen (1981), "Wife's Occupational Status as a Consumer Behavior Construct," Journal of Consumer Research, 8 (September), 185-188.

Strober, Myra H. and Charles B. Weinberg (1977), "Working Wives and Major Family Expenditures," Journal of Consumer Research, 4 (December), 141-147.

-- (1980), "Strategies Used by Working and Nonworking Wives to Reduce Time Pressure," Journal of Consumer Research, 6 (March), 338-348.

Weinberg, Charles B. and Russell S. Winer (1983), "Working Wives and Major Family Expenditures: Replication and Extension," Journal of Consumer Research, 10 (September), 259-263.

CONSUMER RESEARCH IN RETROSPECT: AN ANALYSIS OF THE AMERICAN SILVER MARKET, 1750-1800

Terrence H. Witkowski, California State University, Long Beach

Abstract

Both aggressive marketing practices and lively consumer markets have had a long history. Early luxury markets are particularly worthy of investigation because they set a general pattern for broader markets in later years. This paper analyzes the American silver market between 1750 and 1800. After first defining silver as a product class and briefly showing how it was marketed, the paper describes the market in terms of relevant geographic and demographic characteristics. The paper then segments the market with appropriate end uses and product benefits. The concluding section summarizes the findings and offers questions for further research.

Introduction

After many years of indifference, the marketing community has recently been showing some interest in the evolution of its discipline (Savitt 1980, Hollander and Savitt 1983, Hollander and Nevett 1985, Belk and Pollay 1985). Michigan State University hosted conferences on marketing history in 1983 and 1985 and plans for a third one in 1987. An international conference on Historical Perspectives in Consumer Research was held in Singapore in July, 1985. Most of the presenters at these meetings have been marketing scholars.

Two historical issues in marketing seem to be particularly noteworthy because they challenge conventional assumptions. First, marketing activities designed to stimulate demand were <u>not</u> invented in twentieth century America. These practices can be traced back over 200 years. In his excellent article debunking the "production era" concept, Fullerton (1985) provides ample evidence of demand stimulation in Britain, Germany, and the United States as early as the mid-nineteenth century. A major study by McKendrick, Brewer, and Plumb (1982) shows how English entrepreneurs frequently used "modern" marketing tactics, such as product differentiation, loss leader pricing and sales promotion, in the latter part of the eighteenth century.

Second, researchers are uncovering evidence of active early markets, characterized by widespread demand and conspicuous consumption. According to McKendrick and his colleagues, a substantial proportion of the population of late eighteenth century England desired and purchased a wide assortment of discretionary items, from Wedgwood pottery to children's books. Although not nearly as affluent as one of today's industrialized nations, England still had become the world's first consumer society.

Since economic development in the American colonies and early republic lagged behind that of England, it seems reasonable to assume that most of our consumer markets were also less developed. The term "consumer society" should not be applied to colonial and federal America. Nevertheless, there were a few relatively brisk markets for luxuries such as silver, china, and fine furniture. By investigating markets of this caliber, marketing historians should be able to identify buyer attitudes and behavior that set a pattern for the much broader consumer markets of later years.

This paper analyzes the American silver market in the second half of the eighteenth century. The first section provides a historical overview by defining silver as a product class and showing how it was marketed. The next section profiles the consumer market in terms of its probable size, geographic distribution, and demographic characteristics. Subsequent sections use contextual or product specific variables to segment the market. Section three distinguishes between church, official, presentation and domestic or home uses, while section four describes silver's economic, aesthetic, and social status benefits. Finally, the concluding section summarizes the paper and suggests questions for further research.

With buyer aggregates and their motives as the focus of inquiry, this approach differs greatly from previous historical research in the area. For instance, business and economic historians, with some notable exceptions, have favored research on production and physical distribution (Savitt 1980). Traditional decorative arts scholars, responding to the needs of collectors and curators, have usually studied the products themselves and by whom, in what style, and how they were made (e.g., Hood 1971, Kolter 1979). Their emphasis has been upon individual artifacts and makers rather than upon the market, its components, and consumer attitudes.

The Product Class and Marketing Practices

The Product Class

Eighteenth century silversmiths fashioned their metal into an impressive product class containing hundreds of different product forms. Spoons, forks, knives, and many other small utensils were among the more common and affordable objects. Surviving letter books and inventories indicate that silver shoe and garment buckles were especially popular (Fales 1974). Mugs and tankards, tea caddies, sauce boats, jugs, creamers, and boxes of all kinds comprised the middle of the line. Beautiful tea, coffee and chocolate pots, ornate trays and salvers, and magnificent ceremonial urns were the most expensive items. There were silver accessories for the bedroom, for the person, and for a multitude of uses. Gentlemen's swords were hilted in silver and many fine flintlock pistols were furnished with silver mountings. Even children's toys were made of silver.

Buyers obtained most of their silver from two sources: the output of American craftsmen and English imports. Imported items could be purchased when visiting the mother country, from agents in London, or from local smiths who resold silver they purchased abroad. This trade reached its peak in 1760 and 1761 when 56,400 ounces of wrought silver were imported from England (Fales 1970, pp. 145-

146). How this figure compares to total American production is unknown, but it was less than three percent of English manufacture (Wills 1969, p. 6). Whether produced in America or England, the great majority of makers adhered to the sterling standard, 92.5 percent silver and 7.5 percent copper (Fales 1970). Imports of fused-plated objects made in Sheffield were negligible until after the Revolutionary War (Davis 1976, p. 217).

Product branding, in the form of assay and maker's marks, was a reasonably straightforward matter during this era. English silver typically included four marks signifying the sterling standard, the town and year of manufacture, and the maker's initials (Wyler 1937). Since there were no assay offices on this side of the Atlantic, American silver was usually stamped with just the maker's initials or surname. However, creative smiths sometimes added sundry symbols of their own device, a practice perhaps intended to impart a sense of quality (Fales 1970). What else these rudimentary brand names may have meant to the eighteenth century buyer has been forgotten, although one might speculate that the marks of famous smiths, such as Boston's Paul Revere or Philadelphia's Joseph Richardson, may have impressed some people. At the very least, these marks did enable owners to identify their silver in case of theft.

Marketing Practices

The prices set by eighteenth century silversmiths depended upon the going rate for bullion, the value of their labor, and the cost of additional services such as engraving. For example, in 1797 Paul Revere sold an outstanding silver tray, weighing over 41 ounces, to the prosperous Salem merchant, Elias Hasket Derby. Revere charged him 14 pounds, 13 shillings and 19 pence for the silver, 12 pounds and 6 shillings for the making, and 15 shillings for the engraving (Fairbanks et. al. 1975, p. 191). Labor costs increased relative to total cost when a piece was very elaborate or when it was small and of little weight. Still, the cost of silver generally exceeded the cost of labor (Fales 1970, 1974).

Silversmiths differed in their promotional activities. Richardson apparently did little advertising, while Myer Myers, a famous New York silversmith, advertised regularly in the New York Gazette and the New York Weekly Mercury in 1754 and thereafter (Rosenbaum 1954). Other forms of advertising included store signs and trade cards, the latter becoming increasingly common and more stridently promotional by the end of the century (Fales 1970; McKendrick, Brewer and Plumb 1982). Publicity, in the form of important commissions, and personal selling were probably the most effective tactics in the silversmith's promotional mix. Both Revere and Richardson were extremely active in community affairs and one suspects that they had more in mind than just doint their civic duty.

Many silversmiths operated a retail store adjacent to their workshop where items made or purchased for resale were sold on speculation. The busiest stores stocked quite a variety of merchandise. An inventory of the shop of Nathaniel and Joseph Richardson Jr., compiled when they terminated their partnership in 1790, includes 46 different categories of wrought silver, 17 of silver plate, and 22 of additional items such as weights, scales, and gold jewelry (Fales 1974, pp. 261-263). Their silver alone weighed over 754 ounces. Little is known about the layout of the retail store, but contemporary English and French engravings suggest that floor space was limited and that merchandise was kept safely within locked display cases (Fales 1970, p. 198; Ward and Ward 1979, p. 18). As retailers, silversmiths offered additional services such as secure storage space for client valuables and credit. Credit was especially important since specie was in short supply on both sides of the Atlantic (Randel 1973; McKendrick, Brewer and Plumb 1982).

Market Characteristics

Market Size

At the start of the Revolutionary War approximately 2.5 million people lived in the thirteen American colonies (U.S. Bureau of the Census 1976). Perhaps twenty percent were African slaves or poor black freemen. About two million were white, but nearly half were indentured servants who worked in bondage to pay for the cost of Atlantic passage or for crimes committed in England (Randel 1973). Among the remaining free whites were many paupers and debtors, poor widows and their children, unskilled or unemployed men, and backcountry subsistence farmers. Only a handful of these people, if any, could afford to buy silver.

Prosperous land owners, wealthy merchants, rising professionals, and ambitious tradesmen comprised the core of the American silver market. The size of this market has been estimated by Hood (1971) who states: "Early inventories indicate that only the top 5 per cent of society owned silver in any quantity" (p. 12). Taking rapid population growth into account, Hood's figure implies a market ranging from about 60,000 in 1750, to 125,000 in 1775, to nearly 270,000 in 1800. Because of the war and subsequent economic disruptions, the market virtually collapsed between 1775 and 1790 (Hood 1971, pp. 160-162).

Geographic Distribution

Decorative arts scholars typically argue that the silver market was largely urban. As Hood (1971) contends: "The demand for fine silversmiths and their wares existed primarily in urban societies" (p. 11). It is true that the vast majority of identified silversmiths plied their trade in the cities, places where free whites could find great opportunities for amassing wealth. However, population data clearly indicate that many buyers lived in small towns and rural areas.

In 1775 the five largest colonial cities were Philadelphia (40,000), New York (25,000), Boston (16,000), Charleston (12,000), and Newport, Rhode Island (11,000) (Bridenbaugh 1955, p. 216). Together they accounted for about four percent of the entire population. Even the top twenty cities amounted to only seven percent of the population (Randel 1973). Black slaves made up a substantial proportion of urban inhabitants: 14 percent of New York, 20 percent of Newport, and 50 percent of Charleston (Bridenbaugh 1955, p. 286). Considering the additional large numbers of indentured servants and poor whites (Nash 1983), the remaining free urban whites, able to afford silver, probably represented but two percent of the entire colonial population, less than half the potential size of the overall market.

The silver market seems to have varied by region. The South, for example, may have been a better market than either New England or the middle colonies. In 1774 the average free white colonist owned 4.0 pounds sterling worth of portable consumer durables, less apparel (U.S. Bureau of the Census 1976, p. 1175). This number ranged from 2.7 in the middle colonies, to 3.4 in New England, to 5.6 in the South. Assuming a consistent percentage of portable wealth allocated to silver, free white southerners owned more silver than other colonists. Unfortunately, the data do not reveal the percentage of wealth invested in silver.

Southerners also preferred imported English silver silver to that made in America, at least until the outbreak of the war (Avery 1968, Davis 1976). With the exception of Charleston, relatively few silversmiths worked in the South. Slave labor and a rural plantation economy limited craft development. Planters found it convenient to request their London agent or merchant house to purchase silver against future shipments of tobacco, rice, or indigo. Indeed, they may have ". . . scorned Colonial silver as too crude and provincial for their scale of living (Avery 1968, pp. 199-200). This prejudice apparently had diminished by the 1790s (Avery 1968).

Demographic Characteristics

Using the jargon of modern consumer research, the American silver market was definitely "upscale." Rich citizens, major buyers of domestic silver, were the best market segment for most silversmiths. Research in this area often attributes original ownership of important artifacts to the leaders of society, such as the aforementioned Elias Hasket Derby, merchant of Salem. These individuals derived their income and wealth from land ownership, mercantile activities, and, with luck, good marriages (George Washington) and inheritances (John Hancock). Although not well-educated by today's standards, they did have access to preparatory schools and nine American colleges (Randel 1973).

There was also a growing middle-class market segment. In her research, Fales (1970) discovered:

> Not only the very wealthy wanted silver objects. The butcher, the baker, and candlestick maker were all among the customers of Joseph Richardson. The mid-eighteenth-century houses of tradesmen had become much finer (p. 146).
>
> Even in rural areas, where conditions were more primitive and more like the days of first settlement, where previously only a few families had had silver spoons or possibly a tankard, a cann, or a porringer, there were now plated sets, at least, and small silver cups in many of the farmhouses (p. 150).

Barter was a common form of payment until the 1790s and documents do show that tradesmen exchanged their labor for a few small articles (Fales 1974). Clearly, this segment had less purchasing power than the rich, but is was probably an important one, especially for second-tier smiths in the smaller cities and towns.

Two other demographic characteristics are worth noting. First, according to the bills of sale reproduced in Avery (1968) and Fales (1970, 1974), the vast majority of purchasers were men. Second, these men were likely to be married and supporting a number of surviving children. Early marriage was encouraged during this era and women were often continuously with child, six to eight pregnancies being typical (Scholten 1983).

End Use Segmentation

Broad product classes evolve because they serve a multitude of uses. Early silver was no exception: its market can be segmented by church, official, presentation or gift, and domestic or home uses (Fales 1970). By analyzing these uses, the researcher can begin to understand the buyer motives that caused the vigorous demand for silver in eighteenth century America.

The Church Market

Catholic, Anglican and Reformed churches, as well as Jewish Synagogues, acquired a wide variety of silver objects for purposes of ceremony and display. "Church plate" included chalices, communion cups, crosses, and many other specialized items. Myer Myers, himself a Jew, not only sold ribbonim (Torah scroll finials) to synagogues in New York, Philadelphia, and Newport, but also made alms basins for the First Presbyterian Church of New York (Rosenbaum 1954, p. 34). Protestant churches imported a fair amount of their silver, while ". . . most of the silver used in Catholic churches was of foreign manufacture" (Fales 1970, p. 158). Churches received their silver from members of the congregation, either as gifts or through bequests established for this purpose. For example, Thomas Hancock of Boston, John's wealthy uncle and benefactor, left 100 pounds sterling to the Brattle Street Church (Fairbanks et. al. 1975, p. 32). The purity and perfection of silver had strong symbolic meaning for the major religious faiths (Ward and Ward 1979, p. 36). The great pride that church members took in these objects conferred prestige upon the donor. Given the number of surviving pieces with church associations, this must have been a reasonably large market segment.

The Official Market

Since the American colonies and early republic did not have the permanent hierarchies of England and the continent, the official market was fairly small. According to Fales (1970), "official silver can be designated as that made for official use by a government or organization, and that which is emblematic of office or membership" (p. 159). Silver representative of this segment includes official seals, Masonic emblems, and Phi Beta Kappa medals.

The Presentation Market

Buyers often purchased silver as a gift, given to commemorate important events and to impart a sense of permanence and dignity. Infants sometimes received silver baptismal spoons, rattles, and teething toys. Newly married couples or couples celebrating an anniversary were given an assortment of silver objects, the size of the gifts dependent upon the affluence of friends and relatives. Families often presented gold and silver rings to important mourners at funerals. Admired college tutors, heroic ship captains, and the winners of horse races and lotteries frequently received pieces of silver (Fales 1970). Various items such as medallions and gorgets were even presented to Indians (Fales 1974). Americans throughout the colonies used silver for gift-giving, a practice especially prevalent among Dutch New Yorkers (Ward and Ward 1979, p. 35). The many surviving artifacts with such associations suggest that this was a reasonably important market segment.

The Domestic Market

Undoubtably, the domestic or home use market overshadowed the church, official, and presentation markets combined. The earliest settlers brought domestic silver with them and silversmiths were already at work in the colonies by the mid-seventeenth century. Aside from the war years, this market expanded continuously throughout the eighteenth century. The custom of tea drinking seems to have spurred demand greatly. Starting as an exclusive indulgence of the wealthy, tea consumption became increasingly widespread, fashionable, and, for the elite, virtually ceremonial (Fairbanks et. al. 1975, p. 97). By mid-century silversmiths were producing an impressive array of tea paraphernalia, from simple spoons and sugar tongs to expensive trays and teapots. Circa 1790, Joseph Richardson Jr. was selling complete tea services as large as nineteen pieces and costing over 100 pounds sterling (Fales 1970, p. 147). The introduction of other beverages, notably coffee and chocolate, also stimulated demand for new product forms in silver.

Benefit Segmentation

Markets can be segmented according to the different benefits that buyers seek from the product class. This section segments the American silver market in terms of economic, aesthetic, and social status benefits. These benefits reveal the basic underpinnings of the demand for silver.

Economic Benefits

As an important means of storing wealth, silver provided several economic benefits. It was easily transportable and quite liquid. Compared to paper currency, it generally maintained its value, and, unlike coinage, it could be traced if stolen. James Mills, a tavern keeper, placed an ad in the New York Gazette in 1755 to notify the public of marks on silver taken from his hous (Fales 1970, p. 263). Banks were uncommon in the eighteenth century and unknown in America before 1781; so alternative financial investments were limited. On the other hand, silver was a sterile investment that yielded no income stream. Therefore, additional perceived benefits must have contributed to the brisk demand.

Aesthetic Benefits

Silver was considered an important art form and the possession of beautiful pieces was an indicator of good taste and breeding. Although silver styles changed less rapidly than styles of clothing, the design of silver did evolve between 1750 and 1800, passing through what moderns call the Queen Anne, rococo, and neo-classical periods. The American market appears to have been conscious of style. American smiths strived to keep abreast of current British trends, often making nearly identical copies of English imports (Hood 1971). Advertisements and trade cards frequently boasted "made in the newest fashion" or its equivalent (see, e.g., Fales 1970, p. 284). Families even had their old silver melted down and remade in the latest style.

However, some evidence contradicts the impression of an aesthetically sophisticated market. When ordering from abroad, for instance, some buyers merely mentioned the general form desired without specifying particular artistic attributes (Avery 1968, Davis 1976). Since repair work consumed much of the silversmith's time, silver may have been treated a little roughly and certainly not like a prized art object. Generally speaking, French and European tastes were unpopular amongst rich Americans until the very end of the century. Exposure came indirectly through the work of silversmiths of Dutch and French Huguenot extraction.

Social Status Benefits

Silver was a telling status symbol that demonstrated financial success and social pretension as much as did fine furniture and clothing. Indeed, in a century when social status and class distinctions governed everyday life, when families made detailed inventories of their material possessions, silver had a social significance far beyond that of later years (Hood 1971). Following a practice that can be traced to Roman times, silver was openly displayed on cupboards and tea tables, expensive objects in their own right (Ward and Ward 1979). Compared to Europe, social mobility was still a distinct possibility in late eighteenth century America. One way of demonstrating upward mobility was through the purchase and conspicuous display of silver.

Conclusion and Implications

The American silver market was small, truly a class market, but it did have an important middle-class component. The market was distributed throughout the colonies and early republic, in rural as well as urban settings, with an apparently heavy concentration of buyers in the South. Americans purchased silver for many different reasons. They used it in the home and in church ceremonies. They gave it as gifts and utilized it as an official symbol. However, the fundamental sources of demand can be attributed to silver's economic, aesthetic, and, above all, social status benefits. Whatever the manifest uses and benefits of silver might have been, there was a strong undercurrent of purchase for the sake of invidious consumption, a social-psychological motive that would drive many luxury markets in the future. With his astute powers of observation, Thorstein Veblen might have written The Theory of the Leisure Class a century earlier, had he lived between 1750 and 1800.

This analysis suggests many avenues for further research. First, the characteristics of the silver market need to be more fully delineated. Research questions might include the following: What was the extent of total American production and consumption between 1750 and 1800? What was the proportion of portable physical wealth invested in silver? What demographic segments (merchants or landowners, Dutch or Anglo-Americans) invested most heavily? Second, the social-psychological motives that created demand need to be more fully documented. Did eighteenth century buyers truly appreciate the economic and aesthetic benefits of silver? Was silver really perceived to be a valid measure of social status? Finally, market-oriented research should address other categories of late eighteenth century luxuries. Such consumer research in retrospect can impart a descriptive and theoretical richness to the discipline.

References

Avery, C. Louise (1968), Early American Silver, New York: Russell and Russell.

Belk, Russell W. and Richard W. Pollay (1985), "Images of Ourselves: The Good Life in Twentieth Century Advertising," Journal of Consumer Research, 11 (March), 887-897.

Bridenbaugh, Carl (1955), Cities in Revolt: Urban Life in America, 1743-1776, New York: Alfred A. Knopf.

Davis, John D. (1976), English Silver at Williamsburg, Williamsburg, VA: The Colonial Williamsburg Foundation.

Fairbanks, Jonathan L., Wendy A. Cooper, Anne Farnam, Brock W. Jobe, Martha Katz-Hyman, and Walter Muir Whitehill (1975), Paul Revere's Boston, 1735-1818, Boston: Museum of Fine Arts.

Fales, Martha Gandy (1970), Early American Silver, New York: Excalibur Books.

________ (1974), Joseph Richardson and Family: Philadelphia Silversmiths, Middleton, CT: Wesley-University Press.

Fullerton, Ronald A. (1985), "Was There a 'Production Era' in Marketing History? A Multinational Study," Marketing in the Long Run: Proceedings of the Second Workshop on Historical Research in Marketing, Stanley C. Hollander and Terence Nevett, eds., East Lansing, MI: Department of Marketing and Transportation, Michigan State University, 388-400.

Hollander, Stanley C. and Ronald Savitt, eds. (1983), First North America Workshop on Historical Research in Marketing: Proceedings, East Lansing, MI: Department of Marketing and Transportation, Michigan State University.

________ and Terence Nevett, eds. (1985), Marketing in the Long Run: Proceedings of the Second Workshop on Historical Research in Marketing, East Lansing, MI: Department of Marketing and Transportation, Michigan State University.

Hood, Graham (1971), American Silver: A History of Style, 1650-1900, New York: Praeger Publishers.

Kolter, Jane Bentley, ed. (1979), Early American Silver and Its Makers, New York: Mayflower Books.

McKendrick, Neil, John Brewer, and J. H. Plumb (1982), The Birth of a Consumer Society: The Commercialization of Eighteenth-Century England, Bloomington, IN: Indiana University Press.

Nash, Gary B. (1983), "Up from the Bottom in Franklin's Philadelphia," The Private Side of American History: Readings in Everyday Life, third edition, Gary B. Nash, ed., New York: Harcourt Brace Jovanovich, Inc., 163-178.

Randel, William Peirce (1973), The American Revolution: Mirror of a People, Maplewood, NJ: Hammond Incorporated.

Rosenbaum, Jeanette W. (1954), Myer Myers, Goldsmith, 1723-1795, Philadelphia: The Jewish Publication Society of America.

Savitt, Ronald (1980), "Historical Research in Marketing," Journal of Marketing, 44, 4 (Fall), 52-58.

Scholten, Catherine M. (1983), "Changing Customs of Childbirth in America, 1760-1825," The Private Side of American History: Readings in Everyday Life, third edition, Gary B. Nash, ed., New York: Harcourt Brace Jovanovich, Inc., 245-262.

United States Bureau of the Census (1976), The Statistical History of the United States From Colonial Times to the Present, New York: Basic Books.

Ward, Barbara Mclean and Gerald W.R. Ward (1979), Silver in American Life, Boston: David R. Godine, Publisher, Inc.

Wills, Geoffrey (1969), Silver for Pleasure and Investment, New York, Arco Publishing Company, Inc.

Wyler, Seymour B. (1937), The Book of Old Silver, New York: Crown Publishers, Inc.

FOOD RETAILERS' PERCEPTIONS OF SUPERMARKET UPC SCANNER CHECKOUT SYSTEMS

Daulatram B. Lund, Iowa State University

Abstract

This paper reports preliminary findings about food retailers' perceptions of a wide range of characteristics about the Universal Product Code scanner checkout system. Food retailers comprised of two sampling frames, namely, installers and non-installers of the scanner checkout systems. Food retailers from thirty-six states responded to the mail survey. Their perceptions are anlayzed and compared.

Introduction

The evolutionary changes in the food retail enterprises, leading to the present day electronic retailing have not always been unpredictable (McNair and May 1978). However, the introduction of the Universal Product Code (UPC) scanner checkout system in supermarkets in 1974 was particularly significant. It marked the successful culmination of two major events: (1) the acceptance of the now familiar UPC symbol as the common labeling code by the grocery industry, and (2) the invention of the UPC readable electronic scanner checkout system. Briefly, the UPC scanner checkout innovation was expected to offer the retail grocery industry a means to offset its spiralling operating costs via improvement in front-end productivity (Danzansky 1975), and increases in productivity of marketing decisions via utilization of UPC scanner generated sales intelligence data (Hutt 1979). Also, food retailers anticipated increase sales through enhanced consumer satisfaction in the entire range of general services such as quicker checkouts, detailed and descriptive sales receipt, lower misrings, among other benefits (Adamy 1975; Shaw 1977).

The focus of published studies by marketing researchers has been on supermarket shoppers' reaction to the scanner checkouts, and on the item price removal controversy. McGinnis and Gardener (1976), Mason (1979), Robinson and Langrehr (1980), and Pommer, Berkowitz, and Walton (1980) are some of the early investigators who assessed consumer reactions to the innovation. Overall, these studies reported consumer satisfaction with the scanner checkouts. Hutt, Harrell, and Allen (1976), and Harris and Mills (1980) concentrated on item removal controversy and its societal implications. Their findings, while not conclusive, indicated the need for retention of price markings in the UPC scanner checkout systems to prevent debilitating consumers' abilities concerning price awareness, price determination, and price consciousness.

In addition to the above references from the academia, popular trade journals such as Progressive Grocer, Chain Store Age, among others, have and continue to provide updates on this technological innovation in the supermarket in every issue. While the focus of academe and trade publications has been on consumer reaction to scanner checkouts, little attention has focused on retail food managements' reaction to this innovation. Just as questions about the advantages and disadvantages of the scanners for the consumers have been considered, the questions need to be asked of grocery retail managements. Therefore, the present investigation was undertaken.

The purpose of the present paper is (1) to provide a parsimonious description of the food retailers' perceptions of the potential costs, benefits, and problems surrounding the UPC scanner checkout system; and (2) to determine the extent of differences in perceptions of the system characteristics between food retailers who have installed the system and those retailers who have not installed the system in their supermarkets. It must be noted that the findings reported in this paper are only preliminary, exploratory, and primarily descriptive in nature. Future papers will present both the conceptual development and hypotheses within an innovation adoption-diffusion framework.

Research Methodology

Data Base

The data base for the investigation comprised of all food retailers in the United States. Two sampling frames were involved: (1) food retailers who had installed the UPC scanner checkout system as of June 1980, and (2) food retailers who had not installed the system. The first sampling frame comprised 215 food retailing firms. This list was compiled from updates published by the Food Marketing Institute. The second sampling frame of non-installers comprised 240 food retailing firms randomly selected from a list generated from the 1980 Chain Store Guide.

To identify management personnel closely associated with the UPC scanner checkout system, and to seek the firm's cooperation in the study, all firms within both sampling frames were mailed participation forms. Completed participation forms were received from 169 (78.6%) firms in the first sampling frame, and 148 (61.7%) firms in the second sampling frame.

The survey questionnaires were mailed directly to all management personnel identified in the participation forms. Survey were mailed to 310 individuals within 169 firms in the first frame, and to 261 individuals within 148 firms in the second frame. Four weeks after the first mailing, one follow-up mailing was undertaken. A combination of methods was employed to reduce the likelihood of low response rate (Kanuk and Berenson 1975). Briefly, these included a strategically written cover letter, prepaid return envelope, assurance on anonymity, and a renewed offer for a complimentary copy of the summary of survey results for participation. A total of 150 (48.4%) questionnaries from 122 (72.2%) firms were received in the first frame; and a total of 104 (39.9%) questionnaires from 89 (60.1%) firms were received in the second sampling frame. The relatively high response rates in terms of participating firms, though unexpected, suggested the food retailers' interest in the UPC scanner checkouts.

Research Instrument

Structured mail questionnaires were employed in the study. Five-point Likert rating scales with possible response ranging from "strongly agree" to "strongly disagree" were utilized to scale items measuring various dimensions of the scanner checkout system.

A pool of UPC scanner specific scale items were developed after an extensive review of published literature (Flint 1975; Hutt 1979; Phase I Report of McKinsey and Company 1971; Evaluation Manual for Electronic Checkout System by Arthur Andersen and Company 1971; Shaw 1977). From the pool of operational items, sixty items were selected for inclusion in the questionnaire.

Analysis

The frequency counts of the food retailers' responses are examined across all items. Next, responses of installers and non-installers are pooled and factor analyzed using varimax rotation. The extracted factors are labeled and alpha coefficient of reliability computed (Cronbach 1951). Using the labeled categories, the differences in perceptions of the UPC scanner checkout characteristics between the installers and non-installers is examined by t-tests. Finally, a two-group linear discriminant analysis is performed to examine if factored items discriminate installers and non-installers.

Results and Discussion

In this section the descriptive results of the preliminary analyses of the food retailers' perceptions are presented. The discussion is limited to general observations with emphasis on comparative differences in perceptions among the installers and non-installers of the innovation.

General Characteristics of the Samples

In the first sample food retailing firms from 36 states responded, while in the second sample firms from 34 states responded to the survey. Differences in the type of ownership of the firms, and firm size (number of full-time employees and annual dollar sales) were statistically significant ($p<.05$) in the two samples. In general, larger firms have installed scanners while smaller firms tend not to opt for scanner checkouts. While differences between firm-characteristics in the two samples are significant, differences in respondent-characteristics in terms of age, education levels, position within the firm, number of years experience are not significant ($p>.05$).

Retailers Perceptions of UPC Scanner Checkouts

From an examination of food retailers' responses to the sixty items concerning the UPC scanner checkout system, the following observations are made:

* The majority of installers and non-installers perceive the costs associated with the scanning system to be high. Also, installers perceive the cost of financing to be higher than that perceived by non-installers.

* Installers and non-installers both recognize the tangible and intangible benefits accruing from the system. However, installers differ from non-installers in their perceptions of benefits accruing from eliminating item price marking; efficiency of customer credit check; savings in inventory carrying costs; and the potential revenue generated from the sale of patronage checkout data.

* A large majority of installers than non-installers perceive shoppers to be satisfied with the speed of checkout, checkout-register tape, and with the accuracy of the scanner system to weigh and price purchased items.

* Retailers perceived the scanning system to be reliable, compatible, and the stored data to be useful for estimating overall profitability. However, the majority of food retailers perceive the system to have non-scan, information retrieval, and in-store symbol marking problems.

* Installers and non-installers perceive some difficulty in hiring skilled technicians for operations, but do not foresee cutbacks in the total number of employees due to increases in labor productivity.

* Installers and non-installers agree on the need to educate shoppers on scanner checkouts; disagree that item price removal makes shoppers less price conscious; and are equally split on the possibility of consumers being charged higher prices than shelf-marked prices.

* The majority of installers and non-installers perceive the opportune time to install scanners is when opening a new store, and not when replacing outdated checkout equipment. Both groups perceive the system to be inflexible towards partial conversion of checkouts.

* Both groups are neutral in their response for the desirability of financing by such alternatives as bank, hire-purchasing, pilot leasing, and internal funding. However, fewer installers than non-installers agree about willingness of financial institutions to readily loan them the capital requirements for the system.

* Installers perceive published guides, scanner publications of the Supermarket Institute, and trade shows and conventions to be useful sources of information. Non-installers exhibited similar response trends on information sources.

* Installers and non-installers perceive that by

supporting management decision favoring scanner checkouts, neither the firm nor their personal position within the firm would be jeopardized.

Factor Analysis, Reliability, t-Tests, and Discriminant Analysis

Factor Analysis

To summarize and reduce the dimensionality of the sixty-item responses into meaningful categories, factor analysis was undertaken. The resulting principal component factor analysis with varimax rotation yielded twenty-one factors with eigenvalues of greater than one. The extracted factors have been labeled while taking into consideration all factor loadings of 0.30 or more. These factor results, reliability coefficients, and t-test results are summarized in Table 1.

The extracted factors account for 65.78 percent of the total variation in the retailers' perceptions of the scanner checkout characteristics. It is interesting to note that scanner benefits and shopper satisfaction are major factors extracted. This is indicative of food retailers' desire to increase operational productivity while maintaining competitive edge through shopper satisfaction. These factors have often been cited as the major decision influencers towards adoption of this innovation (U.S. Senate Committee on Commerce 1975).

Reliability

The reliability coefficients for each identified category of multi-item scales is obtained by Cronback's alpha. As shown in Table 1, the reliability coefficients range from several scales are below acceptable level, but

TABLE 1

SUMMARY OF RESULTS OF FACTOR ANALYSIS, RELIABILITY ALPHA, T-TESTS, AND DISCRIMINANT ANALYSIS

Factor No.	Factor label	No. of items	Variance Explained eigenvalue value	%	Reliability alpha	t-value
1.	Scanner checkout benefits	6	5.62	(9.37)	0.6745	-2.67 **
2.	Scanner information benefits	4	3.24	(5.41)	0.6877	1.93 *
3.	Shopper satisfaction	7	3.09	(5.14)	0.6606	-6.39 ***
4.	Management perceived risk	4	2.29	(3.82)	0.6522	0.89
5.	Internal financing views	2	2.22	(3.71)	0.7738	1.22
6.	System operational costs	4	2.03	(3.38)	0.5184	-1.70
7.	Scanner equipment costs	2	1.91	(3.18)	0.6990	2.23 *
8.	Adoption decision influencers	3	1.80	(3.00)	0.4833	1.74
9.	Competitive influences	2	1.77	(2.95)	0.3648	2.73 **
10.	Skilled personnel requirement	2	1.66	(2.77)	0.3916	0.23
11.	Additional management effort	3	1.53	(2.55)	0.3611	0.31
12.	Feasibility of partial conv.	2	1.49	(2.48)	0.5291	0.85
13.	Additional scanner benefits	3	1.43	(2.39)	0.3831	1.90
14.	Addtln. adoption consideration	3	1.31	(2.19)	0.4093	-3.57 ***
15.	Item price legislation	1	1.28	(2.14)	--	-0.35
16.	Scanner purchase options	2	1.23	(2.04)	0.4209	1.38
17.	Scanner operational costs	4	1.19	(1.98)	0.4664	-1.22
18.	Scanner adoption timing	2	1.15	(1.91)	0.4282	-1.84
19.	Order-installation timelag	1	1.11	(1.85)	--	-1.97 *
20.	Labor productivity	2	1.06	(1.77)	0.1382	0.15
21.	Pricing ethics	1	1.05	(1.75)	--	0.70
	Total	60	39.46	(65.78)		

*p<.05 **p<.01 ***p<.001

DISCRIMINANT ANALYSIS

	Number Percentage	CLASSIFIED Installers	Non-installers	
ACTUAL	Installers	106 87.6%	15 12.4%	121 100%
	Non-installers	26 29.2%	63 79.8%	89 100%

Percent correctly classified: 80.4%

in this initial analysis no corrective measures were undertaken.

t-Tests: To determine statistical differences in perceptions among installers and non-installers, item responses within the factor-categories were summed and t-tests applied on each of the twenty-one-category mean scores of the two independent samples. A summary of t-test results is presented in Table 1. Installers and non-installers differ significantly on seven of the twenty-one categories. Based on sample means, installers perceive scanner benefits, shopper satisfaction, additional adoption considerations, and order-installation timelag more favorably than non-installers. Likewise, non-installers perceive scanner generated information benefits, scanner equipment costs, and competitive influences more favorably than installers.

Discriminant Analysis

Finally, to determine if the twenty-one categories of UPC scanner checkout characteristics could discriminate installers and non-installers, two-group linear discriminant analysis was undertaken. Based on the classification criterion developed by utilizing within-group covariance matrices, the percentage of food retailers correctly classified into installers and non-installers is 80.5 percent. These classification results are presented in Table 1. The results, however, must be viewed with caution since no effort was made to adjust for the upward bias resulting from classifying the same individuals used to calculate the discriminant function.

Conclusions

This initial analysis documents for the first time food retailers' perceptions of a wide range of UPC scanner checkout system characteristics. Food retailers comprised of two sampling frames, namely, installers and non-installers of scanner checkouts. A comparison of their perceptions reveals that they differ significantly on seventeen of sixty items considered in the study. A factor analysis of the items generated twenty-one factors. Installers and non-installers differ significantly on seven of twenty-one categories. A discriminant function based on the twenty-one factor-category correctly classified 80.5 percent of the retailers into the installer and non-installer groups.

Based on the results present in the preceding section, it may be tentatively concluded that installers perceive the scanner checkout system as favorably as projected in the popular press and trade journals. However, their favorable attitude towards the innovation may be attributed to their post-installation rationalization, and/or to their hands-on experience with the system which enables them to truly realize the intended benefits.

Regarding the item price removal controversy, this study documents the food retailers point of view. While the majority of installers perceived item price removal not to lessen shoppers' price consciousness, interestingly, installers were equally split in their perception of the possibility that shoppers could be charged prices higher than shelf-marked prices in scanner equipped supermarkets. Therefore, consumer advocates who in the past have opposed item price removal citing the potential for supermarket "rip-offs" as one of the reasons, may find considerable support among food retailers themselves. Regarding another controversial issue concerning labor cut-backs, a majority of installers did not foresee any cut-backs in the number of employees because of increased operational productivity.

This study also documents for the first time the attitudes of food retailers who have not installed UPC scanner checkouts in their supermarkets. Overall, non-installers exhibited a remarkable degree of familiarilty on almost all aspects of the innovation. A closer examination of their responses reveals that they tend to be cautious in ther evaluation of the innovation, and often take a neutral position on issues calling for actual experience with the system.

Given the nature of competition in food retailing, it is foreseeable that greater number of non-installers will opt for scanner checkouts in the near future. Based on the present preliminary analysis it is tentatively recommended that marketers of scanner equipment:

* Emphasize on scanner checkout benefits such as cost effectiveness, efficiency of customer credit check or check authorization, and potential for sales increases due to faster checkouts.

* Emphasize on customer satisfaction with the speed of checkout, checkout register tape receipt, and the accuracy with which scanners price and weigh purchased items.

* Emphasize on the operational reliability of the system when ordered.

References

Adamy, Clarence G. (1975), "UPC and the Electronic Front-end in Perspective," in Price Disclosure Act: Hearings, U.S. Senate Subcommittee for Consumers of the Committee on Commerce, Washington, D.C.: U.S. Government Printing Office, S.997, 114-122.

Arthur Andersen and Company (1971), Evaluation Manual for Electronic Checkout System, Chicago, Illinois: Supermarket Institute.

Chain Store Age Executive, (1976), "Lucky's Newest Experiment," (June), 21-22.

Chain Store Guide (1980), Chain Store Guide--1980 Directory, New York, New York: Chain Store Guide.

Danzansky, J.B. (1975), Price Disclosure Act: Hearings, U.S. Senate Subcommittee for Consumers of the Committee on Commerce, Washington, D.C.:

U.S. Government Printing Office, S.997, 30-33.

Flint, W.N. (1975), "The Automated Checkout Counter--Old Idea, New Reality," *Code & Symbol*, (November), 15-18.

Food Marketing Institute (1980), *Scanning Installation Up-Date*, Washington, D.C.: Food Marketing Institute, (June).

Harrell, G.D., M.D. Hutt and J.W. Allen (1976), *Universal Product Code: Price Removal and Consumer Behavior in Supermarkets*, Michigan: Michigan State University, Graduate School of Business Administration.

Harris, B.F. and M.K. Mills (1980), "The Impact of Item Price Removal on Grocery Shopping Behavior," *Journal of Retailing*, 56:4 (Winter), 73-93.

Hutt, Michael D. (1979), "Universal Product Code: Visible Obsticles, Hidden Benefits," in *Macro Marketing: New Steps in the Learning Curve*, George Fisk, and Robert Nelson (eds.), Boulder Colorado: University of Colorado, Business Research Division, 149-162.

Hutt, M.D., G.D. Harrell and J.W. Allen (1976), "Consumer Behavior Research and the Public Interest: Universal Product Code (UPC) Scanning System," *Proceedings*, Chicago, Illinois: American Marketing Association, 162-164.

Kanuk, L. and C. Berenson (1975), "Mail Surveys and Response Rates: A Literature Review," *Journal of Marketing Research*, 12 (November), 440-453.

Love, B. (1976), "Faster Thruput Being Achieved at Magnamarts,"*Supermarketing*, (February) 1, 62-64.

Mason, J.B. (1979), "The New Technology of Retailing," in Neil Beckwith et al, eds., *1979 Marketing Educators Proceedings*, Chicago, Illinois: American Marketing Association, 396-400.

Mason,J.B. and M.L. Mayer (1980), "Retail Merchandise Information Systems for the 1980's," *Journal of Retailing*, 56:1 (Spring), 56-76.

McGinnis, M.A. and L.L. Gardner (1976), "Electronic Checkout and Supermarket Sales Volume: Some Evidence," *Akron Business and Economic Review*, (Summer), 31-34.

McKinsey and Company, Inc. (1971), *Phase I Report, Grocery Industry Ad Hoc Committee on a Universal Product Code*, (November 28).

McNair, M.P. and Eleanor G. May (1978), "The Next Revolution of the Retailing Wheel," *Harvard Business Review*, (September-October), 81-91.

Pommer, M.D., E.N. Berkowitz, and J.R. Walton (1980), "UPC Scanning: An Assessment of Shopper Response to Technological Change," *Journal of Retailing*, 52:2 (Summer), 25-44.

Progressive Grocer (1975), "UPC Scanning a Success at Marsh's, (March), 59-67.

Robinson, R.K. and F.W. Langrehr (1979), "Consumers' Evaluations of Selected Aspects of Supermarket Scanners," in Neil Beckwith et al, eds., *1979 Marketing Educators' Proceedings*, Chicago, Illinois: American Marketing Association, 389-391.

Shaw, R.N. (1977), *Universal Product Code Scanning Systems: The Retail Experience 1974-1976*, Unpublished Ph.D. Thesis, Ithaca, New York: Cornell University.

U.S. Senate Subcommittee for Consumers of the Committee on Commerce (1975), *Price Disclosure Act: Hearings, Bill S.997*, Washington, D.C.: U.S. Government Printing Office.

Wegman, Bob (1975), "Scanning At Wegmans," *Price Disclosure Act: Hearings, U.S. Senate Subcommittee for Consumers of the Committee on Commerce*, Washington, D.C.: U.S. Government Printing Office, S.997, 47-48.

THE EFFECT OF MUSIC ON ATTENTION TO AUDIO ADS

Carl Obermiller, University of Washington
April Atwood, University of Washington

Abstract

The role of music in advertising is discussed and, based on a limited capacity model of attention, it is hypothesized that highly attractive music may contribute to learning of commercial message information in "noisy" environments but inhibit same in "quiet" environments. An experimental study provides support for the hypothesis. The use of music in advertising is discussed broadly and research issues raised.

Introduction

Since town criers and market hawkers used song to spruce up their sales pitches, music has been an important part of advertising. Casual observation, however, suggests an upswing in the use of popular music in recent radio and television advertising. The listening and viewing public has been exposed to ads using such popular artists as Lionel Ritchie and Michael Jackson, to ads using adaptations of popular music, and to ads using popular songs unchanged. One can suppose several potential justifications for the use of popular music in ads--music may aid in memory; it may provide information by means of the images it suggests; or it may merely entertain the audience, thereby helping to secure and maintain attention.

There has been relatively little published research on the role of music in advertising. Perhaps the most prominent work has been that of Gorn (1982). Gorn found evidence to support another justification for music in ads: classical conditioning was his explanation for positive preferences resulting from showing the target product in the presence of liked music and negative effects from pairing the product with disliked music. The artificial aspects of his research, however, leave some interesting questions unanswered: Could music have an effect in a more realistic advertising execution and a more realistic exposure situation, one in which the attention of the respondents was not focused on the ads? An interesting possibility is that music may work as an attention-attracting device, thereby moderating the effect of product claim information on audience response.

Music and Attention

What do we know about attention processes that is relevant to the use of music as an attention-getting device in advertising? We know that our information processing capacity is limited to processing only a subset of the information being presented, and is especially limited when the incoming streams of information are in the same sense modality (Broadbent, 1958; Glass, Holyoak and Santa, 1979).

Because of their processing limitations, receivers of incoming information must decide to which of the incoming streams they will direct their attention. The ability to shift the focus of processing activity is especially apparent in audio information situations, where we can shift our attention from one source to another almost effortlessly. Thus, it is easy for listeners to shift and direct attention to those sources of audio information that are most useful and satisfying.

One would expect that music would act as attention-getting device, especially in a medium (such as radio) generally used for musical entertainment and diversion. In such a context, music might be used as "bait" to lure the attention of listeners away from competing environmental stimuli toward an ad. The question we pose is whether the music in a musical execution may capture <u>too much</u> of the listener's attention. In an environment rich with competing stimuli ("noisy"), an ad would likely be ignored unless it had some aspect (such as music) that was very attention-getting, encouraging listeners to focus on the ad. In such a "noisy" environment, music that was low in attention-getting properties could not expect to generate much attention for the ad. By contrast, in a subdued, quiet listening environment, any music would be likely to generate attention; and music that was <u>very</u> attention-getting might be so attractive that there would be insufficient capacity left over to adequately process the information in the ad. Our research was designed to test the hypothesis that relatively attractive and unattractive musical selections differentially affect advertising effectiveness, depending on the amount of environmental distraction. When environmental distraction is low, we expect highly attractive music to adversely affect learning of message information; but when environmental distraction is high, we expect highly attractive music to be necessary for an ad to capture much attention at all.

Method

Design

The experiment was a 2 (music attractiveness) X 2 (environmental distraction), between-subjects factorial. The independent variables were operationalized as follows:

<u>Music attractiveness</u> refers to the extent to which a song attracts attention. The features of music that contribute to its attention-attractiveness are likely confounded with or also contribute to other dimensions, particularly pleasantness. For this research, no attempt was made to dissect the construct; but loudness, rhythm, tempo, and familiarity are some features relevant to attention-attraction.

Twenty selections of music were chosen that we felt were relatively high or low in attention-attraction. Pretesting by a representative subject sample resulted in six songs--three high and three low in attention attraction. The high attention attracting songs were "A Little Help From My Friends" by The Beatles, "Cover Me" by Bruce Springsteen, and "California Girls" by The Beach Boys. The low attention attracting songs were "Greensleeves" by Ferrante and Teicher, "Arabesque" by Mannheim Steamroller, and "Candy" by The Manhattan Transfer.

<u>Environmental distraction</u> refers to the extent to which there were competing focuses of attention in the setting in which the commercials were presented. This variable was manipulated in two ways. First, the environment was controlled. In the "quiet" environment, subjects sat at a bare table in a dimly lit room with closed blinds, listening to a tape-recorded audio program. In the "noisy" environment, subjects were surrounded by stimuli: the audio program, a video tape of a nature film w/o sound, magazines and picture books on the table, pretzels and soft drinks, open

windows, and ample illumination. Second, the subjects were given different instructions to direct their attention. Subjects in the quiet environment were instructed to sit quietly and listen to the program. Subjects in the noisy environment were instructed to imagine they were in a typical living room environment and to feel free to attend to whatever stimuli they wanted, including the snacks and drinks.

Procedure

Subjects were run in groups of 3 to 5. A "blind" experimenter assembled each group and described the research as a psychology study. The subjects sat at a table; the experimenter started the audio program and, in the noisy environment, the video, and sat in the back of the room. A random ordering of conditions was used, subject to an effort to produce equal cell sizes. At the conclusion of the program, the subjects were asked to fill out the dependent measure questionnaires, debriefed, thanked, and dismissed.

Stimuli

Commercial messages: The ads were adapted from professionally developed television commercials for products unavailable in the area. Voice copy for each ad was adjusted to make 45 second spots that had three clear points. Three commercials were used; the advertised brands were Neo Citran cold remedy, Sauce "N" Savour baking sauce, and Black Magic chocolates. Each ad began with approximately eight seconds of music that faded into the copy, which was read by a professional disc jockey. After the copy, the ad concluded with the music brought up for a few seconds, then faded.

Program: The ads were embedded in tape-recorded radio program discussing possible revolution in French New Caledonia. Three minutes of programming were followed by the first ad; then four minutes of programming and the second ad; then four more minutes of programming and the third ad, followed by several more minutes of programming.

Subjects

Subjects were seventy-two junior and senior students recruited from the business school at the University of Washington. Students were given class credit for participating in the research outside of class time.

Dependent Measures

The questionnaire included self-reports of focus of attention, program comprehension items, commercial learning measures (free recall, aided recall, and recognition), commercial evaluations, brand evaluations, and measures of brand purchase intentions. At the conclusion of the questionnaire, a recording of all six musical selections was played, and subjects rated each song on several scales.

Results and Discussion

Manipulation Checks

The research question was based on manipulation of two theoretical constructs, environmental distraction and music attractiveness. Although both manipulations were face valid, they were also checked. In the noisy environment subjects' attention should be less focused on the audio program relative to the quiet program. Subjects were asked to check the thing to which they paid most attention from a list that included all the stimulus sources plus an "other" category. In the quiet environment 27 of 34 subjects indicated the audio program as their focus of attention (five of the remaining seven indicated "sitting quietly"); whereas, in the noisy environment 32 of 38 subjects indicated something other than the audio program (magazines and video were attended most).

Although the music selections had been pretested for attractiveness, a manipulation check was performed at the conclusion of the current experimental data collection. Each subject listened to all six melodies, randomly ordered, and rated each on 5-point scales. The data are presented in Table 1. The ratings of the music were analyzed with a repeated measures analysis of variance, which showed an effect of attractiveness for all three scales with $p < .001$.

Table 1
Ratings of Music Selections

	Music Selections					
	Low Attractive			High Attractive		
	1	2	3	4	5	6
Attention-Getting*	1.67	1.29	.96	3.18	3.58	3.19
Liked*	2.60	1.47	2.31	3.33	3.44	3.19
Familiar*	3.36	.82	.31	3.67	3.39	3.75

*For all measures, a 5-point scale was used with 1=low, and 5=high.

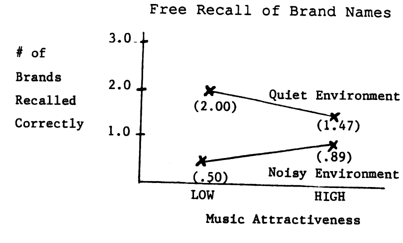
Effects on Learning

The theoretical basis of this research involves the limited capacity of attention and the nature and effects of distractions from attention tasks. We have no direct measure of attention, however, nor is attention itself of much interest to consumer behaviorists. The learning of information that results from attention is, however, of interest, and we presume that evidence of differential learning can be taken as evidence of differential attention.

We included three types of learning measures: free recall, aided recall (given the product category), and recognition (given several choices). (Due to space limitations, data are presented for key dependent measures only). Responses to the three ads were summed to yield total learning scores for each type of measure. The brand name recall and recognition scores could, thus, range from 0 correct to 3 correct. Since there were three claims made in each ad, copy claim recognition scores could range from 0 correct to 9 correct. The means for the free recall of brand name are shown and illustrated in Figure 1.

Figure 1

Free Recall of Brand Names

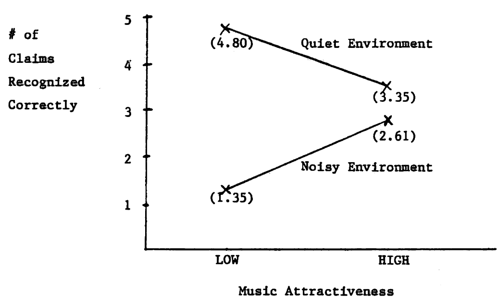


The scores on the brand name free recall were analyzed with analysis of variance. The analysis indicated an interaction effect; F(1,68)=3.72, p=.06. As predicted, brand names were recalled better when commercials were introduced by attractive music in the noisy environment, but in the quiet environment, recall was better when ads were introduced by unattractive music. Pairwise t-tests indicated marginally significant simple main effects (all pairs, p <.12). (The patterns of results for aided recall of brand name and brand name recognition were similar.)

The recognition of commercial claims, a more demanding task, was measured by asking subjects to indicate which, from a list of five or six plausible claims, had been made for each brand. The total number of correct recognition judgments was used as the dependent measure. The results are illustrated in Figure 2.

Figure 2

Recognition of Commercial Product Claims



Analysis of variance revealed a statistically significant interaction effect for commercial claim recognition; F(1,68)=8.40, p=.005. More attractive music was associated with higher claim recognition accuracy in the noisy environment, but with lower accuracy in the quiet environment. T-tests indicated simple main effects of music attractiveness for each environmental distraction condition (p <.05).

It is arguable that brand name and attribute claim memory are the most important measures of commercial learning. Since these key learning measures showed a common overall data pattern that approached or reached conventional levels of statistical significance, we feel comfortable in concluding that the results, in total, provide strong support for the hypothesized effects of music attractiveness, moderated by environmental distraction.

Effects on Evaluation and Intention

The effectiveness of advertising is not limited to learning of information. Favorable evaluative reactions and purchase intentions are also advertising goals. To assess evaluative responses, subjects were asked to rate each brand on three 5-point scales (bad-good, worthless-valuable, and like-don't like). Subjects were also given a "don't remember" option, which, if checked, resulted in no evaluation data for that brand for that subject. Purchase intentions were measured with a single item, a 5-point likely-unlikely to purchase if available scale.

Thirty-two of the 72 subjects used the "don't remember" option for the brand evaluation measures. Seven of the subjects were in the quiet and 25 were in the noisy environment condition. Because of the large and unbalanced loss of data, statistical analysis of the evaluations is not feasible. However, the purchase intention measure was completed by all the subjects, and, to the extent that evaluation and purchase intent are sequential phenomena, we can infer evaluations from the measure of purchase intention.

Separate analyses of variance of the purchase intention measures were conducted for each product. For only one product, Neo Citran cold medicine, there was a modest interaction effect, F(1,68)=3.15, p=.098, which is consistent with the hypothesized effects. Subjects were more willing to buy Neo Citran when advertised with high attractive music in the noisy environment, but more willing to buy when advertised with low attractive music in the quiet environment. Given that the pattern of effects mirrors the recall and recognition data, we conclude that these purchase intentions result from learned information. The effects of music on purchase intentions are, however, small, and none of the cells had a mean above the scale mid-point. One cannot expect large effects on willingness to buy a new brand from a single exposure of an ad in an experimental setting.

CONCLUSIONS

On the basis of the converging pattern of results from this experiment, we conclude that music has effects on attention to advertising, but it also affects attention within ads. The same highly attractive song that is effective in capturing a share of attention from a distracting environment may be so powerful that, in a quieter environment, it attracts attention away from the message in its own ad. Advertisers may well need to think twice before trying to construct ads with highly attractive musical "hooks". To the extent that exposure situations are known, by means of vehicle context, timing, or segment characteristics, the appropriateness of barbed and barbless hooks may be anticipated.

A considerable amount of research is yet to be done on the role of music in ads. Just as we have characterized Gorn's work as simplistic because it ignored the interaction of music and information, our work has focused on that relationship to the exclusion of other effects of music, particularly the role of music in affective responding. Moreover, we have ignored the differing roles of music in ads with different goals. Not all advertising is designed to convey specific information (although brand name communication may be part of almost all advertising); and the distracting effects of music in image-based advertising may be of little importance. We have also ignored the information value of music itself. Popular songs are not merely distractors, they have meaning to people; and the effects of this meaning, its content and its relevance is another interesting aspect of music in ads. Finally, we have admitted to making no effort to determine what dimensions of music make it attractive of attention. Such research, while of undeniable interest to consumer behaviorists, may best be left to those of us with better training in musical theory or music psychology.

In addition to pursuing the specific question of music's role in advertising, our research question lends itself to further investigation of the structure of ads. Do other attention hooks behave as music? Many advertisers are aware of the dangers of putting too much emphasis on the entertaining aspects of ads; do humor, novelty, shock, sex, and other hooks come in barbed and barbless varieties? The implications of current models of attention that we used for music seem to apply to these other components of advertising as well.

In conclusion, remember that music hath charms to soothe the savage breast, but take care not to turn away the attentive ear with delightful tunes or charming melodyes.

REFERENCES

Broadbent, D.E. (1958), Perception and Communication, London: Pergamon Press.

Glass, Arnold Lewis, Keith James Holyoak, and John Lester Santa (1979), Cognition, Reading, MA: Addison-Wesley Publishing Company.

Gorn, Gerald, (1982), "Music in Advertising: A Classical Conditioning Explanation", Journal of Marketing,

THE PSYCHOPHYSICS OF PRICE: A CRITIQUE OF THE WEBER-FECHNER APPROACH IN CONSUMER BEHAVIOR

J. Dennis White, Florida State University
Judy A. Vilmain, University of Wisconsin

ABSTRACT

The present paper reviews the application of Fechnerian psychophysics to the study of consumer perceptual response to price. Because Weber's Law and Fechner's Law apply only to sensory dimensions, and are predicated upon the concepts of sensory thresholds, they cannot be applied to the study of price perception, since price is a nonsensory dimension. An alternative approach to the study of the psychophysics of price is presented which depends upon direct consumer estimates of subjective magnitude. The implications of this approach for future research are discussed.

INTRODUCTION

An important area of research within the field of consumer behavior concerns the consumer's subjective response to price. One of the goals in this and other areas is the determination of the psychophysical transformations involved in perception--the determination of the processes by which external physical stimuli are translated into internal psychological responses. Research within psychology has traditionally sought to discover and validate simple, consistent mathematical laws that capture these relationships (see Carterette & Friedman 1974, for a review). A voluminous literature exists concerning the psychophysical relations for a variety of physical stimulus dimensions (e.g., Marks 1974). Recently, the work has been extended to nonsensory or social dimensions as well (Wegener 1982a).

Researchers within the area of price perception have recognized the potential of various psychophysical scaling principles and methods developed within the field of psychology for the study of subjective response to price. Unfortunately, applications of these principles and methods have sometimes been misguided. In particular, it appears to be widely accepted in the marketing literature that the perception of price changes obeys Weber's Law, and that Fechner's Law is an accurate representation of the psychophysical function relating objective price to subjective price (Britt 1975; Miller 1962; Monroe 1971b, 1973; Monroe & Petroshius 1981), and yet, close examination of the two formulations and the principles underlying them, reveal their inapplicability to the study of price perceptions.

WEBER'S LAW

In the mid 1800's, Ernst Weber discovered that although people can perceive small changes in a weak stimulus, they notice only large changes in a strong stimulus. According to Weber's Law, the amount by which the intensity of a stimulus must be increased or decreased in order for a sensory change to be detected (i.e., the "just noticeable difference") is a constant fraction of the original stimulus intensity

$$\Delta\phi = k\phi \qquad (1)$$

where ϕ represents the original stimulus intensity, and $\Delta\phi$ represents the minimum amount of change in intensity required for detection. To illustrate, if a one lb. increase in the weight of an item originally weighing ten lbs is necessary for an individual to perceive that a change has occured (k=.10), then five lbs. must be added to an item weighing fifty lbs. before the individual will notice the weight difference. According to Weber's Law, the value of k should remain constant along any particular stimulus dimension, although different stimulus dimensions may yield different values of k.

Empirical evidence supporting Weber's Law has been obtained for a number of sensory dimensions using an indirect, discriminability scaling procedure. Rather than ask the individual to directly comment on the magnitude of his or her sensation, the individual is presented with a variety of physical stimulus levels, and sensations are inferred through his or her responses to the physical stimuli.

In a typical discriminability scaling task, the individual is presented with a constant standard stimulus (ϕ) and a variable stimulus for comparison. The experimenter begins by presenting the comparison stimulus at a much lower, (or much higher) intensity level than the standard and then increase (or decrease) the intensity level of the comparison stimulus in small steps until it can no longer be distinguished from the standard. The final value of the comparison stimulus then defines the individual's "difference threshold" (see Luce & Galanter 1963, for an extensive treatment). (It should be noted that although Weber's Law is a useful approximation of discriminability along a sensory dimension, it has not been found to hold under all circumstances.)

FECHNER'S LAW

Gustav Fechner, a contemporary of Weber's, was interested in determining the exact relationship between any given increase in stimulus intensity and the corresponding increase in sensation. Building upon Weber's

Law, Fechner argued that the "just noticeable difference", or JND, could be used as a unit of measurement by which sensory magnitude could then be reliably assessed. Fechner assumed that each JND represents a minimal increment in sensation and that the JNDs are all equal in subjective magnitude. Fechner further assumed that since a JND corresponds to a minimal sensory change, Weber's Law could be written in terms of mathematical differentials. Therefore, because of the assumed subjective equality of the JNDs, it follows that

$$\partial\psi = k(\partial\phi/\phi) \qquad (2)$$

where ψ represents the sensation magnitude, ϕ represents the stimulus magnitude, and k is a constant of proportionality. Integration of eq. 2 gives us the following:

$$\psi = k \log \phi \qquad (3)$$

where k is a constant of proportionality. The stimulus magnitude, ϕ , is measured with the absolute threshold value as the unit of measurement. That is, the valueof $\phi$is a ratio of the intensity of the stimulus to the absolute threshold value. (The absolute threshold is defined as the smallest stimulus intensity at which an individual notices the presence of the stimulus 50% of the time.) Equation 3, known as Fechner's Law, states that the psychophysical function relating subjective price to objective price is a logarithmic function.

It should be noted that Fechner's approach is not without controversy within the field of psychology. The validity of this entire approach rests upon Fechner's assumption that the JNDs are subjectively equal to each other. The major difficulty with Fechner's approach is that there is no way to determine whether the JNDs are in fact subjectively equal. As a result, this assumption operates as an unproved postulate or axiom; it depends upon our intuitive belief in the validity of Fechner's assumptions (Galanter 1962).

APPLICATION TO THE PERCEPTION OF PRICE

As stated above, it has been assumed by many researchers and theorists that the perception of price obeys Webers Law: i.e., it is assumed that as one moves forward along the price scale, increasingly larger changes in price are required for a consumer to perceive that a price change has occurred and that the amount of the price change necessary for detection will be a constant proportion of the original price.

Recall from the above discussion that both Weber's Law and Fechner's Law rely heavily upon the concepts of the difference threshold and the absolute threshold. Herein lies the difficulty in applying these laws to the study of price perception. Price is an artifical, man-made scale having no basis in the physical world. It is not a sensory dimension, and because of this, the concept of a sensory threshold has no meaning when applied to the price scale. There is no difference threshhold for the price dimension, that is, there is no difference in price so small that it cannot be perceived. Everyone can perceive the difference between $30.01 and $30.02. Nor is there an absolute threshold for the price dimension; i.e., there exists no price so small that it cannot be detected. Everyone can tell the difference between $0.00 and $0.01. Weber's Law, and consequently Fechner's derivation, have no meaning in the absence of a sensory threshold.

This does not mean that consumers will overtly respond to (in the form of a change in purchase behavior), or even notice all price changes that they encounter in the marketplace — it simply means that there are no price changes that the consumer is incapable of perceiving, and apparently this is where the confusion lies. Failure to notice a price change may be a function of either selective attention or the individual's memeory load. Failure to overtly respond to a noticed price change may occur because the change in price was not large enough to motivate the individual to modify his or her purchase behavior. Neither situation, however, can be accounted for by assuming that the change in price was below the indidvual's difference threshold for price; i.e., that the individual's perceptual system was insensitive to the price variation.

Intuitively, it makes sense that for any given purchase, there exists an acceptable price range, and that if the actual price falls outside this range, the consumer will be motivated to alter his or her purchase behavior (see Monroe 1973; Monroe & Petroshius 1981; Monroe & Venkatesan 1969). There is empirical evidence to suggest that consumers do report and act upon a range of acceptable prices (Monroe 1973, Gabor & Granger 1969). It also makes sense that the size of this price range increases as one moves forward along the price scale. It may even be the case that the ratio of this acceptable price range to the original or base price is constant all along the price scale; i.e., that

$$APR = k\ (P) \qquad (4)$$

where APR denotes the individual's acceptable price range, P denotes the original or base price, and k is a constant of proportionality. To the best of our knowledge, this relationship has never been empirically tested. Even if consumer response to price is, in some future experiment, found to obey eq. 4, this would not constitute validation of Weber's Law for the price dimension. Eq. 4 may look something like Weber's Law, but the two formulae are at best analogous. The distinction is not trivial -- researchers in the area of price perception have assumed a logarithmic psychophysical function relating objective price to subjective price based on their unfounded assumption that Weber's Law holds for the price dimension. But clearly, because diffences in absolute threshold have no meaning on the price dimension, Fechner's Law cannot be derived from eq. 4. It would be grossly inaccurate to say that the relationship

Subjective price = k log (objective price) (5)

follows from eq. 4. At the very least, it would be difficult to argue that "acceptable price ranges" are subjectively equal. (Recall that Fechner had to assume that JNDs are subjectively equal in order to derive his formula.)

It must be noted that Weber's Law may hold for consumer response to stimulus dimensions other than price, as long as the stimlus dimensions are sensory dimensions yielding sensory thresholds. Britt (1975) has argued that Weber's Law can be profitably applied in areas such as product design, packaging, copy and layout, size of advertisements, frequency of presentation, etc. As noted above, however, Weber's Law has not been found to hold under all circumstances.

The widespread acceptance of Weber's Law and Fechner's Law in price research is puzzling, given the lack of supporting empirical evidence. An extensive literature search produced no studies on price perception utilizing the scaling methods necessary to produce psychophysical scales that have been traditionally associated with thresholds. Monroe and Venkatesan (1969) and Monroe (1971a) report studies in which consumers consistently identify ranges of "acceptable" prices. The authors label the limits of this range as price thresholds. The lower price threshold, in particular, implies that there are some prices that are unacceptable because they are too low (Monroe and Petroshius 1981, p. 48). Monroe's definition refers to an entirely different phenomenon than absolute thresholds as used in the Fechner formulation. The latter refers to perceptual discriminability while Monroe's acceptable price range involves the consumer's "preference" for certain price levels. It is important to realize that the two concepts are distinct, and that Monroe's concept of acceptable price ranges has no bearing on the empirical validity of Weber's Law or Fechner's Law for the price dimension.

There are several studies reported in the literature utilizing direct scaling methods (category scales) which have shown a logarithmic relationship between price and subjective value or product quality (Adams 1969; Cooper 1969; Fouilhe 1969). Cooper (1969), for example, conducted a series of studies in which he varied the prices for a variety of common household items, and had consumers rate the items in terms of the product's probable level of quality. The results appeared to confirm the adequacy of a logarithmic relationship between price and perceived quality. There was, however, no relationship established between objective price and subjective price, as would be stipulated by a strict interpretation of the Fechner's Law; i.e., Cooper was investigating the relationship between objective price and subjective quality.

Cooper's study illustrates the complexities involved in the study of subjective response to price. Marketers are ultimately interested in predicting the relationship between objective price and observable purchase behavior, but there are a number of intervening variables that must be distinguished and examined, such as subjective judgments of cost, quality, value, and utility, as well as the consumer's verbal responses. All of these interrelationships are worthy of study, but unless we are careful and diligent in determining these intervening steps, we will encounter numerous obstacles in understanding consumer use of price information. Future research in this area should seek to identify the specific transformations taking place between these variables and provide some theoretical explanation of their interrelationships.

Given the controversy surrounding Fechnerian psychophysics in general, and its inapplicability to the price dimension in particular, alternative approaches for investigating the various subjective responses to price need to be employed. One such approach, described below, is S. S. Stevens' (1975) method of magnitude estimation. Magnitude estimation is a simple, direct procedure for exploring psychophysical transformations, and it does not rely upon the concept of sensory thresholds as does Fechner's approach. As such, it should act as a viable alternative for research on price perception.

MAGNITUDE ESTIMATION

Magnitude estimation involves asking subjects to make a direct report on the magnitude of their sensations. This approach has been applied to a variety of sensory and social modalities (see Marks 1974, and Stevens 1975, for reviews). In a typical magnitude estimation task, subjects are presented with a standard stimulus and a series of test stimuli. The standard stimulus is assigned an arbitrary number by the experimenter, and subjects are required to assign a number to each of the test stimuli that represents the sensation ratio between the test and standard stimulus. In other words, if the subject perceives the subjective magnitude of the test stimulus to be twice the magnitude of the standard, then the subject should assign a number twice the subjective magnitude of the standard stimulus. Stevens argues that the method of magnitude estimation leads to a ratio scale of subjective magnitude, and that this ratio scale is superior to both Fechner's JND scale and the category-rating scale (e.g., Cooper 1969) for several reasons (Stevens 1975).

The Power Law

Whereas Fechner proposed a logarithmic psychophysical law, Stevens proposes that the psychophysical law takes the following form

$$\Psi = k\Phi^{\beta} \qquad (6)$$

where Ψ is the sensation magnitude, Φ is the stimulus magnitude in physical units, k is a constant that depends on the units of measurement, and β is a parameter of the sensory continuum under investigation. Using the method of magnitude estimation, Stevens and his associates have found a large number of sensory continua for which the power function appears to be valid.

Is such an estimation task valid and reliable? One method proposed to verify the exponents of the psychophysical power function is known as cross-modality matching. Cross-modality matching consists of adjusting stimuli on one sensory dimension so that the sensation magnitudes appear to match those on another sensory continuum. For example, the experimenter might present various levels of luminance of a light, and the subject's task would be to adjust the sound pressure of a tone so as to produce loudnesses that match the brightnesses.

For instance, assuming that the power function governing the psychophysical behavior of subjective cost is

$$\Psi_c = k_c \Phi_p^{\beta_c} \tag{7}$$

and that governing loudness is

$$\Psi_1 = k_1 \Phi_1^{\beta_1} \tag{8}$$

cross-modality matching involves procedures which result in equal subjective values on the two continua. Thus, $\Psi_c = \Psi_1$ and

$$k_c \Phi_p^{\beta_c} = k_1 \Phi_1^{\beta_1} \tag{9}$$

so,

$$\Phi_p = (k_1/k_c)^{1/\beta_c} \Phi_1^{(\beta_1/\beta_c)} \tag{10}$$

The predicted relation between price and loudness is a power function with an exponent equal to the ratio of the exponents of the two psychophysical functions. If, for instance, subjective cost grows as the two-thirds power of monetary price, the matching function between price and sound energy should be linear. Predictions such as these are rarely disconfirmed on either sensory dimensions (Marks 1972) or with social modalities (Wegener 1982a).

The Power Law and Economic Phenomena

The appropriateness of a power function has not yet been determined for price, although it has been demonstrated for other economic continua. Galanter and associates (1974) have conducted a number of studies where they attempt to find some transformation of monetary wealth that represents the "psychological effect of the magnitude of the physical variable" (i.e., utility). Since the physical scale of wealth comes with a clearly marked numerical value, it is unreasonable to ask a subject to estimate whether $20 is worth twice as much as $10. Instead, Galanter asked subjects to assign numbers not to the amounts of money being scaled but rather to the relative happiness that additional monetary increments would provide (e.g., "If $10 will make you happy to a certain degree, how much would you have to receive to be twice as happy?). The results support the hypothesis that utility is a power function of money. In particular, the exponent(β) for the utility function was found to be .43. In additional studies, Galanter attempted to confirm the form and the exponent of the utility function through cross-modality matching. In one of these studies, subjects first scaled the loudness of a 400-Hx tone across varying levels of amplitude. The subjects were then given control over the amplitude of the tone and asked to adjust the loudness to correspond to the value of different monetary increments. Cross-modality matching produced estimates of the exponent equal to .45, clearly confirming the estimated exponent for the positive monetary increments.

SUMMARY

Despite its widespread acceptance in consumer behavior, there is no basis, theoretical or empirical, for the application of either Weber's or Fechner's Law in the study of the perception of price. Fortunately, there exist other psychophysical approaches that can be employed in research in this area, one of which is Stevens' method of magnitide estimation. Future work in this area should give special consideration to the following points:

1. Careful methodological work must begin to establish consistent scaling and measurement methods that detail the necessary and sufficient conditions for psychophysical measurement with respect to price.

2. Research is necessary to validate the existence of a power law relating objective price and subjective responses to that price.

3. Finally, the complex relationships between objective price, subjective judgments of cost, quality, value, and utility, as well as the consumer's observable purchase behavior must be clarified theoretically, and validated empirically.

REFERENCES

Adams, D. 1969. "Consumer Reaction to Price." In B. Taylor, & G. Wills (Eds.), Pricing Strategy. Princeton: Brandon/Systems Press, Inc.

Britt, S.H. 1975 "How Weber's Law Can Be Applied to Marketing." Business Horizons, 18 (February), 21-29.

Carterette, E.C., and M.P. Friedman (Eds.) 1974 Handbook of Perception: Psychophysical Judgment and Measurement (Vol.2), New York: Academic Press.

Cooper, P. 1969. "Subjective Economics: Factors in a Psychology of Spending." In B. Taylor, & G. Wills (Eds.), Pricing Strategy. Princeton: Brandon/Systems Press, Inc.

Engen, T. 1971 Psychophysics: I. Discrimination and Detection, In. J.W. Kling, L.A. Riggs (Eds.) Experimental Psychology (3rd Ed.), New York: Holt, Rinehart, & Winston, Inc.

Fouilhe, P. 1969. "The Subjective Evaluation of Price: Methodological Aspects. In B. Taylor, & G. Wills (Eds.), Pricing Strategy. Princeton: Brandon/Systems Press, Inc.

Fechner, G.T. 1860 Elemente der Psychophysik. Leipzig: Breitkopf & Hartel.

Gabor, A., and C. Granger 1969 "The Attitude of the Consumer to Price," In B. Taylor, & G. Wills (Eds.), Pricing Strategy: Reconciling Customer Needs Pricing Strategy: Reconciling Customer Ny Objectives, New York: Brandon/ Systems Press, Inc.

Galanter, E. 1962 "Contemporary Psychophysics," E. Galanter, E. Hess, & G. Mandler (Eds.) New Directions in Psychology. New York: Holt, Rinehart & Winston.

Galanter, E. 1974 "Psychological Decision Mechanisms and Perception," in E.C. Carterette, & M.P. Friedman (Eds.) Handbook of Perception: Psychophysical Judgment and Measurement, (vol.2), New York: Academic Press.

Luce, R.D., & Galanter, E. 1963 "Psychophysical Scaling," In R.D. Luce, R.R. Bush, & E. Galanter (Eds.), Handbook of Mathematical Psychology, Vol. 1. New York: Wiley.

Marks, L.E. 1974 Sensory Processes: The New Psychophysics, New York: Academic Press.

Miller, R. L. 1962. "Dr. Weber and the Consumer," Journal of Marketing Research, Vol. 8 (November), 460-464. (a)

Monroe, K.B. 1979 "Measuring Price Thresholds by Psychophysics and Latitudes of Acceptance," Journal of Marketing Research, Vol. 8, (November), 460-464. (a)

__________ 1976 "The Information Content of Prices: A Preliminary Model for Estimating Buyer Response". Management Science, Vol. 17, (April), B519-b532. (b)

__________ 1973 "Buyer's Subjective Perceptions of Price." Journal of Marketing Research, Vol. 10 (February), 70-80.

__________ & Petroshius, S.M. 1981 "Buyers Perceptions of Price: An Update of the Evidence." In H.H. Kassarjian, & T.S. Robertson (Eds.) Perspectives in Consumer Behavior (3rd Ed.), Glenview, Ill: Scott, Foresman & Co.

__________, & M. Venkatesan 1969, "The Concept of Price Limits and Psychophysical Measurement: A Laboratory Experiment." Proceedings: American Marketing Association. 345-351.

Stevens, S.S. 1975 Psychophysics. New York: Wiley

Wegener, B. (Ed.) 1982a. Attitudes and Psychophysical Measurement. Hillsdale, N.J.: Erlbaum Associates. (a)

Wegener, B. 1982b "Outline of a Structural Taxonomy of Sensory and Social Psychophysics," In Wegener, B. (Ed.) Social Attitudes and Psychophysical Measurement. Hillsdale, N.J. : Erlbaum Associates, 1-38, (b)

DETERMINANTS OF PRODUCT VALUE-EXPRESSIVENESS: ANOTHER LOOK AT CONSPICUOUSNESS, DIFFERENTIATION, AND COMMON USAGE

M. Joseph Sirgy, Virginia Polytechnic Institute and State University
J. S. Johar, California State University, San Bernandino
Michael Wood, Hunter College, CUNY

Abstract

This paper reports a study that examined the effects of product conspicuousness, product differentiation, and product common usage on product value-expressiveness. As expected, the results showed that product conspicuousness and product differentiation are positively related to product value-expressiveness, and that product common usage is negatively related to product value-expressiveness.

Introduction

That buying decisions are made not only on the basis of instrumental aspects of products but in recognizance of their meaning to self and others (value expressiveness) has been a central observation in marketing and consumer behavior (Sirgy, 1982; Solomon, 1983). Consensus about the importance of value-expressive or "symbolic" aspects of products at the theoretical level however has not been paralleled by systematic efforts to empirically delineate the sources and determinants of product value expressiveness. [A notable exception is Belk (1981) see below]. Consumer behavior research on the role of the self and valuational processes has increased recently (Sirgy, 1985), but the value of such research for marketers depends upon complementary understanding of product value-expressiveness. Thus, self-image congruence models, for example, can be most successfully applied to products displaying a high degree of value-expressiveness, i.e., where consumers have a strong stereotypic image of the generalized users of these products (Sirgy, 1982, 1983, 1985). Given that marketers use self-image congruence models for positioning purposes, marketers need to have a reliable and valid measure of product value-expressiveness. Measures of product value-expressiveness may help marketers identify those products that can be analyzed (for positioning purposes) using self-image congruence models. To develop such a measure, we need to know something about the product dimensions that are associated with product value-expressiveness.

Sources and Determinants of Product Value-Expressiveness

Value-expressive or symbolic attributes of products communicate meanings about the age, sex, social status, and lifestyle of users (Levy, 1959; Csikszentmihali and Rochberg-Halton, 1981). Many factors are thought to influence the formation and change of product value-expressiveness: product-related factors (Belk, 1981), individual difference factors (Belk, 1978; Belk, Mayer, and Bahn, 1981; Belk, Bahn, and Mayer, 1982; Hamid, 1969; Munson and Spivey, 1981; Sommers, 1964), and factors related to utilitarian attributes (Varvoglis and Sirgy, 1984).

Belk (1981) argued that there are several factors that influence how product cues are used for impression formation of a generalized user of a product (personal image associated with the product). These are: (1) product current uniqueness, (2) variety of choices available, (3) the cost of the product, (4) length of time for which the consumer is committed to a choice, (5) amount of time and thought that go into the selection decision, (6) product visibility or noticeability, (7) product complexity, and (8) rate of stylistic change currently associated with the product. The greater the current product uniqueness [and the variety of choices of brands available, the cost of the product, the long-term commitment, the thoughtful selection, the social visibility or conspicuousness of the product, the complexity of the product, and the rate of stylistic changes associated with the product] the greater the likelihood that product cues will be used to make inferences about the stereotypic image of the product user. The results of Belk's study provided some support only to the relationships between cost and thoughtful selection on the use of product cues to form judgments of the consumer's personality and social class.

The present study focuses only on the effects of product-related factors on product value-expressiveness. The reader who is interested in individual difference effects on product value-expressiveness may consult Belk (1978), Belk, Mayer, and Bahn (1981), Belk, Bahn, and Mayer (1982), Hamid (1969), and Munson and Spivey (1981).

The lack of support for the effects of social conspicuousness (visibility), differentiation (variety of choices), and common usage (uniqueness or scarcity) on product value-expressiveness in Belk's (1981) study may have been due to several method problems, and not necessarily conceptual ones. Some of these method problems may include (1) the use of products rather than brands, and (2) the use of social class imputations as the only expression of product value-expressiveness. It may be that value-expressiveness may be related to differences among products as well as brands. By focusing on brands, we may be able to capture additional variance unaccounted for at the product level. A similar argument can be made in regard to the broadening of the measure of value-expressiveness to a larger class of symoblic attributes, and not necessarily limited to social class imputations.

The present study will attempt to remedy these method problems in attempt to provide support for the hypothesized effects of conspicuousness, differentiation, and usage. The present study attempts to accomplish these objectives by using an experimental design, focusing on brands rather than products, and broadening the conceptual and operational definition of product value-expressiveness (not restricted to social class impressions.

Hypotheses and Conceptual Development

Hypothesis 1: Product social conspicuousness is positively related to product value-expressiveness.

Hypothesis 2: Product differentiation is positively related to product value-expressiveness.

Hypothesis 3: Product common usage is negatively related to product value-expressive.

The rationale for hypothesis 1 involves the notion that products that are socially visible (i.e., socially consumed) can be associated with those personal characteristics of their users more than products that are consumed inconspicuously. The social visibility of the product facilitates learning and helps establish consensual beliefs regarding the stereotypic image of the product user. Also, Belk (1981) argued that the visibility or noticeability of a product may be used as a perceptual cue for impression formation. Furthermore, research in reference group influence in consumer behavior has produced evidence to suggest that the greater the product social visibility the greater the reference group influence on consumer behavior (Bourne, 1957; Bearden and Etzel, 1982).

Hypothesis 2 involves the concept of product differentiation. It can be argued that because a product is highly differentiated, observers can easily make the inference that the user of a highly differentiated product prefers or desires those differentiated attributes that are provided by a specific brand. The use of perceptual cues in categorizing or stereotyping the brand user is also explained by impression formation theory. Furthermore, Belk (1981) has hypothesized that variety of choices available may have an effect on product value-expressiveness as evidenced from research in the area of cosmetic products. He suggested that the reason that people attribute different stereotypic images to cosmetic users is because there is variety of choices among the many available brands. His argument can be used to lend support for the hypothesis relating product differentiation to product value-expressiveness.

Hypothesis 3 deals with product common usage. From attribution theory in social psychology we know that unique (uncommon) events are used by people to make causal attributions, i.e., the information weight of unique characteristics is augmented, whereas common characteristics are discounted in perceptual inferences. Accordingly, product unique usage (i.e., product directed to select few) can be used by consumer observers, to make attributions about the personality (or personal characteristics) of the product user. Also, Brock's (1968) commodity theory supports the product uniqueness effect. The theory argues that scarcer goods are better able to convey messages concerning status or uniqueness of the consumer (Fromkin, Olson, Dipboye, and Barnaby 1971; Szybillo 1975; Worchel, Lee, and Adweole 1975). Furthermore, from research in reference group influence in consumer behavior, we know that reference group influence is more evident for luxury goods than necessity goods (Bourne, 1957; Bearden and Etzel, 1982). Luxury goods can be viewed as products that are less commonly used than necessity goods. Since product value-expressiveness can be expressed through self-identification (reference group influence), then we can infer that luxury goods may be more symbolic than necessity goods. This argument may provide further theoretical justification to Hypothesis 3.

Methodology

Sample

Fifty marketing students participated as subjects in this study (22 males and 30 females). Since this study is designed to test a set of theoretical relationships, convenient sampling may be argued to be justifiable.

Design and Products

A 3-way repeated-measures ANOVA design was selected for this study. The three independent variables were product conspicuousness, product differentiation, and product common usage. The dependent variable was product value-expressiveness (see Table 1).

TABLE 1

A THREE-WAY REPEAT MEASURES DESIGN WITH SELECTED PRODUCTS

Experimental Condition			
Conspicuousness	Usage	Differentiation	Selected Product
high	high	high	Pontiac (Sport Car)
high	low	high	Rolls Royce (Luxury Car)
high	high	low	Ford Escort (Economy Car)
high	low	low	Orthopedic (Wheel Chair)
low	high	high	TV Guide (Magazine)
low	low	high	Science Digest (Magazine)
low	high	low	Anacin (Aspirin)
low	low	low	Preparation H (Hemoroid Medicine)

Eight products were selected based on the following criteria: (1) Each product had to, at face value, fit one of the eight design cells. (2) The products can be used by both male and female consumers. (3) College students have to be familiar with the products.

Product Differentiation Measure

Ten Likert-scale items (5-point scales) were designed to measure the product differentiation construct. Each subject was asked to agree or disagree with the following statements applied to each of the eight products:

1. Brand X is not that different from the other brands.
2. Brand X is highly differentiated from the other brands.
3. It is hard to distinguish brand X from its competition.

4. Brand X is not that different from the others, all brands of this type product are alike.
5. There is a lot of options besides brand X, but there is hardly any difference among the brands.
6. In buying a product like brand X, you have to shop around because there is a lot of differences among brands.
7. Brand X is very different from the competitor brands.
8. Brand X is very similar to the competitor brands.
9. Why shop around, buying brand X is as good as any other.
10. I can hardly notice the difference between brand X and the other brands I know.

The reader should note that the term "brand X" was replaced by the actual brand name of the particular product being measured. Items 2, 6, 7, are positively keyed (reflect high product differentiation) and items 1, 3, 4, 5, 8, 9, and 10 are negatively keyed (reflect low product differentiation). Alpha reliability coefficients varied between .732 to .899 among the eight products.

Because of the measure's adequate internal consistency values, summative composite scores were computed for each product to reflect an overall score of "product differentiation."

Product Common Usage Measure

Ten Likert-scale items (5-point scales) were developed to measure the product common-usage construct. Each subject was asked to agree or disagree with the following statements applied to each of the eight products:

1. Brand X is very unique.
2. Only a very select few use brand X.
3. Almost everyone uses brand X.
4. A select few buy brand X.
5. Not a lot of people use brand X.
6. Brand X is commonly used.
7. There is a very small minority of people who use brand X.
8. The majority of consumers buy brand X.
9. Brand X is not for everyone, only a handful of people.
10. Brand X is directed to a highly select market.

Items 3, 6, and 8 are positively keyed (high product common usage) and items 1, 2, 4, 5, 7, 9, and 10 are negatively keyed (low product common usage). Alpha reliability coefficients varied between .651 to .945 among the eight products. As with the product differentiation scales, summative composite scores were computed for the eight products reflecting an overall "product common usage" score for each product.

Product Social Conspicuousness

Ten Likert-scale items (5-point scales) were used to tap the product conspicuousness construct. Each subject was asked to agree/disagree with the following statements applied to each of the eight products:

1. Brand X is very visible when using it.
2. Brand X is very noticeable by others.
3. You can't avoid people not seeing you when you use brand X.
4. People notice the user of brand X.
5. Brand X is attention-getting.
6. The user of brand X is an attention-seeker.
7. The use of brand X is very private.
8. The use of brand X is highly inconspicuous.
9. People who use brand X show off.
10. The use of brand X draws attention from others.

Items 1, 2, 3, 4, 5, 6, 9, and 10 are positively keyed (high product conspicuousness) and items 7 and 8 are negatively keyed (low product conspicuousness). Alpha reliability coefficients varied between .556 to .932 among the eight products. As with the product differentiation and product common usage measures, summative composite scores were computed for the eight products.

Product Value-Expressiveness

Each subject was asked to respond to the following question after each product presentation:

What kind of person do you think often uses brand X?
Describe this type of person in your own words.

After responding to this question, each subject was asked to agree/disagree with the following 10 Likert-scale (5-point) items as applied to each of the eight products:

1. I am not sure who often uses brand X.
2. It is difficult for me to say what kind of person often uses brand X.
3. Brand X has a distinct "image."
4. Brand X has "personality."
5. I don't see any "image" in brand X.
6. It is foolish to think that there is a stereotype of user of brand X.
7. Brand X tells me something about its user.
8. Brand X communicates certain symbols about the person who uses it.
9. Brand X doesn't say much about its user.
10. I can't describe the user of brand X.

Items 3, 4, 7, and 8 are positively keyed (high product value-expressiveness) and items 1, 2, 5, 6, 9 and 10 are negatively keyed (low product value-expressiveness). Alpha reliability coefficients varied between .653 to .837 among the eight products. Additive composite scores were similarly derived.

Manipulation Check

Now we return to the question of "are the categories represented by the brands assigned?" Or "are the treatment levels of the variables involving conspicuousness, differentiation, and common usage effectively represented by the brands selected?" Having illustrated the reliabilities of the product differentiation, product common usage, and product conspicuousness measures, we now can use the composite scores of each of these variables and conduct t-tests as manipulation checks. The means are reported in Table 2. As shown in Table 2, the product manipulations involving conspicuousness, common usage, and differentiation have been mostly successful. The results of all t-tests (one-tailed) comparing the high versus low conditions of each treatment variable were significant beyond the .01 level and in the expected direction.

TABLE 2

MANIPULATION CHECKS RESULTS (MEANS AND t-TEST ANALYSIS)

Experimental Condition						
Conspicuousness	Usage	Differentiation	Mean Conspicuousness Score	Mean Usage Score	Mean Differentiation Score	Mean Value-Expressiveness Score
high	high	high	42.3	40.1	36.3	40.36
high	low	high	41.3	15.6	43.3	37.62
high	high	low	35.4	39.3	13.2	36.32
high	low	low	39.9	12.3	16.3	24.92
low	high	high	20.5	43.3	40.6	34.50
low	low	high	15.0	13.1	40.3	28.88
low	high	low	13.2	45.1	10.1	25.20
low	low	low	13.7	16.0	8.3	20.32
			t=5.05 (p<.01, df=49)	t=7.04 (p<.01, df=49)	t=7.13 (p<.01, df=49)	

Note: t-tests reflect the difference between high and low categories of product social conspicuousness (t=5.05, p<.01, df=49), product common usage (t=7.04, p<.01, df=49), and product differentiation (t=7.13, p<.01, df=49).

Results and Discussion

Using the 3-way repeated measures design, three significant main effects were expected pertaining to product conspicuousness, product common usage, and product differentiation in relation to product value-expressiveness. The results of the analysis-of-variance produced three significant main effects with no important interaction effects (see Table 2 and 3).

TABLE 3

RESULTS OF THE THREE-WAY WITHIN ANALYSIS OF VARIANCE

Source	df	SS	F-Value	% Variance Accounted for
Differentiation (A)	1	7717.62	196.40*	.26
Usage (B)	1	3962.70	167.18*	.13
Conspicuousness (C)	1	5542.80	143.64*	.18
Subjects (S)	49	1229.52		
A x B	1	447.32	14.99*	.01
A x C	1	2.10	.07	<.01
A x S	49	1925.50		
B x C	1	109.20	5.44	<.01
B x S	49	1161.42		
C x S	49	1890.82		
A x B x C	1	617.52	21.69*	.02
A x B x S	49	1462.30		
B x C x S	49	982.92		
A x C x S	49	1395.10		
A x B x C x S	49	1515.02		
Total	399	29961.89		

Note: *p < .01

These results provide direct support for hypotheses 1, 2, and 3 establishing the relationships between product conspicuousness, product differentiation, product common usage, and product value-expressiveness. More specifically, the results show that product conspicuousness, product differentiation, and product usage do account for a significant portion of the variance in product value-expressiveness. The greater the brand is differentiated from its competition, the greater the tendency for consumers to impute impressions to the typical user of that brand. The greater the social conspicuousness (or social visibility) of the brand (or the use of the brand), the greater the tendency for consumers to attribute personality characteristics to the typical use of that brand (i.e., the greater the value-expressiveness of that brand). The more "common" (or the less scarce) the brand is, the greater the value-expressiveness of that brand.

Of course, although causal relationships have been postulated, this study as presently designed cannot address the causality issue. We can only postulate the direction of causality. Future studies may address the causality issue.

References

Bearden, William O. and Etzel, Michael J. (1982), "Reference Group Influence on Product and Brand Purchase Decisions," Journal of Consumer Research, 9, 184-185.

Belk, Russell W. (1978), "Assessing the Effects of Visable Consumption Cues on Impression Formation," in H. K. Hunt (Ed.), Advances in Consumer Research (Vol. 5), Ann Arbor, MI: Association for Consumer Research.

Belk, Russell W. (1981), "Determinants of Consumption Cue Utilization in Impression Formation: An Associational Derivation and Experimental Vertification," in K. B. Monroe (Ed.) Advances in Consumer Research (Vol. 8), Ann Arbor, MI: Association for Consumer Research.

Belk, Russell W., Bahn, Kenneth D. and Mayer, R. N. (1982), "Developmental Recognition of Consumption Symbolism," Journal of Consumer Research, 9, 4-17.

Belk, Russell W., Mayer, R. N., and Bahn, Kenneth D. (1981), "The Eye of the Beholder: Individual Differences in Perceptions of Consumption Symbolism," in Proceedings of the Association for Consumer Research Annual Conference.

Bourne, Francis S. (1957), "Group Influence in Marketing and Public Relations," in Rensis Likert and Samuel Hayes Jr. (Eds.), Some Applications of Behavioral Research, UNESCO, Paris, pp. 208-209.

Brock, Timothy C. (1968), "Implications of Commodity Theory for Value Change," in A. G. Greenwald, T. C. Brock, and T. M. Ostram (Eds.), Psychological Foundations of Attitudes, New York: Academic Press, pp. 243-275.

Csikszentmihali, Mihaly and Rochberg-Halton (1981), The Meaning of Things: Domestic Symbols and the Self. Cambridge, MA: Cambridge University Press.

Fromkin, Howard L., Olson, Jerry C., Dipboye, Robert L., and Barnaby, David L. (1971), "A Commodity Theory Analysis of Consumer Preference for Scarce Products," Proceedings, 79th Annual Convention, American Psychological Association, pp. 653-654.

Hamid, P. N. (1972), "Some Effects of Dress Cues on Observational Accuracy: A Perceptual Estimate and Impression Formulation," Journal of Social Psychology, 86, 279-289.

Levy, Sidney J. (1959), "Symbols for Sale," Harvard Business Review, 37, 117-124.

Munson, J. M. and Spivey, W. A. (1981), "Product and Brand-User Stereotypes Among Social Classes," Journal of Advertising Research, 21, 37-46.

Sirgy, M. Joseph (1982), "Self-Concept in Consumer Behavior: A Critical Review," Journal of Consumer Research, 9 (December), 287-300.

Sirgy, M. Joseph (1983), Social Cognition and Consumer Behavior. New York: Praeger Publishers.

Sirgy, M. Joseph (1985), "Using Self-Congruity and Ideal Congruity to Predict Purchase Motivation," Journal of Business Research, 13 (June), 195-206.

Soloman, Michael R. (1983), "The Role of Products as Social Stimuli: A Symbolic Interactionism Perspective," Journal of Consumer Research, 10 (December), 319-329.

Szybillo, George (1975), "A Situational Influence on the Relationship of a Consumer Attribute to New Product Attractiveness," Journal of Applied Psychology, 60, 652-655.

Worchel, Stephen, Lee, Jerry, and Adweole, Akanbi (1975), "Effects of Supply and Demand on Ratings on Object Value," Journal of Personality and Social Psychology, 32, 906-914.

Varvoglis, Theofanis and Sirgy, M. Joseph (1984), "Interrelationship Between Utilitarian and Value-Expressive Attributes of Store Image," in Jay Lindquist (Ed.), Developments in Marketing Science (Vol. 7), Kalamazoo, MI: Academy of Marketing Science, pp. 27-31.

GENDER STEREOTYPING OF PRODUCTS: ARE PRODUCTS LIKE PEOPLE?

Easwar S. Iyer, University of Massachusetts/Amherst
Kathleen Debevec, University of Massachusetts/Amherst

Abstract

The literature on sex-role identification is reviewed and the same framework is applied to classify products/services into gender categories. Subjects tended to perceive products along a continuum of masculinity and feminity with few products being perceived and classified as androgynous and undifferentiated. The differences in the perception of male and female subjects is discussed. It is suggested that the product user, purchaser, and promoter characteristics may be important determinants of the gender of a product/service.

Introduction

Sex-role stereotypes have traditionally influenced standards of behavior and have been very pervasive in creating the notion that men and masculine characteristics are more highly valued than women and feminine characteristics (Powell and Butterfield 1979). Marketers have always been interested in such stereotyping since it provides a framework within which one could study consumer choice and consumption behaviors. Moreover, such an understanding would facilitate in creating communication strategies that are effective.

There are significant changes that have taken place, and continue to evolve in product choice and consumption. For example, cigarettes were almost exclusively used by males and are now as frequently used by females. Hair sprays were once almost solely used by females but have been accepted and are quite widely used by males nowadays (Stuteville 1971; Gentry and Doering 1977). However, it is important to realize that, while the actual gender of the consumer may be an important determinant of product consumption, it is their perceived sex-role that may be a mediating factor influencing their consumption behavior. In other words, what is of importance are the consumer's perceptions of attitudes, abilities, problems, and interest that are consistent with being a male or female (Sechrest 1976). In the context of cigarette smoking behavior, Vitz and Johnson (1965) found that a person's masculinity or feminity was correlated with the masculine or feminine image of the cigarette smoked. Subsequent research appeared to confirm this conclusion. Fry (1971) concluded that feminine men were more likely to smoke cigarettes with a less masculine image and vice versa.

In the context of persuasive communication, Debevec and Allen (1984) point out that the primary interest has been to document the presence and nature of sex-role stereotyping (e.g., Courtney and Whipple 1983, 1980, 1976, 1974). The typical conclusion has been that the portrayal of women in advertising has been unflattering, at best. Basically women are portrayed as devoted mothers, caring wives, or competent housewives, although there is a slight trend away from such undimensional portrayals (Scheibe 1979; Sharits and Lammer 1983). Unfortunately, the move away from the traditional unidimensional portrayal only creates another parallel stereotype. For example, if it is not a housewife who is in endless pursuit of dirt, then it is the chauffer-driven working women (Wall Street Journal, Oct. 28, 1982). Such a unidmensional representation is also true in the case of single men and the elderly (Arnoff 1974; Harris and Feinberg 1977; Northcolt 1975).

Relatively few studies have been conducted that attempt to associate a gender image with a product. Two recent studies did attempt this (Allison et al. 1980; Golden et al. 1979). The purpose of these two studies was to assess the congruency between sex-role self-concept and sex-typing of products. The researchers could not establish a strong and systematic relationship between these two constructs but they were able to conclude that product perceptions indeed are related to the sex of the respondent rather than their sex-role orientation. The studies were somewhat limited by the fact that they did not include any durables or service items, only consumables.

The purpose of this current study is to identify the gender image of a variety of products and see if that image varies with the sex of the respondent. The basic idea underlying our work is to apply the same framework for classifying products as that used for classifying people. In the psychology literature, masculinity and femininity are conceptualized as two separate dimensions that need to be measured separately (Bem 1974, 1972). One of the most widely used scales to classify people

FIGURE 1

IDENTIFICATION OF SEX-ROLE TYPOLOGY

		Femininity Self-Score	
		Below Mean	Above Mean
Masculinity Self-Score	Above Mean	MASCULINE	ANDROGYNOUS
	Below Mean	UNDIFFERENTIATED (NEUTER)	FEMININE

according to their sex-role is the Bem Sex-Role Inventory (BSRI). This consists of twenty characteristics of the masculine sex-role type (e.g., self-reliant, ambitious), twenty characteristics not associated exclusively with either sex-role type (e.g., helpful, conscientious), and twenty characteristics of the feminine sex-role type (e.g., sympathetic, yielding). The characteristics are rated on a 7-point Likert-type scale. Each individual respondent receives a score for his/her masculinity and femininity. Usually the central tendency for the entire sample is estimated either in the form of the mean or the median (for an example, see Powell and Butterfield 1979). Each individual's score is compared to the estimated central tendency and the individual is classified into one of four possible sex-role categories (see Figure 1).

An intuitively appealing question that arises is: Do products possess a gender just like people? The product life cycle theory is an example of attributing the people-like characteristics of birth, growth, maturity, and death to products. Is there a difference in the perception of a product's gender between male and female subjects? Is there a difference in the perceived gender of durables, consumables, and services? These questions can be viewed as working hypotheses. Since this is an exploratory study, it is somewhat descriptive in nature.

Methodology

The population chosen for our study was undergraduate college students. Besides being convenient, this offered us an opportunity to explore a future population whose perceptions are being formed, rather than a population of elders, whose perceptions have already been formed (Gentry, Doering, and O'Brien 1978). In that sense, the results of our study might be useful for marketers in understanding the perceptions of a future, less traditional consumer.

The product/service stimuli were chosen using the following two criteria:

a) A fair representation for consumables, durables, and service items, and

b) Both males and females could potentially use them.

The first criterion was established because previous research had never made that distinction and it was possible that the gender associated with a product might be a function of such a distinction. The second criterion was established so as to make the stimuli potentially neutral rather than biased such as would be the case with pantyhose and a beard clipper. Using these criteria, a set of 43 products/services evolved, 16 were durables, 16 were consumables, and 11 were services.

In the questionnaire, the 43 products/services selected were arranged in alphabetical order. Subjects recorded their overall perception as to how masculine each product/service was on a 9-point scale (1 = not at all masculine, 3 = somewhat masculine, 5 = moderately masculine, 7 = quite masculine, and 9 = extremely masculine). Then, they recorded their perceptions of each product/service's femininity on a similar scale. Approximately one-half of the subjects responded to the masculinity scale first followed by the femininity scale, whereas the order was reversed for the other half of the sample. There were no order effects, and hence the final results reported in this paper are from the pooled sample.

Results

The sample was divided into two sub-groups based on the sex of the respondent. There were 35 males and 43 females in the sample. Within each subgroup an average perception of masculinity (PM) and femininity (PF) were computed for each product/service. In addition, the overall grand means for masculinity (GMM) and for femininity (GMF) were computed. Each product's/service's PM and PF scores were compared with the GMM and GMF scores. This was done with a purpose of identifying and associating a gender to each product/service. The criteria used for this classification were as follows:

a)	MALE (M)	: if PM>GMM and PF<GMF
b)	FEMALE (F)	: if PM<GMM and PF>GMF
c)	UNDIFFERENTIATED (U)	: if PM<GMM and PF<GMF
d)	ANDROGYNOUS (A)	: if PM>GMM and PF>GMF

The resultant classification in terms of the gender of a product/service is reported in Figures 2 and 3 and Tables 1 and 2. The GMM and GMF were 4.342 and 4.092 for male subjects and 3.490 and 3.753 for female subjects respectively. The map of the relative product positions (Figures 2 and 3) was drawn using the respective GMM and GMF scores as coordinates for the origin, since this was the very basis for classifying the products into the gender categories.

The PM and PF scores are reported in Table 3 only for those products which were classified differently by male and female subjects. Two kinds of comparisons were tested. First, the differences between the PM and GMM and that between PF and GMF were tested in order to establish the stability of the classification itself. Second, the difference between the PM scores for male and female subjects and the difference between the PF scores for male and female subjects were tested in order to establish the differences in product/service gender perception for the two sexes. These results are reported in Table 3.

Discussion

The discussion is presented in three sections, each of which attempts to throw additional light on the working hypotheses presented earlier.

1. Do products possess a gender image?

There are some interesting observations one could make based on Tables 1 and 2. It appears that both males and females perceive products/services to be largely masculine or feminine only, since there are very few products/services that masculinity and femininity classified as undifferentiated or androgynous. This strongly suggests that there may be only one dimension and that the gender of a product may be bi-polar in nature. The maps in Figures 2 and 3 also indicate a possible bipolar representation for product/service gender. For both males and females, the products/services were alligned from the upper left quadrant (masculine) to the lower right quadrant (feminine). Further research using discriminant analysis may uphold this tentative conclusion.

Overall, it would appear that products are perceived to have a gender image. From Figures 2 and 3, it would appear that there are at least two categories of products (i.e., masculine and feminine). However, it is not clear if additional categories are required in describing a product's gender.

TABLE 1

PRODUCT/SERVICE GENDER AS PERCEIVED BY MALES*

	MASCULINE	FEMININE	UNDIFFERENTIATED	ANDROGYNOUS
DURABLES	Cameras (35 mm) Car Golf clubs Lawn mower Stereo Wrench set	Clothes dryer Food processor Microwave oven Refigerator Toaster (U) Washing machine	Air conditioners Electric iron Television	Tennis racket
CONSUMABLES	Beer Cigarettes Potato chips (U) Scotch Sneakers Wall paint	Bath soap Dishwashing liquid Frozen vegetables Facial tissue Hair spray Shampoo Wine	Canned soup Toothpaste	Coffee (F)
SERVICES	Hotel (U) Haircut (F) IRA account Lawn care Legal aid Retaurant (F)	Day care Long distance phones	Checking/savings account (F) Health maintenance organizations	Credit card (F)

*Paranthetical notation represents the product/service gender as perceived by females.

TABLE 2

PRODUCT/SERVICE GENDER AS PERCEIVED BY FEMALES*

	MASCULINE	FEMININE	UNDIFFERENTIATED	ANDROGYNOUS
DURABLES	Cameras (35 mm) Car Golf clubs Lawn mower Stereo Wrench set	Clothes dryer Food processor Microwave oven Refrigerator Washing machine	Air conditioners Electric iron Television Toaster (F)	Tennis racket
CONSUMABLES	Beer Cigarettes Scotch Sneakers Wall paint	Bath soap Coffee (A) Dishwashing liquid Frozen vegetables Facial tissue Hair spray Shampoo Wine	Canned soup Potato chips (M) Tooth paste	
SERVICES	IRA account Lawn care Legal aid	Credit card (A) Checking/Savings account (U) Day care Hair cut (M) Long distance phones Restaurant (M)	Hotel (M) Health maintenance organization	

*Paranthetical notation represents the product/service gender as perceived by males.

2. Is there a difference in the perception of a product's gender between male and female subjects?

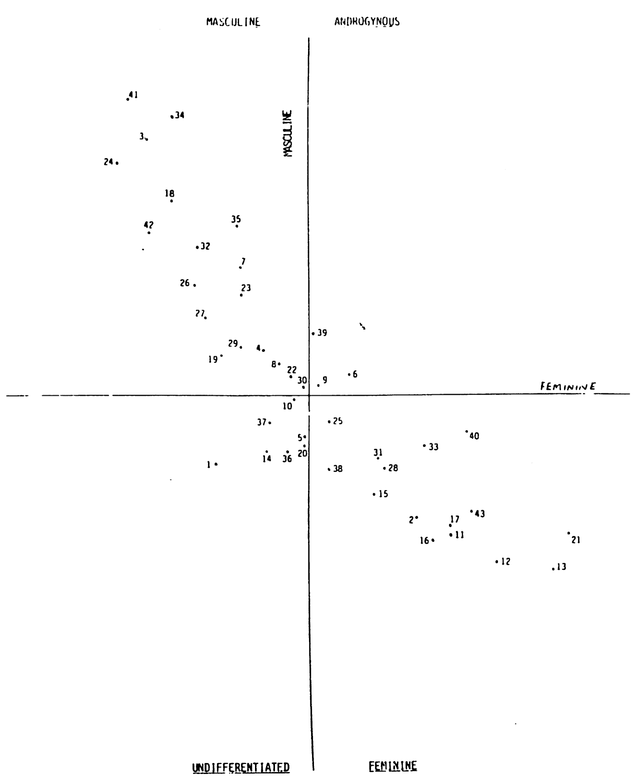
Figures 2 and 3 also suggest that male subjects perceive more products as masculine than female subjects while female subjects perceive more products as feminine than male subjects. The gender of the perceiver does seem to influence the perception of a product's gender. However, we feel that a useful extension would be to study the role of product related characteristics, such as the gender of the likely user, purchaser, and promoter in the formation of a product's gender.

TABLE 3

PRODUCT/SERVICE	PM		PF	
	MALES (n=35)	FEMALES (n=43)	MALES (n=35)	FEMALES (n=43)
Checking/savings account	4.286[e]	3.186[e]	3.829	3.953
Coffee	4.429[e]	3.047[a,e]	4.229	4.256[b]
Credit card	4.486[e]	3.349[e]	4.489	4.163[b]
Haircut	4.514[e]	3.395[e]	3.943[f]	5.233[b,f]
Hotel	4.743[c,e]	3.349[e]	3.229[d]	2.930[b]
Potato chips	4.857[c,e]	3.140[a,e]	3.371[d]	2.953[b]
Restaurant	4.429[e]	3.279[e]	4.029	3.791
Toaster	3.400[c,e]	2.419[a,e]	4.371[f]	3.488[f]

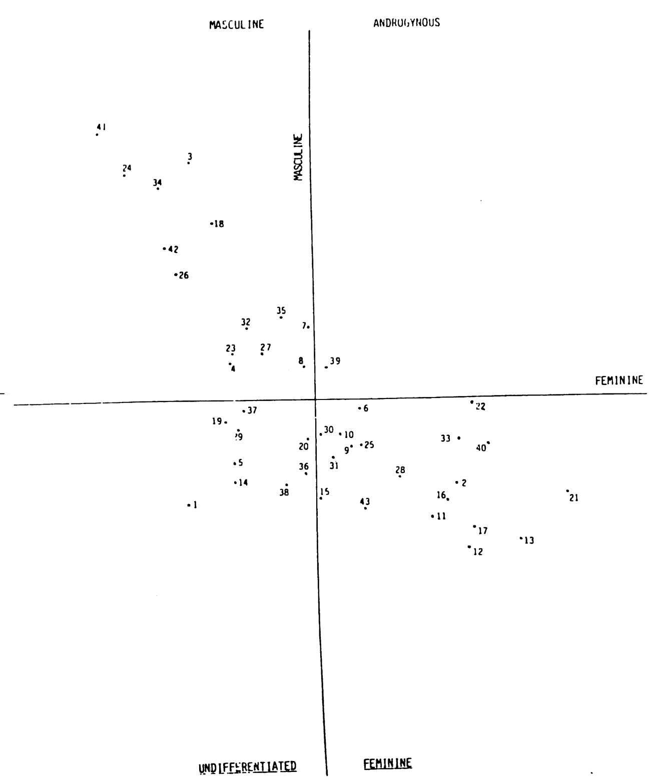
a) Significantly different from GMM (3.490) at $p<0.1$ or better
b) Significantly different from GMF (3.754) at $p<0.1$ or better
c) Significantly different from GMM (4.342) at $p<0.1$ or better
d) Significantly different from GMF (4.092) at $p<0.1$ or better
e) Significant difference between PM for males and females at $p<0.05$ or better
f) Significant difference between PF for males and females at $p<0.05$ or better

FIGURE 2



PERCEPTION OF PRODUCT GENDER FOR MALE SUBJECTS

FIGURE 3



PERCEPTION OF PRODUCT GENDER FOR FEMALE SUBJECTS

KEY FOR FIGURES 2 AND 3

1. Airconditioner
2. Bath soap
3. Beer
4. Cameras (35 mm)
5. Canned soup
6. Credit card
7. Car
8. Cigarettes
9. Coffee
10. Checking/Savings account
11. Clothes dryer
12. Dishwashing liquid
13. Day care services
14. Electric iron
15. Frozen vegetables
16. Food processor
17. Facial tissue
18. Golf clubs
19. Hotel
20. H.M.O.
21. Hairspray
22. Haircut
23. IRA account
24. Lawnmower
25. Long distance phone service
26. Lawn care service
27. Legal service
28. Microwave oven
29. Potato chips
30. Restaurant
31. Refigerator
32. Stereo system
33. Shampoo
34. Scotch
35. Sneakers
36. Toothpaste
37. Television
38. Toaster
39. Tennis racket
40. Wine
41. Wrench set
42. Wall paint
43. Washing machine

A cursory analysis of the actual products/services in Tables 1 and 2 that were classified as masculine or feminine seems to suggest that certain product characteristics such as the gender of its likely user would be a discriminating variable. For example, wrench set, which was perceived as highly masculine by both sexes, is typically used by "the man of the house" whereas hairspray, which was perceived as highly feminine by both sexes, is typically used by "the woman of the house." Further research using variables such as the sex of the likely purchaser, user, or promoter of the product/service would help to understand the reasons why a gender image is associated with a product/service.

3. Is there a difference in the perceived gender between consumables, durables, and services?

This issue was raised with an implicit expectation that there would be some systematic pattern in the perception of a product/service's gender. For example, we might have expected durables to be perceived as masculine and consumables as feminine. This expectation is consistent with the notion of longevity and stability being masculine traits. However, such was not the case. From Tables 2 and 3, it is clear that all the cells are adequately filled with products/services.

In addition, there were eight products/services reported in Table 3 that were classified differently by male and female subjects, but some of them were not stable classifications. None of the PM scores for males were significantly different from GMM, whereas the PM scores for females were significantly different from GMM in the case of coffee, potato chips, and toaster. The PF scores for males were significantly different from GMF in the case of the hotel and potato chips, while the PF scores for females were significantly different from GMF in the case of coffee, credit cards, haircuts, hotels, and potato chips. A more thorough examination of these differences would have to be conducted, in conjunction with some of the tentative conclusions suggested earlier. This would considerably aid in designing communications to promote products/services.

Conclusion

The findings reported in this study are preliminary since the study itself was exploratory in nature. Even though there were no formal hypotheses, some working questions were posed. In conclusion, it would seem that products do possess gender characteristics, just like people. It is, however, unclear as to how many categories are needed to define a product's gender. The gender of the perceiver seems to have an influence in the formation of a product's gender. Equally interesting would be a study attempting to relate certain product related characteristics to that very process.

References

Allison, Niel K., Linda L. Golden, Gary M. Mullet, and Donna Coogan (1980) "Sex-Typed Product Images: The Effect of Sex, Sex-Role Self-Concept, and Measurement Implications," in Jerry Olsen (ed.), Advances in Consumer Research, 7, p. 604-609, Ann Arbor, MI: Association for Consumer Research.

Arnoff, Craig (1974) "Old Age in Prime Time," Journal of Communication, 24, p. 86-87.

Bem, Sandra L. (1974) "The Measurement of Psychological Androgyny," Journal of Consulting and Clinical Psychology, 42, p. 155-162.

Courtney, Alice E. and Thomas W. Whipple (1983), Sex Stereotyping in Advertising, Lexington, MA: Health.

_____ and _____ (1980), "Sex Stereotyping in Advertising: An Annotated Bibliography," Cambridge, MA: Marketing Science Institute Report No. 80-100.

_____ and _____ (1976), "Reaction to Traditional Versus Liberated Portrayals of Women in TV Advertising," Toronto, Ontario: Canadian Advertising Advisory Board.

_____ and _____ (1974), "Women in TV Commercials," Journal of Communication, 24, p. 110-118.

Debevec, Kathleen and Chris T. Allen (1984), "Theoretical Frameworks for Examining the Effectiveness of Stereotyping in Persuasive Communication," in Paul F. Anderson and Michael J. Ryan (eds.), AMA Winter Educators Conference, Chicago, IL: American Marketing Association.

Fry, Joseph (1971), "Personality Variables and Cigarette Brand Choice," Journal of Marketing Research, 8, p. 298-304.

Gentry, James W. and Mildred Doering (1977), "Masculinity-Femininity Related to Consumer Choice," Proceedings of the Fall Conference, Chicago, IL: American Marketing Association.

_____, _____, and Terrence V. O'Brien (1978), "Masculinity and Femininity Factors in Product Perception and Self-Image," in Keith Hunt (ed.), Advances in Consumer Research, 5, p. 326-332, Ann Arbor, MI: Association for Consumer Research.

Golden, Linda L., Neil Allison, and Mona Clee (1979), "The Role of Sex-Role Self-Concept in Masculine and Feminine Product Perceptions," in William L. Wilkie (ed.), Advances in Consumer Research, Vol. 6, Ann Arbor, MI: Association for Consumer Research.

Harris, Adella J. and Jonathan F. Feinberg (1977), "Television and Aging--Is What You See What You Get?" The Gerontologist, 17, p. 464-468.

Northcott, Herbert C. (1975), "Too Young, Too Old--Age in the World of Television," The Gerontologist, 15, p. 184-186.

Powell, Gary N. and D. Anthony Butterfield (1979), "The 'Good Manager': Masculine or Androgynous?" Academy of Management Journal, 22, p. 395-403.

Scheibe, Cyndy (1979), "Sex Roles in TV Commercials," Journal of Advertising Research, 19, p. 23-27.

Sechrest, Lee (1979), "Personality," in M.R. Rosenzweig and L.W. Porter (eds.), Annual Review of Psychology, 27, p. 1-27, Palo Alto, CA: Annual Reviews Inc.

Sharits, Dean and H. Bruce Lammers (1983), "Perceived Attributes of Models in Prime Time and Daytime Television Commercials: A Person Perception Approach," Journal of Marketing Research, 20, p. 64-73.

Stuteville, John R. (1971), "Sexually Polarized Products and Advertising Strategy," Journal of Retailing, 47, p. 3-13.

Vitz, Paul C. and Donald Johnson (1965), "Masculinity of Smokers and Masculinity of Cigarette Images," Journal of Applied Psychology, 49, p. 155-159.

Wall Street Journal (1982), "Advertising World's Portrayal of Women is Starting to Shift," October 28, p. 33.

DIFFERENCES IN SUSCEPTIBILITY TO REFERENCE GROUP INFLUENCE ON BRAND DECISIONS: MIDDLE AGED AND ELDERLY GROUP PARTICIPANTS

Alan J. Greco, The University of North Carolina at Charlotte

Abstract

The susceptibility to three types of reference group influence on the brand choice behavior of 94 elderly and 88 middle aged group participants was investigated for six product categories. Data for this study were collected by self-administered questionnaires distributed at regular meetings of the organizations. Significant differences in susceptibility to reference group influence were obtained at the .05 level in 6 out of 18 relationships between the two age groups. The marketing implications of these findings are discussed.

Introduction

During the past two decades, a number of primary and secondary research studies have attempted to describe the size and economic importance of the elderly consumer market (Meadow et al 1980). This interest in the elderly consumer on the part of marketing academicians has recently been shared by a number of business organizations. For example, in 1969, the cosmetics firm, Elizabeth Arden, did not want their products to be connected with older women (Forbes 1969). More recently, however, the same firm has introduced product lines specifically for older women (Allan 1981). Retailers, such as Sears, Roebuck and May Department Stores, have organized clubs designed to cater to the elderly consumer by offering periodic merchandise discounts and opportunities for socialization (Bivins 1984).

Despite the increasing interest in elderly consumers and the implications of their growing numbers and purchasing power (Lumpkin & Greenberg 1982; Tongren 1981), relatively little is known about this market's sensitivity to marketing and social influences which impact upon its consumption behavior (Phillips & Sternthal 1977). Social influences as embodied in the reference group construct have been generally accepted by marketers as a partial explanation of consumer behavior. A better understanding of these social influences on the elderly consumer would facilitate the communication of the want-satisfying benefits of goods and services to this important market segment. This study addresses itself toward the latter problem.

Empirical research on the impact of reference group influence on consumer behavior has traditionally focused on students, housewives, and members of consumer panels (e.g., Bearden & Etzel 1982; Park & Lessig 1977). Conspicuously absent from the marketing literature are studies directly concerning the elderly consumer's susceptibility to reference group influence.

Clearly, additional work is needed in this area since fragmentary evidence suggests that the elderly are not isolated from others with respect to product- and brand-related information. Schiffman (1971), for example, noted that communication networks existed in an apartment housing project for the elderly. Klippel and Sweeney (1974) found formal and informal sources of information to be important to the elderly when making brand decisions for televisions and headache remedies. Michman, Hocking, and Harris (1979) reported that word-of-mouth and professional recommendations were important sources of information for elderly purchasers of cold remedies. They further speculated that since shopping is frequently done with others the opportunity for reference group influence exists. Lumpkin and Greenberg (1982) found that while elderly apparel shoppers were not as active information seekers as middle aged and younger shoppers, the elderly reported friends, spouse, and salespersons to be important sources of product information.

The above studies provided indirect evidence of reference group influence on senior citizens' buyer behavior, but differed in terms of sample characteristics, method of analysis, and operationalization and measurement of various information sources. With the exception of Lumpkin and Greenberg's work, these investigations explored the importance of information sources of the elderly without comparing them to other adults. All of these works confined their analyses to only one or two product categories. In addition, no direct attempt was made to incorporate the reference group construct in these studies. To overcome the limitations of previous efforts, this research utilizes Park and Lessig's (1977, p. 105) reference group influence manifestation statements to explore for differences in the perceived importance of reference group influence upon brand decisions for several product categories among elderly and middle aged members of pre-established groups. The primary focus of this investigation is on the elderly consumer, with the middle aged subjects included as a benchmark for comparison purposes.

Background

The Reference Group Concept

Park and Lessig (1977, p. 102) defined a reference group to be "...an actual or imaginary individual or group conceived of having significant relevance upon an individual's evaluations, aspirations, or behavior." Based on the works of Deutsch and Gerard (1955) and Kelman (1961), Park and Lessig identified three types of reference group influence:

1. Informational: An informational influence is accepted if it is perceived to be of value in making informed decisions about a product. Individuals are likely to accept the views of those referents possessing credibility, such as persons with apparent expertise or significant others. The informational type of influence imposes no norms on the individual.

2. Utilitarian: If an individual's actions are expected to be visible or known to others, he

or she may be expected to comply with the preferences or expectations of significant others who are perceived as mediators of rewards or punishments.

3. Value-Expressive: This type of influence is based on the individual's need for psychological association with a person or group. The individual may be expected to associate himself with positive referents and/or dissociate himself from negative referents. Additionally, a person may be influenced because of the person's liking of the group whether the group is real or imaginary.

Information seeking, compliance with the preferences of others, and the adoption of others' values involve either some verbal interaction and/or observation of reference group members' behavior with respect to the decision under consideration (Bearden & Etzel 1982).

Reference Groups and the Elderly

Social gerontologists generally agree that as a person ages he or she progresses through life course stages (Atchley 1980). As persons move from middle into the later maturity stage -- typically late 50's to 75 years of age -- they are normally freed from work or family responsibilities. However, this reduction in formal roles in society need not result in social isolation and a concomitant reduction in the role of reference group influence.

Activity theorists suggest that except for biological changes, older people are the same as middle aged with respect to psychological and social needs (Knapp 1977). Maddox (1963) pointed out that interaction is what sustains the social self throughout the life course. Furthermore, Shibutani (1961) maintained that although an individual's self-concept is relatively stable by adulthood, it is still reaffirmed by the responses of others. Consequently, there is a tendency for all individuals to seek associations with others and to maintain fairly level amounts of activity throughout the life course. Proponents of the activity model of aging believe that the amount of social participation and present lifestyle of the elderly are -- barring ill-health -- more influenced by past lifestyle and activity patterns than by retirement or aging (Palmore 1968). Thus, it would appear that if the elderly continue to be active in interpersonal interaction, then, like the middle aged, they will continue to be in a position to be influenced by reference groups.

Research Objective

The objective of this research is to determine if age differences in susceptibility to reference group influence exist between middle aged and elderly adults in a marketing context. If the elderly continue to be socially active, then they will not be isolated from potential reference group influence. Given that the members of both age groups are socially active, no differences in susceptibility to reference group influence are expected between the two groups.

If there are differences in susceptibility to reference group influence between age segments, different promotional appeals could be used to communicate with the different segments. Should there be no differences found in susceptibility to reference group influence between the members of the two age groups, this would suggest that differential appeals in this context would be unnecessary.

Methodology

Sample

Respondents for this study were drawn from two age groups -- 40-59 years and 60 years and over -- in a Standard Metropolitan Statistical Area in upstate New York. The elderly subjects were ambulatory members of a senior citizens organization, while the middle aged subjects were members of a Parent-Teacher association. The middle aged group consisted of 59 females and 29 males. Sixty-nine of the elderly subjects were female, while 25 were male. The age distribution in the middle aged sample included 70 respondents in the 40-49 years category and 18 respondents in the 50-59 years category, while the senior citizen sample was comprised of 94 respondents in the 60-years and over age group. Thus, there is no evidence of the majority of the middle aged respondents clustering just below age 59. These samples were used since members of organizations tend to be relatively homogeneous and socially active (Tongren 1981). Members of such pre-established groups presumably have had the opportunity for verbal interaction with peers and for observation of others' behavior (Moschis 1976; Midgley 1983). Thus, the impact of reference group influence on brand decisions is examined among those segments of the two age groups that would most likely be susceptible to reference group influence. Although this research design necessarily limits the ability to generalize the results to the general population of middle aged and elderly adults, the approach is deemed appropriate since age differences in perceived importance of reference group influence were of interest.

Self-administered questionnaires were distributed at the regular meetings of the two organizations. Individual help was available to respondents if needed. All members present at each meeting participated in the study resulting in 94 completed questionnaires from the senior citizen group, and 88 responses from the middle aged subjects.

Selected Products

The six products included in this study were chosen from twenty product categories investigated by Park and Lessig (1977) and included color television, clothing, furniture, headache remedies, magazines, and canned fruit. These product classes were selected for several reasons. First, these products represent two distinct price and involvement categories. Color television, clothing, and furniture are relatively high priced items that are often viewed as high involvement merchandise with respect to information seeking, physical search, and comparison shopping, while headache remedies, magazines, and canned fruit represent low priced, low involvement items for which little systematic information gathering is conducted

(Assael 1984, p. 93). Second, these products fit into each of three sets of products, identified by Lessig and Park (1978), which varied in terms of perceived importance of informational, utilitarian, and value-expressive reference group influence. Third, it was necessary to include products that members of both age groups would be likely to purchase. Prior research has indicated that these six items are relevant to both middle aged and older consumers (Allan 1981; Bartos 1980; Gelb 1982; Martin 1976; and Social Research, Inc. 1966).

Past research has suggested that reference groups can exert an influence on both product and brand decisions (Bearden & Etzel 1982). However, in the present study, brand decisions were of interest since respondents were asked to assume that they were in the market for these product categories and had to make a brand-choice decision. Therefore, in this investigation, the perceived importance of reference group influence on selective, rather than primary, demand is examined.

Reference Group Influence Measures

The relevance of reference group influence on the brand selection process was assessed by analyzing the subjects' responses to fourteen reference group influence manifestation statements developed and validated by Park and Lessig (1977, p. 105). These statements were designed to reflect informational, utilitarian, and value-expressive reference group influences through five, four and five item subscales respectively. Respondents were asked to assume that they were to purchase a brand within each of the product categories.

Three reference group influence scores were obtained for each of the six product categories under consideration, thus reflecting the relevance of the three types of reference group influence upon brand selection. The fourteen manifestation statements were operationalized by Park and Lessig's 4-point scale, ranging from 4 (highly relevant) to 1 (not relevant). The levels of measurement were assumed to be interval. Consistent with Park and Lessig's methodology, a respondent's degree of reference group influence was defined as the highest response given for a product by the individual on any of the statements comprising each of the three reference group influence subscales. This scoring technique insures that more than one response at the highest level does not increase the relevance of, say, the informational reference group influence. This situation would merely indicate that there are several sources through which information can be obtained. The informational, utilitarian, and value-expressive scores for each of the six products were computed by averaging across respondents the highest relevance response which each respondent assigned to the specific product.

The informational, utilitarian, and value-expressive reference group influence scores of the 88 middle aged respondents were compared to the corresponding scores of the 94 senior citizens by means of two-tail t-tests. A total of 18 t-tests were conducted to reflect three reference group influence scores on each of the six product categories.

Results and Discussion

As indicated in Table 1, significant differences at the 0.05 level were found in only 6 out of 18 product-reference group influence combinations between middle aged and elderly adults. A separate examination of each type of reference group influence reveals some interesting results.

For informational reference group influence, where differences in susceptibility occurred, it was the senior citizens who were more susceptible to informational group influence regarding brand or style of clothing and brand of canned fruit. For clothing, the elderly may lack confidence in style or brand selection (Lumpkin & Greenberg 1982) and may infer the value of a product or brand from the reactions of others with whom they are shopping or from salesclerks (Martin 1976). While canned fruit is not normally associated with reference group influence (Park & Lessig 1977), concern over dietary matters may help explain the greater relevance of informational reference group influence to senior citizens.

As with informational reference group influence, the elderly respondents were more susceptible to value-expressive reference group influence where significant differences were observed between the two age groups. Specifically, value-expressive reference group influence was perceived to be more relevant to senior citizens regarding color television, headache remedy, and canned fruit decisions. One of the processes involved in value-expressive reference group influence is that an individual may adopt the recommendations of the group in order to associate oneself with positive referents. It may be that the elderly subjects felt that it would be nice to be like the persons in advertisements for headache remedies, for example, who experience relief after using the advertised brand. This process would illustrate identification with the spokesperson in the promotional message (Kelman 1961). Regarding canned fruit, the value-expressive reference group influence does not require that the item in question be visible to others since the individual's acceptance of this group's recommendation is irrelevant to the group. Thus, the elderly may feel that those who purchase or use a particular brand of canned fruit possess the characteristics they would like to have. Schreiber and Boyd (1980), in a study of 442 elderly subjects, found that 57 percent of the respondents found the elderly in television commercials to be "active and healthy" or "likeable." In addition, they found that the commercials chosen as best-liked and most useful were for food and health products. This evidence suggests that for the elderly, value-expressive reference group influence may indeed be relevant in making brand decisions for products such as headache remedies and canned fruit. With respect to brand of color television, a relatively complex product, the elderly may feel that those who purchase a particular brand which is known for its reliability or quality are respected by others for making a prudent brand decision.

The difference in perceived relevance of utilitarian reference group influence indicated that the middle aged respondents were more subject to utilitarian influence for brand or style of furniture. These results may be partially explained by the

TABLE 1

COMPARISON OF MIDDLE AGED AND ELDERLY REFERENCE GROUP INFLUENCE SCORES

Product Category	Informational			Utilitarian			Value-Expressive		
	Middle Aged	Elderly	t-Value	Middle Aged	Elderly	t-Value	Middle Aged	Elderly	t-Value
Color TV	3.67	3.45	-1.89	3.15	2.92	-1.58	1.94	2.40	2.87*
Clothing	2.66	3.22	4.03*	2.68	2.71	0.20	2.72	2.58	-0.81
Furniture	3.15	2.98	-1.19	2.99	2.56	-2.16*	2.38	2.47	0.56
Headache Remedy	3.03	3.02	-0.09	2.50	2.43	-0.45	1.58	2.00	2.97*
Magazine Subscription	2.24	2.40	1.02	2.30	2.12	-1.08	1.87	1.98	0.76
Canned Fruit	2.40	2.86	2.88*	2.58	2.46	-0.73	1.53	2.27	4.99*

*Significant at $\leq$ .05 level

desire among members of the middle aged to satisfy the expectations and preferences of several family members and is consistent with the normative social influence associated with the utilitarian type of reference group influence (Burnkrant & Cousineau 1975).

Implications

The evidence presented here suggests that at the period of this investigation, few differences exist between the middle aged and elderly group members with respect to perceived importance of reference group influence on brand decisions. The findings provide some evidence that socially active older persons are generally no less susceptible to reference group influence than are active middle aged adults, thus providing indirect support to the activity theory of aging. As indicated by the magnitude of the reference group influence scores, both age groups generally attached greater importance to the informational type of reference group influence, thus suggesting their interest in obtaining a good product (Burnkrant & Cousineau 1975).

The results of this study illustrate the danger of automatically assuming that the elderly as a group are relatively insensitive to the influence of others in the brand selection process. Active segments within the elderly population may warrant special attention in the marketing strategy planning process. It may be possible, for example, to develop communications strategies which simultaneously appeal to both the middle aged and elderly who maintain relatively active lifestyles (Merrill & Weeks 1983). The relative importance of informational reference group influence suggests that marketers of relatively high priced durable goods direct consumers' attention to product quality and to symbols of product quality such as the Good Housekeeping seal of approval or favorable evaluation from Consumer Reports. Even for what are typically viewed as low involvement, low priced products, reference group influence (informational and value-expressive) appears to be relevant to elderly consumers. One may speculate that products such as headache remedies and canned fruit are of a higher involvement nature to the elderly than to the middle aged because of health-related concerns (e.g., Schiffman 1971; Michman et al 1979) and the elderly's need to make wise brand decisions because of real or perceived monetary constraints.

The relatively high informational reference group influence scores for the elderly relative to the middle aged for clothing and canned fruit offer several implications to firms wishing to communicate their offerings to elderly consumers. For products such as clothing, fashion shows could be offered at senior citizen centers. This action would enable the participants to examine brands and styles of clothing as well as foster word-of-mouth communications among the consumers themselves and with clothing representatives. For food products, brand manufacturers could sponsor instruction on the nutritional and health-related aspects of diet. These efforts could be supplemented with improved in-store displays highlighting low calorie, low-salt brands.

For those product categories where there are no significant differences in susceptibility to reference group influence between the elderly and the middle aged, no special marketing efforts would be needed to reach the elderly if the middle aged are also part of the organization's target market.

Before the findings of this study can be acted upon, additional investigation is needed. Further research should be undertaken with a broader cross section of middle aged and elderly persons in different geographic areas using probability sampling procedures. Since this study's primary objective was to explore for age related differences in the perceived importance of reference group influence among group participants, the managerial implications are necessarily tentative. Because the elderly may differ in the manner in which they cope with role changes in retirement, it may be worthwhile to examine relationships between adjustment patterns and susceptibility to reference group influence (LaForge et al 1981). Elderly persons who exhibit disengaged adjustment patterns, for example, are likely to be less susceptible to interpersonal reference group influence and more subject to value-expressive influences through television viewing.

References

Allan, C. B. (1981), "Over 55: Growth Market of the '80s," Nation's Business, 26-32.

Assael, H. (1984). Consumer Behavior and Marketing Action. Second ed., Belmont, California: Wadsworth, Inc.

Atchley, R. C. (1980). The Social Forces in Later Life. Third edition. Belmont, California: Wadsworth, Inc.

Bartos, R. (1980), "Over 49: The Invisible Consumer Market," Harvard Business Review, 58, 140-148.

Bearden, W. O. & Etzel, M. J. (1982), "Reference Group Influence on Product and Brand Purchase Decisions," Journal of Consumer Research, 9, 183-194.

Bivins, J. (1984), "Senior Citizen Marketing: Shattering Stereotypes," Chain Store Age Executive 60, 17-20.

Burnkrant, R. E. & Cousineau, A. (1975), "Informational and Normative Social Influence in Buyer Behavior," Journal of Consumer Research 2, 206-215.

Deutsch, M. & Gerard, H. B. (1955), "A Study of Normative and Informational Social Influences Upon Individual Judgment," Journal of Abnormal and Social Psychology, 51, 629-636.

Forbes (1969), "The Forgotten Generation" 23 (January 15).

Gelb, B. D. (1982), "Discovering the 65+ Consumer," Business Horizons, 25, 42-46.

Kelman, H. C. (1961), "Processes of Opinion Changes," Public Opinion Quarterly, 25, 57-68.

Klippel, R. E. & Sweeney, T. W. (1974), "The Use of Information Sources by the Aged Consumer," The Gerontologist, 14, 163-166.

Knapp, M. R. J. (1977), "The Activity Theory of Aging," The Gerontologist, 17, 553-559.

LaForge, M. C., French, W. A. & Crask, M. R. (1981), Proceedings, American Institute of Decision Sciences, 248-250.

Lessig, V. P. & Park, C. W. (1978), "Promotional Perspectives of Reference Group Influence: Advertising Implications," Journal of Advertising 7, 41-47.

Lumpkin, J. R. & Greenberg, B. A. (1982), "Apparel-Shopping Patterns of the Elderly Consumer," Journal of Retailing, 58, 68-89.

Maddox, G. L. (1963), "Activity and Morale: A Longitudinal Study of Selected Elderly Subjects," Social Forces 42, 195-204.

Martin, C. R., Jr. (1976), "A Transgenerational Comparison -- The Elderly Fashion Consumer," Advances in Consumer Research, Vol. 3, edited by Beverly B. Anderson. Urbana, Illinois: Association for Consumer Research, 453-456.

Meadow, H. L., Cosmas, S. C. & Plotkin, A. (1980), "The Elderly Consumer: Past, Present, and Future," In K. Monroe (Ed.) Advances in Consumer Research, Vol. 8, Proceedings of the Association for Consumer Research, 742-747.

Merrill, J. R. & Weeks, W. A. (1983), "Predicting and Identifying Benefit Segments in the Elderly Market," Proceedings, American Marketing Association, 399-403.

Michman, R. D., Hocking, R. T. & Harris, L. (1979), "New Product Adoption Patterns of Senior Citizens for Cold Remedies," Proceedings, Southern Marketing Association, 309-311.

Midgley, D. F. (1983), "Patterns of Interpersonal Information Seeking for the Purchase of a Symbolic Product," Journal of Marketing Research, 20, 74-83.

Moschis, G. P. (1976), "Social Comparison and Informal Group Influence," Journal of Marketing Research, 13, 237-244.

Palmore, E. B. (1968), "The Effects of Aging on Activities and Attitudes," The Gerontologist, 8, 259-263.

Phillips, L. W. & Sternthal, B. (1977), "Age Differences in Information Processing: A Perspective on the Aged Consumer," Journal of Marketing Research, 14, 444-457.

Schiffman, L. G. (1971), "Sources of Information for the Elderly," Journal of Advertising Research, 11, 33-37.

Schreiber, E. S. & Boyd, D. A. (1980), "How the Elderly Perceive Television Commercials," The Journal of Communication, 30, 61-69.

Shibutani, T. (1961). Society and Personality. Englewood Cliffs, New Jersey: Prentice-Hall.

Social Research, Inc. (1966), "Furniture Buying and Life Stages," in Understanding Consumer Behavior. Edited by Martin M. Grossack. Boston: Christopher Publishing House, 287-290.

Tongren, H. N. (1981), "Retailing to Older Consumers," Proceedings, Southern Marketing Association, 93-96.

THE BLACK CONSUMER MARKET: VALUES AS AN ALTERNATIVE SEGMENTATION STRATEGY

Miriam B. Stamps, University of South Florida
Clint B. Tankersley, Syracuse University

Abstract

Values, operationalized by using the "striving index," are shown to be a viable base for segmenting the black consumer market. Demographic, psychographic, and marketing behavior variables are examined to determine differences between strivers and non-strivers. These differences are then explored to suggest marketing strategies.

Introduction

The importance of black consumers to American businessmen cannot be denied. Television/Radio Age (1985), based on census projections, estimated that during 1985 the black population would reach 29 million persons with a total income of $175 billion. This makes for a market that is larger than that of many foreign countries. However, the following statement (D. Parke Gibson 1969, p. 9) still holds true:

> The fact that Negroes have billions of dollars to spend and that they can be influenced to buy a wide range of products and services through positive programs that recognize them as consumers, identify with them to buy, is a fact that is gaining increased interest and action from American businessmen. Yet there still exists a lack of information and understanding of this market.

One manifestation of this lack of understanding has been the general treatment of this diverse market as if it were homogeneous; i.e., there has been a frequent use of the terms "blacks" and "low income" as synonymous (Block 1972 and Hills, et al 1973). However, some marketers are now beginning to recognize the importance of segmenting the black market (Barry and Harvey 1974, Portis 1966, Zikmund 1977, Bauer, et al 1965).

Even when the need for segmentation has been acknowledged, a further question exists, and that question deals with what base should be used for segmentation. All of the bases that are routinely used for segmenting any market (demographics, geography, benefits, usage, and psychographics) are also available for this market. In this study the authors have used values, or more specifically the striving index, as a segmentation base. The justification for this particular base comes from the earlier work carried out by Bauer and Cunningham (1970). Their work showed that there was a difference in the distribution of striving scores between black and white women, and also that there were greater differences in consumption behavior between black strivers and non-strivers than there were for white strivers and non-strivers. A further justification derives from the often cited hypothesis that the "black market" will disappear as blacks earn their way out of poverty. If that hypothesis is correct, then differences between blacks and whites are assumed to be based on income. However, if it can be shown that there are differences between segments of blacks based not on income, but rather based on values, a very different scenario results. The reason for this difference lies in the fact that changes in income are more likely in the short run than are changes in values, which tend to be resistant to change.

The relationship between values and consumption behavior has been well established in the marketing literature. For example, Vinson and Munson (1976), utilizing a sample comprised of college students and their parents, showed that these groups not only differed in terms of their value structures, but also seemed to represent distinct market segments for the consumer products involved. A study by Henry (1976) used cultural values, along with other variables, to predict ownership of generic automobile categories. Vinson, Scott, and Lamont (1977) demonstrated how group differences in global values and domain-specific values were reflected in differences in preferred automobile attributes and consumer products. Fjeld, Schutz, and Sommer (1984) related environmental values to the importance of the year-round availability of selected produce items. Further, much of the impact that social class has on consumption behavior is transmitted through the intervening variable of values. However, values can be operationalized by many different constructs (for example, see Rokeach 1968 and Vinson, et al 1977); in this paper the authors have chosen the "striving index" as the method of operationalizing values (Bauer and Cunningham 1977). This particular manifestation of values was chosen because it had been used on black subjects and differences in consumption behavior were found to be related to striving.

While this work was of great import when it was carried out, the question of interest to marketers today is whether the findings of Bauer and Cunningham are still relevant for explaining differences in consumption patterns.

This paper then serves two purposes--first, the updating of Bauer and Cunningham's work and second, the offering of an alternative method of market segmentation among blacks.

Methodology

A sample of 528 blacks in a northern medium-sized city was administered the research instrument. Forty-two percent of the respondents were male and 57 percent were female. The sample was relatively young: 31 percent were under 30 years old, and another 33 percent were between the ages of 30 and 39. Twenty-four percent of the respondents had less than a high school degree, 24 percent had a high school degree, 29 percent had either graduated from college or had at least some college education, and another 21 percent had at least some post-graduate work. The median family income was $17,973.

The research instrument included the four questions that make up the striver's index. They are (Bauer and Cunningham, p. 36):

1. Some people say that a child should be "easy going" and accept things as they come along. Others say that a child should overcome things that get in the way. What should a person like you teach a child? (Striving answer: Try to overcome all obstacles.)

2. It really doesn't make any sense to save for the future; it's better to spend your money today and enjoy it. (Striving answer: Disagree strongly.)

3. People differ on how much they like to plan things out. Would you say that you . . . (Striving answer: Plan ahead all of the time.)

4. To improve the condition of life in this city, some say that people must get together to help themselves. What do you think? (Striving answer: Help themselves --as opposed to relying on the government.)

Three of the four questions had five-point scales for responses and one question had a four-point scale. The midpoint (3) on the five-point scales was essentially a neither agree nor disagree position in reference to the question. A score of 15 was chosen as the cut-off score for strivers because this was the minimum score obtained by a person who at least moderately agreed with the striver answers. In other words, a person who at least scored four (4) on the five-point scales and three (3) on the four-point scale would obtain a score of 15 which would classify that person as a striver. A high scorer (15-19) was designated as a striver, while a low scorer (4-14) was designated as a non-striver. The resulting distribution consisted of 310 non-strivers (61 percent) and 200 strivers (30 percent).

All respondents answered questions on magazines and newspapers read, department stores shopped, food stores frequented, drugstores shopped, discount stores patronized, and retail outlets where such products as shampoo, clothes, shoes, hair dryers, washing machines, and televisions are bought.

In addition, respondents answered 34 psychographic questions and five demographic questions. The psychographic questions included the areas of leisure activities, community involvement, family involvement and orientation, credit attitude and use, self-confidence, shopping habits, and effectiveness of advertising media. The demographic variables included were age, sex, family income, education, and subjective social class.

Each of the marketing behavior variables was examined to determine whether there were significant differences between the groups. The statistical test used was Spearman's rank correlation. A one-tailed test,

H_O: No association

H_{A+}: Positive association

was used.

Additionally, chi-square analysis and discriminant analysis were performed to determine if there were relationships between the scores obtained on the striver's index and the psychographic and demographic variables.

Analysis and Discussion

The findings of the Spearman's rank correlation analyses show that there are no statistically significant differences between strivers and non-strivers in terms of magazines and newspapers read, department stores shopped, food stores frequented, drugstores shopped, and retail outlets where shampoo is bought. There are significant differences in terms of discount stores patronized and retail outlets where clothes, shoes, hair dryers, and washing machines are bought. The retail outlets where televisions are purchased are especially interesting because the direction of association is negative. These results are summarized in Table 1.

TABLE 1
SHOPPING BEHAVIOR AND STRIVER'S INDEX SUMMARY

Shopping Behavior Variable	Difference in Shopping Between Strivers and Nonstrivers	Spearman Rank Correlation Coefficient (r)
Discount Stores	Yes	.435
Stores where Clothing is Purchased	Yes	.524
Stores where Shoes are Purchased	Yes	-.043
Stores where Televisions are Purchased	Yes	-.236
Stores where Hair Dryers are Purchased	Yes	.634
Stores where Washing Machines are Purchased	Yes	.027
Department Stores Shopped	No	.764
Food Stores Shopped	No	.855
Drugstores Shopped	No	.886
Stores where Shampoo is Purchased	No	.881

An examination of the differences between strivers and non-strivers in discount stores shopped shows that both groups ranked K-Mart first and Cook's (a local store similar to K-Mart and located in the suburbs) second. However, after this point, the preference of the two groups diverge.

The stores where respondents bought clothes show the pattern that is evidenced above; that is, the top ranked three stores are the same for both groups--these stores are Deys and Sibley (the largest two local department stores) and J. C. Penney. After this point, the store rankings begin to diverge.

The largest differences in ranks in the entire study appeared in stores where shoes were bought. Strivers ranked the two local department stores highest, followed by three relatively expensive specialty stores, then Florsheim, Baker's, Sears, and J. C. Penney (tied ranks), a local discount shoe outlet, and Thom McAn's last. Non-strivers ranked Baker's first, followed by the two local department stores, then a tie between Thom McAn's and the discount shoe outlet, another tie between Sears and Florsheim, followed by J. C. Penney and the three relatively expensive specialty stores.

The stores where televisions were bought evidenced the second largest differences in rank. Sears was ranked highest for both groups. There was divergence in ranks after this point with strivers ranking hard-goods discounters next, while non-strivers went to stores that had higher prices but had a "cheaper image," and perhaps more liberal credit policies. A similar pattern was seen in stores where washing machines were bought.

For hair dryers, non-strivers ranked K-Mart first, followed by Sears. The two stores tied for the first place ranking among strivers. The largest difference in ranks were for a hard-goods discounter (that requires that customers read catalogs, decode prices, and write orders) and a discount drugstore. Strivers frequented the hard-goods discounter relatively more and non-strivers frequented the discount drugstore more.

Chi-square analysis on the credit and savings behavior of strivers and non-strivers was also performed. In the area of credit behavior, whether one had a finance company loan or loans from friends and relatives was independent of whether a respondent was a striver or non-striver. However, the possession of bank credit cards, store credit cards, gasoline credit cards, and bank loans was not independent of whether one was a striver or non-striver; strivers had more than expected of each of these forms of credit. In the area of savings behavior, striving was not associated with whether one had a weekly insurance policy or not. However, there was association between striving and whether one had monthly payment insurance policies, bank savings accounts, and stocks, bonds, and mutual funds; again, strivers had more of these forms of savings than expected. These results are shown in Table 2.

Finally, chi-square analysis and discriminant analysis were performed to examine the relationship between the 34 psychographic variables and the five demographic variables, and the striver's index. The chi-square analysis was utilized to look at each variable singly and determine whether it was associated with striving. These results showed that four demographic variables and 12 psychographic variables were indeed associated with striving (see Table 3).

Direct discriminant analysis was then performed to examine how well psychographic and demographic variables could predict whether an individual was a striver or a non-striver. The 16 variables that were found not to be independent of striving in the chi-square analysis were included in this analysis. Because the percentage of cases correctly classified will always be optimistic when the same cases are used to both calculate discriminant coefficients and to classify the cases, a random number generator was used to select approximately 40 percent of the sample cases to be used in generating the discriminant coefficents while the other 60 percent were used in the classification process.

TABLE 2
CREDIT AND SAVINGS BEHAVIOR AND STRIVERS INDEX
CHI-SQUARE ANALYSIS SUMMARY

Variable	Strivers %	Nonstrivers %	Chi-Square
Bank Credit Cards	53.3	31.6	23.66**
Store Credit Cards	65.8	40.0	32.34**
Gasoline Credit Cards	30.7	21.0	6.1 *
Bank Loans (other than mortgage)	39.7	27.4	8.37**
Finance Company Loans	10.1	8.4	.41
Loans from Friends and Relatives	5.5	4.5	.27
Insurance Policies (Weekly Payments)	7.0	3.9	2.50
Insurance Policies (Monthly Payments)	54.3	36.8	15.09**
Bank Savings Accounts	78.9	57.1	25.53**
Stocks, Bonds, and Mutual Funds	36.2	14.2	33.30**

* $\alpha < .05$
** $\alpha < .01$

Note: Degrees of freedom = 1 for all variables.

The canonical discriminant function derived from the analysis was studied to determine the most important variables leading to the ability to discriminate between strivers and non-strivers. The ranking of the most important variables was sex, Psych 6 ("I have all the credit I need"), Psych 22 ("I usually buy the brands I see advertised on television"), Psych 15 ("Community groups take up too much time"), education, family income, and subjective social class. Sixty-nine percent of the cases included in the analysis were classified correctly.

Conclusions and Implications

The results of this study have shown that there are indeed still differences in marketing behavior, as well as psychographics and demographics, between black strivers and non-strivers (see Figure 1). While there were no statistically significant differences between the groups in terms of magazines and newspapers read, department stores shopped, food stores frequented, drugstores shopped, and retail outlets where shampoo is bought, there were significant differences in terms of discount stores patronized and retail outlets where clothes, shoes, hair dryers, and washing machines were bought. This pattern suggests that while both groups patronize the same stores, the specific products that they purchase in each type of retail outlet are different.

TABLE 3
STATISTICALLY SIGNIFICANT PSYCHOGRAPHIC AND DEMOGRAPHIC VARIABLES

Psychographic Variables	Agree with Statement Strivers	Nonstrivers	Chi-Square
	%	%	
"I have all the credit I need."	64.7	40.5	23.42**
"I usually buy the cheapest brand of a product that I need."	33.1	43.8	4.21*
"Community groups take up too much time and rarely have any effect on problems."	21.1	35.0	8.02*
"Our family travels quite a lot."	55.6	30.0	25.58**
"I buy many things on credit or with a charge card."	25.9	16.6	4.76*
"I feel more comfortable shopping in discount stores than in department stores."	37.3	54.9	9.87**
"I usually buy the brands that I see advertised on television."	16.2	27.8	6.14*
"I feel more comfortable shopping in small stores in my neighborhood than in large department stores."	16.4	27.0	5.56*
"The more expensive brands are almost always better than the cheaper brands."	21.9	32.3	4.39*
"I seldom fear my actions will cause others to have a low opinion of me."	65.5	50.6	8.15**
"Advertising seldom persuades people to buy things they shouldn't buy."	26.7	38.0	5.23*
"I get most of my information about new products from television."	28.0	50.7	17.90**
Demographic Variables			
Sex			14.51**
Subjective Social Class			6.31*
Education			61.05** (df=5)
Family Income			45.04** (df=4)

Note: Degrees of freedom = 1 for all variables, except as noted.

* $\alpha \leq .05$

** $\alpha \leq .01$

In addition to the differences mentioned above, differences were also found in the credit and savings behavior of strivers and non-strivers. Strivers were found to utilize bank credit cards, store credit cards, bank loans, and gasoline credit cards significantly more than non-strivers. In the area of savings behavior, strivers utilized monthly payment insurance policies, bank savings accounts, and stocks, bonds, and mutual funds significantly more than non-strivers.

FIGURE 1
DEMOGRAPHIC AND PSYCHOGRAPHIC PROFILES OF SEGMENTS

	Strivers	Nonstrivers
Demographically		
	More likely to be male	More likely to be female
	Middle- to upper-class	Lower-class
	Have at least some college education	High school graduation or less education
	Family income over $30,000	Family income less than $30,000
Psychographically		
	More likely to agree that:	
	"I have all the credit I need."	"Community groups take up too much time and rarely have any effect on problems."
	"I buy many things on credit or with a charge card."	"I usually buy the cheapest brand of a product that I need."
	"I seldom fear that my actions will cause others to have a low opinion of me."	"The more expensive brands are almost always better than the cheaper brands."
	"Our family travels a lot."	"Advertising seldom persuades people to buy things they should not buy."
		"I get most of my information about new products from television."
		"I feel more comfortable shopping in discount stores than department stores."
		"I feel more comfortable shopping in small stores in my neighborhood than in large department stores."
		"I usually buy the brands I see advertised on television."

These differences in profiles and in marketing behavior have serious implications for marketing strategies (see Figure 2). For example, retailers that cater to non-strivers need to offer special credit policies that are not geared to credit cards. They should also use television as a source of information and a tool of persuasion. The product should be positioned as similar to the "expensive" brand, but the actual price should be very competitive. The retailer should also be aware of the specific types of goods that strivers and non-strivers are likely to purchase in his establishment, since both groups will often frequent the same retailer, but for different products.

The results of this study confirm that values are a viable and significant way of segmenting the black market. This is crucial to marketers because it suggests that merely increasing the income level of blacks will not cause consumption behavior to change, at least in the short run. Values are a much more enduring characteristic than income level because they (values) are more resistant to change. While there is association between income and striving, there are strivers and non-strivers in all income classes.

FIGURE 2

	Product	Price	Promotion	Place
Strivers	Good market for financial services	Uses lots of credit	Television has less impact as source of product information and as persuasive tool	Use discounters for hard goods; use department stores and higher-priced specialty stores for fashion goods
Nonstrivers	Poorer market for financial services; likely to buy "cheaper" version of products	Needs special credit policies	Uses television for product information; more likely to buy brands advertised on television	Does not use hard goods discounters; more likely to use inner-city "bargain" stores; uses department stores and "cheaper" stores for fashion goods, but not higher-priced specialty stores

References

Barry, Thomas E. and Michael G. Harvey, (1974) "Marketing to Heterogeneous Black Consumers," California Management Review, 17 (Winter), 50-57.

Bauer, Raymond A. and Scott M. Cunningham, (1970) Studies in the Negro Market, Cambridge, Massachusetts: Marketing Science Institute.

Bauer, Raymond A., Scott M. Cunningham, and Laurence H. Wortzel, (1965) "The Marketing Dilemma of Negroes," Journal of Marketing, 29 (July), 1-6.

Block, Carl E., (1972) "Prepurchase Search Behavior of Low-Income Households," Journal of Retailing, 48 (Spring), 3-15.

Fjield, Carla R., Howard G. Schutz, and Robert Sommer, (1984) "Environmental Values of Food Cooperative Shoppers," in Robert E. Pitts, Jr. and Arch G. Woodside (eds.) Personal Values and Consumer Psychology, Lexington, Massachusetts: D.C. Heath and Company.

Gibson, D. Parke, (1969) The $30 Billion Consumer, New York:The MacMillan Company.

"Growing Black Consumer Income Stirring Ad Interest," (1985) Television/Radio Age, 32 (February), B3-B7.

Henry, Walter A., (1976) "Cultural Values Do correlate with Consumer Behavior," Journal of Marketing Research, 13 (May), 121-127.

Hills, Gerald E., Donald H. Granbois, and James M. Patterson, (1973) "Black Consumer Perceptions of Food Store Attributes," Journal of Marketing, 37 (April), 47-57.

Portis, Bernard, (1966) "Negroes and Fashion Interest," Journal of Business, 39 (April), 314-323.

Rokeach, Milton J., (1968) "The Role of Values in Public Opinion Research," Public Opinion Quarterly, 32 (Winter), 547-549.

Vinson, Donald E. and J. Michael Munson, (1976) "Personal Values: An Approach to Market Segmentation," in Kenneth Bernhardt (ed.), Marketing: 1776-1976 and Beyond, Chicago: American Marketing Association, 313-337.

Vinson, Donald E., Jerome E. Scott, and Laurence M. Lamont, (1977) "The Role of Personal Values in Marketing and Consumer Behavior," Journal of Marketing, 41 (April), 44-50.

Zikmund, William G., (1977) "A Taxonomy of Black Shopping Behavior," Journal of Retailing, 53 (Spring), 61-72.

THE INFLUENCE OF THE SITUATIONAL CONTEXT ON PRODUCT USAGE

Erhard K. Valentin, Weber State College
Kent L. Granzin, University of Utah

Abstract

This study first proposed a model of the extended situational context to provide a device for integrating and extending previous findings from research into situational influences. Then, the four elements of the model were operationalized as follows, using food as the focal product: objective situation in terms of who eats the food; object in terms of the particular food item; subject in terms of the values held by the serving homemaker; and the criterion of behavioral response in terms of product usage rate. A projective field experiment supported the model by finding significant prediction of food usage from the main effects representing the first three elements, and all first order interactions.

Introduction

In recent years, a continuing stream of research has investigated the influence of the situation on a number of criterion variables used to represent consumption behavior. Among the criterion measures that have been empirically linked to situation are: attitude (Miller and Ginter 1979); anticipated satisfaction (Granzin and Schjelderup 1982); sequence of store visits (Mattson 1982); purchases of gift items (Scammon, Shaw and Bamossy 1982); and brand loyalty (Granzin and Miller 1980). The situations that have been used to predict these criterion variables include when: consumers are thirsty (Sharpe and Granzin 1974); a restaurant is appropriate for eating (Miller and Ginter 1979); an automobile malfunctions and needs repair (Granzin and Schjelderup 1982); a gift is required (Mattson 1982; Belk 1982).

Thus, previous research supports the usefulness of the situation, variously defined, in predicting a range of psychological states and consumption-related activities of consumers. Given this success in linking situation to outcomes useful to the understanding of consumer behavior, scholars will benefit by continually assessing and consolidating previous findings; incorporating this knowledge into conceptual schemes; and using these schemes to guide future investigations into situational influences, both conceptual and empirical.

The purpose of this paper is to: present important findings from previous situation-related research; integrate these findings to provide a conceptual basis for research into the influence of situation; propose a model useful for consolidating our knowledge of the effects of situation; and report the results of an empirical research project based on this model. The next section of this paper considers previous findings and presents a conceptual basis for situation-related research.

Conceptual Background

The simple S-O-R paradigm provides a point of departure for this conceptual development. In the paradigm, an external stimulus reaches an organism, which then internally processes the stimulus and develops a response. In the concrete world, the complex nature of all three elements of this conceptual device means the paradigm must be expanded and adapted to fit the current research problem. In this section of the paper, the paradigm will be developed into a model that portrays what will later be called the "extended situational context." This model features four basic elements. Figure 1 portrays the flow of influence from the external (stimulus) elements of the objective situation and the object, through the subject (organism), to the behavioral response. The remainder of this section considers each of these elements in greater detail.

The Objective Situation Element

One of the problems that has plagued situation-related research to date has been how to accurately identify the structure of the situation under investigation in a way that aids generalization from the empirical results of a specific study.

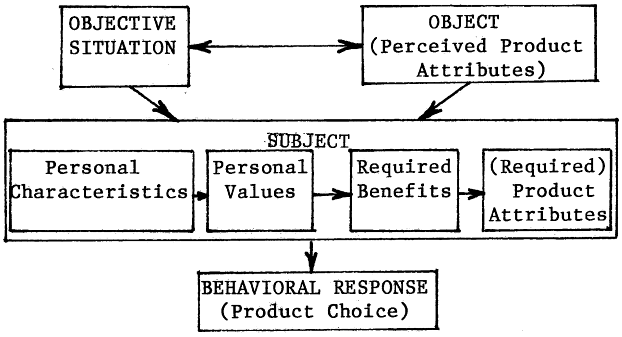
To give a structure to the specification of a situation of interest, Belk (1975) posited five dimensions he considered sufficient for describing situation: (1) physical surroundings; (2) social surroundings; (3) temporal perspective; (4) task definition; and (5) antecedent states. Subsequent empirical research found these dimensions useful for describing three alternative situations to the subjects of a field experiment (Granzin and Schjelderup 1982). This approach that is based on a few relevant dimensions provides a relatively objective means of specifying the structure of a situation. Thus, this element of the extended situational context will be termed the objective situation.

The Object Element

The other element of the extended situational context that lies external to the subject is the choice object. In a marketing context, this object will be the product (or service) under consideration by a customer. A product can be described as a bundle of attributes. The particular attributes that become salient for a given customer, and the magnitudes of these attributes that are needed, will determine the nature of the product that is selected. That is, when the required magnitudes of salient attributes have been specified by a consumer, the product has been sufficiently described for communication purposes.

Bloch and Richins (1983) provided a conceptual portrayal of the sub-process whereby the choice object is mentally evaluated by a consumer who is selecting a product. Although these authors did

FIGURE 1
THE INFLUENCE OF THE EXTENDED
SITUATIONAL CONTEXT ON PRODUCT USAGE



not state just what was meant by the situation in which evaluation takes place, they suggested that the object is assigned different importance ratings with varying combinations of: characteristics of the evaluating subject, attributes of the product, and nature of the situation. In the present model, the sub-process ending at evaluation is extended to the behavioral response construct, to include such events as purchase or consumption.

The Subject Element

The subject provides the internal, mediating element that translates the two external elements of the extended situational context into a behavioral response. Lutz and Kakkar (1975, 1976) treated the nature of this psychological, translating process in some detail. In essence, while they did not deal explicitly with the object element, they showed how the subject translates the nature of the objective situation to form what may be termed the subjective situation. Different persons will perceive different subjective situations in the same objective reality.

Researchers have devoted considerable effort to the study of the flow of influence from one state to another in the human psychological process, in both general and specific contexts. Yet relatively little has been done to empirically establish what mental states and psychological sub-processes are most relevant to the translation of an objective situation to a behavioral response. As isolated instances, earlier empirical research by Vincent and Zikmund (1976) and Granzin and Schjelderup (1982) showed the flow of influence to run through such intervening constructs as perceived risk, self-confidence, anxiety, and expected benefits.

Recently, several authors presented conceptual explanations concerning the influence of personal values in this flow of influence. Munson (1984) stated that the values evoked depend on the nature of the situation. That is, not only do consumers with different personal characteristics possess different value structures, but what they consider right and proper will also differ with what has here been termed the objective situation. Work by Howard and Woodside (1984) and Reynolds and Gutman (1984) supports the notion that values, in turn, influence what benefits (consequences) are sought. And the benefits that are required determine what product attributes are specified (Haley 1968). As mentioned earlier, specifying the attributes that are required thus specifies the product, which is a bundle of attributes. On this basis, values will be featured as an important personal characteristic of the subject in the empirical portion of this research project.

The Behavioral Response Element

As mentioned earlier, a variety of criterion measures can be used to represent the response element of consumer behavior in this paradigm. Potential criterion measures include attitudes, preference, intention, purchase, use, satisfaction, and loyalty. The empirical study described below focuses on product usage. The model of Figure 1 portrays usage as based on the selection of that product alternative whose attributes provide the consumer with the benefits called for by the objective situation and the characteristics of the subject.

In sum, the model features these four major elements: objective situation, object, subject, and behavioral response. In the general case, the objective situation and (the attributes of) the object, as processed by the subject, determine what behavioral response the subject will select. In the specific present case described below, the objective situation is an occasion when food is served. The subject is a homemaker, whose key characteristic in this extended situational context is the structure of her personal values. The object is a type of food that may be described in terms of its product attributes, and the behavioral response is usage of food items.

Method

Variables

Food is the single largest expenditure category in the household budget for Americans. Thus, using food as the object and food usage as the operational measure of behavioral response means that the results have relevance to an important class of consumer decisions. Specifically, to represent the object construct this study focused on three typical items of food served in the home: meat, vegetables, and dessert.

Given the focus on food usage, and the operationalization of the objective situation described below, the appropriate choice to represent the subject construct was the homemaker. While the role of homemaker is not strictly gender-bound, to ensure a relevant sample and to keep the task of data collection within reasonable limits, this study used female homemakers who at one time had been married; i.e., had experienced the responsibility of caring for a family.

Of course, the variety of personal characteristics that provide measures of the subject as a type of person are almost limitless. As introduced above, values provide one variable that previous research suggests is particularly appropriate to the present conceptualization. Thus, personal values were used to characterize the subject. Respondents were placed in one of three categories, as based on their reported personal value structure, according to a method described below.

The objective situation was operationalized by means of three alternatives consistent with the behavioral response, subject, and object measures described above. These alternatives were when serving: the homemaker herself, her immediate family, and guests in her home. Here, the physical surroundings dimension (the home), and the task definition dimension (serving) were explicitly specified as constant, and the persons present dimension was systematically varied to produce three treatment levels in a projective field experiment.

Data Collection

A random, geographical area cluster sampling scheme was used to collect data in the capital city of a western state. Two callbacks were used before substituting the next dwelling, and this procedure provided 245 usable questionnaires. Food usage was obtained for each of three objective situations and three food types by asking, for example: When preparing a meal for YOUR FAMILY, would you include VEGETABLES? Responses were obtained on five-point scales bearing the response choices never, seldom, sometimes, usually, and always.

Personal values were measured by responses to an 18-item scale developed by a preliminary survey of 228 wives and former wives. The earlier survey administered 26 items taken from previous research in the field of values connected with homemaking (White 1966; Arnott 1972; Green and Cunningham 1975; Brogan and Kutner 1976). In essence, these items represented the subjects' deep-seated feelings toward the place of a woman in the often competing worlds of work outside and work inside the home (Reilly 1982; Bellante and Foster 1984), and the implications of this conflict for food preparation (Ortiz, MacDonald, Ackerman and Goebel 1981). Multiple-group factor analysis produced six oblique factors generally supportive of those found by the earlier work cited. The three measures that loaded highest on each factor were used in the main study, and were presented in terms of six-point Likert-type agreement scales.

Data Analysis

Hierarchical cluster analysis (Veldman 1967) of the responses by 245 homemakers to 18 individual measures of personal values produced three groups of women, as based on interpration of the error term at each succeeding level of aggregation (Ward 1963). For reference purposes, these groups were labelled Traditional (n=68), Moderate (n=97), and Modern (80).

Given the nature of the research design, a repeated-measures, mixed-effects analysis-of-variance was used to test the hypothesis that product usage is directly related to persons served, food item used, and category of homemaker, and interactively related to combinations of the three main effects. The nature of those differences found to be significant was interpreted using the Newman-Keuls multiple range test.

Results

Table 1 presents the summary of the ANOVA. All three of the main effects reached significance (p=.000,.000,.000), as did the three first-order interactions (p=.000,.006,.000). Only the test of the second-order interaction (p=.300) failed to support the hypothesized relationship with food usage.

The column labelled R^2 gives the estimated fraction of total variance in product usage that is attributed to that variable or interaction in the linear model. Given the nature of the research design, 26.6 per cent of variance explained by the differences in the three types of food should not be surprising. But, the table also shows that 17.7 per cent of the variance in usage is due to the effect of the objective situation. And, the interaction between type of food and nature of the objective situation is also notable at 7.1 per cent. However, the main effect for type of person and the other two first-order interactions, while significant, are relatively small.

Given empirical results that support the model, these findings should be explored further. Table 2 presents the means and significant differences among means for each main effect, assuming the other two main effects are held constant. The two-way classification for type of person indicates that the modern and moderate, moderate and traditional, and modern and traditional pairs of means all differ significantly, as based on the Newman-Keuls test. For type of food, the meat and dessert and vegetables and dessert pairs of items differ significantly. For nature of the objective situation, all three pairs that represent when food is served differ significantly.

Discussion

These results have implications at three reference levels of conceptual and empirical meaning: support for the conceptualization itself; application to consumer behavior and to marketing decision making; and suggestions for future empirical research. This section considers each of these three sets of implications in such detail as space limitations permit.

Level of Conceptualization

At the first level, the basic conceptualization is generally upheld, given the design of the projective field experiment and the operational measures selected to represent the constructs. Behavioral response was clearly linked to type of food and nature of the objective situation, both directly and interactively. More weakly, usage was also shown to depend directly on type of person. The support for interactive effects indicates that the three basic elements in the model affect food usage in a partially interdependent fashion. Thus, the reciprocal linkages among the predictor elements in the model receive support from the empirical results.

However, type of person, as measured by her values home, did not notably improve the explanation of

TABLE 1
ANALYSIS OF VARIANCE SUMMARY FOR PRODUCT USAGE*

Source of Variation	R2	SS	df	MS	F-Ratio	p
Between subjects		300.9	244			
Type of person effects	.014	35.8	2	17.9	16.2	.000
Error--type of person		267.97	242	1.1		
Within subjects		2,300.7	1960			
Type of food effects	.266	692.6	2	346.3	451.9	.000
Person-food interactions	.007	17.2	4	4.3	5.6	.000
Error--type of food		370.9	484	.8		
Situation effects	.177	461.6	2	230.8	463.2	.000
Person-situation interactions	.003	7.4	4	1.9	3.7	.006
Error-situation		241.1	484	.5		
Food-situation interactions	.071	184.5	4	46.1	158.2	.000
Person-food-situation interactions	.001	1.6	8	.2	.7	.300
Error-food-situation		282.2	968	.3		

*Subjects per group: Modern (80); Moderate (97); Traditional (68).

TABLE 2
WITHIN-VARIABLE MEANS AND DIFFERENCES IN PRODUCT USAGE*

Treatments	Means
Person Type	
Modern	3.39**
Moderate	4.14
Traditional	4.31
Food Type	
Meat	4.45
Vegetables	4.63
Dessert	3.35
Situation	
Self	3.61
Family	4.09
Guests	4.74

*All pairwise comparisons among means for a given main effect are significantly different (p<.05) by Newman-Keuls multiple-range test except meat and vegetables for the food type variable.
**Midpoint of the scale is 3. A low score indicates a low frequency of serving the food items; a high score indicates alow frequency of serving the food items; a high score indicates a high frequency of serving the food item.

product usage. On this basis, the conceptual schemes dealing with values that were cited in the Conceptual Background section of this paper received only token support. Perhaps the difficulty lies with the link to required benefits shown in Figure 1. Future research would do well to examine those links surrounding required benefits to determine if this part of the conceptualization should be reformulated or rejected.

The Level of Application

At the level of application, the findings hold implications for our understanding of consumer behavior and for marketing decision making. With respect to consumer behavior, homemakers are more likely to plan a full meal (i.e., a higher average usage rate over all three food items) when guests are expected than when just the family is involved, and least likely to do so when they only serve themselves. They are more likely to serve meat and vegetables than they are dessert, regardless of the situation they face. And, they are most likely to serve a full meal if they hold a traditional orientation toward involvement in homemaking, next most likely if they hold a moderate orientation, and least likely if they have a relatively strong orientation outside the home.

To the extent their profit rests on the frequency with which a given type of food is served, marketers will succeed best with meat, with food served when entertaining guests, and when the food is served by the traditional homemaker. All else equal, their promotions will be most profitable when they target their audience accordingly to stimulate usage of their brand. Conversely, they may accept the challenge to market to the segments with the lowest usage rate, but therefore the highest potential for gain. Here, their persuasive communications would feature dessert items and would be directed toward homemakers who eat alone and those who hold a modern orientation.

The rather complex pattern of difference in means for the interactional effects could not be further summarized because of space limitations, but the implications of the key findings can be summarized here. Homemakers are least inclined to eat dessert alone, but most inclined to serve vegetables to guests. If marketers want to "jump on the bandwagon," they will feature vegetables and communicate the benefits of their brand for serving to a gathering of persons invited into the home. If marketers want to accept the challenge of boosting usage in the currently least common case, they will seek to convince homemakers to "have a treat when YOU deserve it." The mean usage rates for the 25 other first-order, interactive combinations lie between these two extremes.

The Level of Measurement

Based on this empirical support for the conceptual model, a number of tasks can be suggested for future situation-related research. A first task would be to vary the measure of the object of consumption. While food is an important commodity in the marketplace, other items potentially influenced by the situation should be examined, items such as personal care items, articles of clothing, and entertainment offerings. Of course, the alternative descriptions of the objective situation that are examined will depend on the product or service in question. In this vein, the dimensions proposed by Belk (1975) can be implemented more fully by use of research designs that facilitate a more complete specification of the objective situation. In this way, research can determine which dimensions have the greater effect on behavior.

The criterion measure also can be altered. Research might investigate consumer behavior at various stages in the consumption process. For example, Hammett and van de Mark (1973) suggested these stages are relevant to an understanding of food-related behavior: (1) acceptance of responsibility for food selection, preparation, and service: (2) search for information; (3) product evaluation; (4) product choice; (5) purchase; and (6) usage. A study similar to that reported here, which involved the sixth of these stages, could easily be replicated at each of the first five stages to broaden our understanding of the effect of the extended situational context on consumer behavior. With respect to application, each of these stages furnishes marketers with a different target for persuasive communication, product/service design, and merchandising tactics.

References

Belk, Russell W. (1975), "Situational Variables and Consumer Behavior," Journal of Consumer Behavior, 2 (December), 157-64.

Bloch, Peter H., and Marsha L. Richins (1983), "A Theoretical Model for the Study of Product Importance Perceptions," Journal of Marketing, 47 (Summer), 69-81.

Granzin, Kent L., and Kenneth E. Miller (1980), "Consumption Situation as a Predictor of Brand Loyalty," Journal of Economics and Business, 32 (Spring), 262-67.

Granzin, Kent L., and Kathryn H. Schjelderup (1982), "Situation as an Influence on Anticipated Satisfaction," in Advances in Consumer Research, Vol. 9, ed. Andrew Mitchell, Ann Arbor, MI: Association for Consumer Research., 234-38.

Haley, Russell I. (1968), "Benefit Segmentation: A Decision-Oriented Research Tool," Journal of Marketing, 32 (July), 30-35.

Hammett, Ruth A., and Mildred S. van de Mark (1973), Home Economics Research Journal, 1, 269-76.

Howard, John A. and Arch G. Woodside (1984), "Personal Values Affecting Consumer Psychology," in Personal Values and Consumer Psychology, ed. Robert E. Pitts, Jr. and Arch G. Woodside, Lexington, MA: Lexington Books, 3-12.

Lutz, Richard J., and Pradeep Kakkar (1975), "The Psychological Situation as a Determinant of Consumer Behavior," in Advances in Consumer Research, Vol. 2, ed. M. J. Schlinger, Ann Arbor, MI: Association for Consumer Research, 439-53.

Lutz, Richard J., and Pradeep Kakkar (1976), "Situational Influence in Interpersonal Persuasion," in Advances in Consumer Research, Vol. 3, ed. Beverly B. Anderson, Ann Arbor, MI: Association for Consumer Research, 370-78.

Mattson, Bruce E. (1982), "Situational Influences on Store Choice," Journal of Retailing, 58 (Fall), 46-58.

Miller, Kenneth E., and James L. Ginter (1979), "An Investigation of Situational Variation in Brand Choice Behavior and Attitude," Journal of Marketing Research, 16 (February), 111-23.

Munson, J. Michael (1984), "Personal Values: Considerations on Their Measurement and Application to Five Areas of Research Inquiry," in Personal Values and Consumer Psychology, ed. Robert E. Pitts, Jr. and Arch G. Woodside, Lexington, MA: Lexington Books, 13-33.

Reynolds, Thomas J., and Gutman, Jonathan. (1984), "Laddering: Extending the Repertory Grid Methodology to ConstructAttribute-Consequence-Value Hierarchiess," in Personal Values and Consumer Psychology, ed. Robert W. Pitts, Jr. and Arch G. Woodside, Lexington, MA: Lexington Books, 13-33.

Sharpe, Louis K., and Kent L. Granzin (1974), "Market Segmentation by Consumer Usage Context: An Exploratory Analysis," Journal of Business and Economics, 26 (Spring), 227-35.

Vincent, Mark, and William G. Zikmund (1976), "An Experimental Investigation of Situational Effects on Risk Perception," in Advances in Consumer Research, Vol. 3, ed. Beverly B. Anderson, Ann Arbor, MI: Association for Consumer Research, 125-29.

White, Irving S. (1966), "The Perception of Value in Products," in On Knowing the Consumer, ed. Joseph W. Newman, New York: Wiley.

(Additional references available from the authors.)

THE INFLUENCE OF MOOD ON WILLINGNESS TO SPEND AND UNPLANNED PURCHASING

Dena Thometz Saliagas, Georgia State University
James J. Kellaris, Georgia State University

Abstract

This study explores the impact of mood on two important aspects of consumer behavior: willingness to spend, and perceived likelihood of making unplanned purchases. Previous research suggests that mood state plays an important role in influencing various aspects of decision-making and risk-taking behavior. The current study extends this stream of research into the context of consumer behavior. Preliminary findings suggest that affect does influence consumers, and that this influence differs for males and females.

Introduction

Affect has been found to influence a number of human behaviors such as helping, decision-making and risk-taking. The potential value of mood in influencing consumption behavior is evident in the widespread use of mood-enhancing devices such as background music in the retail setting and in advertising. Although such "mood management" is widely practiced, there is little empirical research linking mood directly to consumer behavior. The present study addresses this gap by examining the impact of mood on two aspects of consumer behavior: willingness to spend, and perceived likelihood of making unplanned purchases. These particular aspects were selected for study because they are important precursors to actual purchase behavior, and because there is some indication in the social psychology literature that they are likely to be influenced by mood.

Conceptual Framework

Previous studies from the field of psychology have related mood to altruistic/helping behavior (Berkowitz 1972, Forest et al. 1979, Isen and Levin 1972). This type of behavior was conceptualized as a special case of decision making (Isen and Levin 1972). That is, helping behavior is the product of the decision of whether or not to help. For example, positive affect was found to serve as a retrieval cue for positive material in memory (Teasdale and Fogarty 1979), which in turn influences judgment and decision making (Isen 1975, Isen and Shalker 1982, Isen et al. 1978). Generally stated, positive mood affects positive evaluations and positive judgements (Shiffenbauer 1974, Masters and Furman 1976, Srull 1983).

Other studies demonstrate the effects of positive affect on the amount of information used in decision making (Isen et al. 1982). Subjects in a good mood tend to use less information in a decision, give less consideration to the information they do process, and make the decision faster than those not in a good mood. This has been labeled a "simplification strategy," -- i.e., an approach to a decision or creative problem-solving-task in the fastest, easiest way. Further, Isen and her colleagues hypothesize that this tendency to simplify the task may be done to maintain the pleasurable, good mood.

Positive affect has also been found to affect risk taking behavior (Isen et al. 1982, Isen et al. 1985). Subjects in a positive mood state exhibit risk-proneness in a low-risk situation, but risk-averseness in a high-risk situation. Isen explains that the tendency to prefer low-risk over high-risk options under positive affect also may be due to one's natural desire to maintain a good feeling (i.e. self-protection). Alternatively, it may be explained in terms of utility theory. There may be a lesser marginal utility of additional "good feeling" to be gained from a favorable outcome in the risk situation among people in a good mood than among people in a neutral or negative affective state. Thus, consumers in a good mood would not be as highly motivated to favor a high-risk option.

The effects of mood on decision-making and risk-taking suggest a number of potential influences of affect on purchasing behavior. First, given that positive affect seems to influence task simplification and positive judgements, one might expect consumers in a good mood to exhibit a greater willingness to spend than their less happy counterparts, and to exhibit a wider "acceptable range" of prices. Task simplification could be in the form of a "price-perceived-quality" relationship (Peterson and Wilson 1985). That is, consumers in a good mood who want to avoid the processing involved in assessing prices may rely on simple decision rules such as "the higher the price, the higher the quality of the product -- and therefore, the greater my satisfaction." Furthermore, positive product judgements may preclude (or at least attenuate) the assessment of prices, which may also lead to a greater willingness to spend.

Second, conservatism and risk avoidance under conditions of high risk/positive affect may also influence the price that one is willing to pay for an item in a product class. Assuming that a positive price-perceived-quality relationship holds for a particular product class, consumers in a positive mood state should prefer a higher-priced alternative so as to reduce the risk of making a poor choice. The perceived risk of making a bad choice in a purchase situation has been shown to motivate consumers to select higher-priced items (Lambert 1973, Shapiro 1968, 1973). However, this tendency should be stronger for subjects in a positive mood when compared with subjects in a non-positive mood.

Finally, according to Isen's interpretation, positive affect seems to be associated with a "cognitive laziness" where the pleasant mood state may be maintained by avoiding cognitive processing. Thus, consumers in a good mood may be more likely to buy on impulse. In this situation, associations and judgements should be more positive. Consumers should devote less cognitive resources to generating counter-arguments to the impulse. However, certain product purchases may have mood-altering characteristics. For example, some consumers in a low mood may make purchases expressly for the purpose of elevating their moods. Thus, consumers in a good mood may be more likely to make unplanned purchases of non-mood-altering products, but less likely to make unplanned purchases of mood-elevating products.

Although this is an exploratory study, two a priori hypotheses are proposed. First, individuals in a good or high mood will be more willing to pay more for an expensive good and less for an inexpensive good than individuals in a low mood. Second, individuals in a high mood will be more likely to make an unplanned purchase than those in a lesser mood. However, it is expected that those in a low mood state may be more likely to purchase certain "mood elevating goods" than those in a high mood.

Method

Sample

The sample was obtained from undergraduate and graduate business classes at a large urban southeastern university. Usable data were gathered for 260 subjects. The sample was deemed appropriate for the purposes of the present study given its exploratory nature. Most of the subjects (95%) were currently employed and frequently purchased a majority of products used in the study.

Procedure

Volunteers were obtained to complete a questionnaire about products and prices. The subjects then completed a mood measure, followed by questions concerning the prices they would pay for a number of goods. The next set of questions dealt with their likelihood of purchasing "impulse" items while at the grocery store. Demographic questions were last. The subjects were debriefed after all the questionnaires were collected. This entire procedure took approximately 15 minutes.

Measures

Mood was measured using a summed, 6 item, seven-point bipolar scale from Veitch and Griffitt (1976). Subjects were asked to describe how they felt at that moment using adjectives such as: comfortable-uncomfortable, good-bad, high-low, happy-sad, pleasant-unpleasant, positive-negative. A pretest determined the Cronbach's coefficient alpha to be .93.

Willingness to spend was measured by asking the subjects to write the approximate lowest and highest dollar amounts that they would be willing to spend for a quality item in each of the various product classes which included shopping, specialty and convenience goods. This list was taken from Peterson and Wilson (1985).

Perceived likelihood of making unplanned purchases was measured on a seven-point scale anchored at one end by "not at all likely to purchase" and by "very likely to purchase" at the other end. Specifically, subjects were asked to imagine that they stopped at the grocery store to buy bread and milk, and the likelihood that they would purchase any of the items listed. The items used in the study were products that had been pre-tested.

Data Analyses

In this study there was no actual manipulation of mood since pre-tests had indicated that there was sufficient variance in individuals' perceived mood state. Isen (1983) contends that a general positive or negative mood state can have far-reaching effects on behavior and perceptions. Further, the focal point of this study concerns the effect of mood on some consumer relevant variables, not the mood induction technique.

Since this study was concerned with comparisons between low and high mood states on a variety of dimensions, the mood scale responses were divided into three groups: low, neutral and high mood state, with a third of the respondents in each group.

The high and low prices for each product class, as well as the price ranges (difference scores), were computed and standardized to allow direct comparison across items.

Finally, the high and low mood groups were compared along willingness to spend (high + low prices), relevant range, and likelihood to make unplanned purchases, via a series of univariate t-tests.

Results

It was anticipated that subjects in the high mood group would generally be willing to spend more money than the low mood group across product classes. This was found to be true for only slightly over half of the product classes (55%); statistically significant differences ($p \leq .10$) were apparent for only 3 of the 20 items tested: perfume, nightgowns, and coffee.

It was further anticipated that subjects in the good mood group might be willing to pay less (i.e. a lower "low price") than the other mood group for inexpensive (low unit cost) items. This was found to be true for 57% of the low-unit-cost product classes; statistical differences between the two mood groups were significant ($p \leq .10$) for 6 of the 14 inexpensive items.

Analysis of the price ranges (i.e. the standardized scores of differences between high and low prices for each product class) revealed that subjects in the good mood group had wider relevant ranges than their low mood group counterparts in 13 out of 20 product classes tested. However, differences between the two mood groups were significant ($p \leq .10$) for only four product classes (See table 1). It was noted that these product classes were generally "feminine", in the sense that they are usually purchased for or by women. These results, along with the wealth of literature suggesting psychological differences among the sexes regarding mood (Debevec and Iyer 1985) and a variety of other phenomena (Maccoby and Jacklin 1974) stimulated the researchers to examine the hypothesized effects separately for the two sexes. When the data were analyzed in this manner, some interesting patterns began to emerge.

Among females, differences between mood groups were in the expected direction for 17 of the 20 product classes. These differences were statistically significant for 8 of the 20 items tested: perfume, shoes, cameras, electric shavers, coffee, toothpaste, nightgowns, and electric clocks. The products where the relevant price range difference was greater in the low mood group were "male products" such as, a man's shirt, beer, and wine. It could be that there is some interaction between sex and gender of product or that the previous experience or familiarity of the subject with the product may be important. Thus, it appears that females may be more susceptible to the effects of mood, vis-a-vis the prices they are willing to pay for products.

For males, less than half of the differences between high and low mood groups were in the anticipated direction. The mood group differences were statistically significant in only one case, for the product "electric shaver". And in this case, the subjects in the low mood group had the wider relevant price range than those in the good mood. It is interesting to note that 60% of the relevant price ranges for the listed products are higher for the low mood male subjects, which is contrary to the hypotheses. The products in which the price range is in the stated direction are products "for women" i.e., perfume, women's shoes, night gowns, etc. Although these differences are not significant, perhaps there is some relationship between the "gender" of the product, the sex of the purchaser and the dollar amount that they are willing to spend.

It appears that the likelihood for unplanned purchases is at least marginally influenced by mood state. Contrary to the hypothesis, it appears that individuals in a low mood state are more likely to purchase "impulse-type" goods than those in a higher mood state. (See Table 2) For the pooled sample (both men and women), 8 of the 13 items listed were more likely to be purchased by those in a low mood state. The items that were significantly influenced by mood ($p \leq .10$) include: candy/gum, snack foods, soft drinks, ice cream and health items. In general, it seems that these products are more or less "junk food" items that probably have the perceived ability to "elevate" the mood level of those individuals that are currently in a low mood state.

Again, these data were broken down by sex. It was found that women in a good mood were more likely to purchase products in 7 out of 13 products. There were also four products that women in a good mood were significantly more likely to purchase ($p \leq .10$): magazines, batteries, razor blades and office supplies. These products are mainly "reminder impluse" items that people often forget to buy unless reminded. Of the "junk-food" products, women in low moods were again more likely to make an unplanned purchase than those in a high mood, although the differences were not significant.

Men, on the other hand, seem to be more likely to purchase items (11 out of 13) when in a low mood state. Men demonstrated significant differences ($p \leq .10$) for five items: alcoholic beverages, delicatessan items, batteries, snack foods and ice cream. In 4 out of 5 of these products the low mood group was more likely to purchase. Thus, it appears that sex and perceived mood state both influence the unplanned purchase.

Discussion

These preliminary results indicate that mood does have some influence on various aspects of consumer behavior such as willingness to spend, relevant price ranges, and perceived likelihood of making unplanned purchases. This is particularly true with women. As expected, women in good moods were more likely to have larger price ranges for most items except "male products." Very nearly the opposite effect held for men. The reasons for these differences are not known; however, it may be physiological differences and/or socialization differences between the sexes. Women may simply be more familiar with the products used in this study than are men.

Women in good moods were again more likely to make unplanned purchases of routine, reminder items. Both men and women in low moods were more likely to purchase possible "mood-elevating" goods without planning. Therefore, it appears that gender and mood interact in determining prices that will be paid for goods, acceptable price ranges and unplanned purchases.

In general it seems that consumers in low moods are more likely to purchase snack food items. A plausible explanation for this could be that individuals know when they are in low moods and may purchase certain goods for the purpose of improving their mood. These data suggest that women may be more susceptible to mood enhancing devises than men. Since women are still the primary shopping agents for most households, it seems plausible that retailers and advertisers should use mood enhancing devices in their stores and in their ads.

Future research might focus on several specific research questions. First, to what extent might the sexes differ with respect to "acceptable price" determination processes, independent of mood? For example, to what extent might males and females rely on cognitive schema such as the "price perceived quality relationship," and how might reliance on these schema be affected by mood? Second, the effects of non-mood factors such as product familiarity, situational variables, etc. on consumers' price determination processes should be assessed and held constant in future mood effects studies. This would afford the potential for a more rigorous assessment of the influence of affect on consumer's willingness to spend. Finally, future studies might examine the differential responses of men and women to marketing stimuli designed to encourage unplanned purchasing.

It would be premature to draw firm conclusions based on the present study; however, the tentative findings reported here suggest interesting interactions between mood, gender and consumer behavior worthy of future research.

Bibliography

Berkowitz, L. (1972), "Social Norms, Feelings, and Other Factors Affecting Helping and Altruism," In L. Berkowitz (Ed.), Advances in Experimental Social Psychology (Vol. 6). New York: Academic.

Debevec, Kathleen and Iyer, Easwar (1985), "Sex Roles and Consumer Perceptions of Promtions, Products, and Self: What Do we Know and Where Shoud We Be Headed?" Prepared for the Association for Consumer Research Conference, October 1985, Las Vegas, Nevada.

Forest, D., Clark, M.S., Mills, J., and Isen, A.M. (1979), "Helping as a Function of Feeling State and Nature of the Helping Behavior," Motivation and Emotion, 3: 161-169.

Isen, Alice M. (1975), "Positive Affect, Accessibility of Cognitions and Helping," In J. Piliavin (Chair.), Current Directions in Theory on Helping Behavior. Symposium presented at the Meeting of the Eastern Psychological Association Convention, New York.

Isen, Alice M. and Levin, P.F. (1972), "The Effect of Feeling Good on Helping: Cookies and Kindness," Journal of Personality and Social Psychology, 21: 384-388.

Isen, Alice M., Means, B., Patrick, R., and Nowicki, G.,(1982), "Some Factors Influencing Decision-Making Strategy and Risk Taking," In M.S. Clark and S.T. Fiske (EDS.), Affect and Cognition (17th Annual Carnegie Symposium on Cognition), Hillsdale, NJ: Erlbaum, pp. 243-261.

Isen, Alice M., Pratkanis, A.R., Solvic, P., and Slovic, L.M. (1985), "The Influence of Affect on Risk Preference: Relevance to Consumer Behavior," In D.W. Stewart (ED.), Proceedings of the Division of Consumer Psychology (Division 23, 1984 Annual Convention), Toronto, Canada: American Psychological Association.

Isen, Alice M., and Shalker, T.E. (1982a), "Do You 'Accentuate the Positive, Eliminate the Negative' When you are in a good Mood?" Social Psychology Quarterly.

Isen, Alice M., and Shalker, T.E. (1982b), "The Effect of Feeling State on Evaluation of Positive, Neutral, and Negative Stimuli," Social Psychology Quarterly, 45: 58-63.

Isen, Alice M., Shalker, T.E., Clark, M.S. and Karp, L. (1978), "Affect, Accessibility of Materials in Memory, and Behavior: A Cognitive Loop?", Journal of Personality and Social Psychology, 36: 1-12.

Lambert, Z. (1972), "Price and Choice Behavior," Journal of Marketing Research 9 (February), 35-40.

Maccoby, E. and C. Jacklin, (1974), The Psychology of Sex Differences, Stanford, CA: Stanford University Press.

Masters, J.C. and Furman, W. (1976), "Effects of Affect on Non-Contingent Outcome Expectancies and Belief in Internal or External Control," Developmental Psychology, 12: 481-482.

Nisbett, R. and Wilson, T. (1977), "Telling More Than We Can Know: Verbal Reports of Mental Processes," Psychological Review, 84: 231-259.

Peterson, Robert A. and Wilson, William R. (1985), "Perceived Risk and Price-Reliance Schema as Price-Perceived-Quality Mediators," In J. Jacoby and J.C. Olson (EDs.), Perceived Quality, Lexington, Mass: Lexington Books, pp. 247-267.

Schiffenbauer, A. (1974), "Effects of Observer's Emotional State on Judgements of the Emotional State of Others," Journal of Personality and Social Psychology, 30: 31-35.

Scitovsky, R. (1945), "Some Consequences of the Habit of Judging Quality by Price," The Review of Economic Studies, 12: 100-105.

Shapiro, B. (1968), "The Psychology of Pricing," Harvard Business Review, 46 (July-August), 14: 25,160.

Shapiro, B. (1973), "Price Reliance: Existence and Sources," Journal of Marketing Research, 10 (August): 286-294.

Srull, Thomas (1983), "Affect and Memory: The Impact of Affective Reactions in Advertising on the Representation of Product Information in Memory." In R. Bagozziand Alice Tybout (Eds.) Advances in Consumer Research 10, Ann Arbor, MI: Association for Consumer Research.

Teasdale, J.D. and Fogarty, S.J. (1979), "Differential Effects of Induced Mood on Retrieval of Pleasant and Unpleasant Events from Epsodic Memory," Journal of Abnormal Psychology, 88: 248-257.

Veitch, Russell and Griffitt, William (1976), "Good News - Bad News: Affective and Interpersonal Effects," Journal of Applied Social Psychology, 6(1): 69-75.

Wilson, W. (1979), "Feeling More Than We Can Know: Exposure Effects Without Learning," Journal of Personality and Social Psychology, 37 (June): 811-821.

TABLE 1

MEAN STANDARDIZED HIGH/LOW PRICE DIFFERENCE SCORES

	Item	POOLED			MALES			FEMALES		
		Mood			Mood			Mood		
		Lo	Hi	t*	Lo	Hi	t*	Lo	Hi	t*
1.	Stereo	.95	1.00	- .49	1.04	1.03	.10	.81	1.00	-1.20[c]
2.	Perfume	.88	1.30	-1.49[b]	.86	1.22	- .90	.76	1.10	-1.59[b]
3.	Man's Dress Shoes	1.05	1.02	.29	1.04	.98	.39	.92	1.01	- .64
4.	Woman's Dress Shoes	.99	1.15	-1.24[c]	1.00	1.02	- .13	.83	1.07	-1.57[b]
5.	Man's Dress Shirt	1.05	.95	1.01	1.00	.94	.56	1.11	.97	.88
6.	Woman's Blouse	1.03	1.07	- .32	.93	.81	1.06	.93	1.11	-1.17
7.	Camera	1.08	1.16	- .48	1.14	1.05	.34	.87	1.07	-1.64[a]
8.	Panty Hose	.99	1.27	-1.14	.75	1.12	-1.02	.99	1.04	- .30
9.	Beer	1.04	.98	.73	1.01	.97	.31	1.08	.99	.65
10.	Electric Shaver	1.02	.99	.27	1.14	.84	2.05[a]	.85	1.13	-1.37[c]
11.	Coffee	.92	1.16	-1.73[a]	.95	.99	- .20	.86	1.22	-2.28[a]
12.	Suntan Lotion	1.10	1.15	- .40	1.02	1.04	- .11	1.02	1.09	- .34
13.	Toothpaste	1.03	1.08	- .40	1.07	.90	1.23[c]	.83	1.29	-1.86[a]
14.	Asprin	1.18	1.07	.91	1.10	.94	1.03	1.05	1.12	- .42
15.	Wine	1.24	1.09	.63	1.09	.95	.45	1.11	1.02	.25
16.	Ice Cream	1.02	1.06	- .55	1.06	1.00	.59	.94	1.08	-1.08
17.	Lipstick	1.15	1.21	- .34	.92	.93	- .03	1.02	1.10	- .56
18.	Nightgown	.95	1.22	-1.73[a]	.90	1.02	- .65	.85	1.25	-1.71[a]
19.	Electric Clock	1.13	1.44	-1.02	.97	1.00	- .12	.79	1.57	-1.30[c]
20.	Body Lotion	1.17	.99	.80	1.21	.85	.93	.99	1.01	- .05

* one tailed t-test

[a] p less than .05
[b] p less than .10
[c] p less than .15

TABLE 2

MEAN VALUES FOR THE LIKELIHOOD OF MAKING UNPLANNED PURCHASES

	Item	POOLED			MALES			FEMALES		
		Mood			Mood			Mood		
		Lo	Hi	t*	Lo	Hi	t*	Lo	Hi	t*
1.	Candy/Gum	4.23	3.73	1.34[b]	3.33	3.05	.60	5.14	4.88	.47
2.	Magazine/Newspaper	3.94	3.94	- .01	3.67	3.56	.25	4.03	4.79	-1.44[b]
3.	Bakery Goods	2.94	2.82	.42	2.67	2.72	- .16	3.17	3.06	.23
4.	Delicatessen Items	2.71	2.93	- .77	2.48	2.93	-1.33[b]	3.03	3.12	- .19
5.	Alcoholic Beverages	3.50	3.11	1.16	3.46	2.79	1.61[b]	3.51	3.45	.10
6.	Cosmetics	2.05	1.83	.91	1.53	1.28	1.22	2.60	2.64	- .08
7.	Batteries	1.77	1.78	- .10	2.02	1.04	2.82[b]	1.51	2.42	-2.36[a]
8.	Razor Blades	2.04	2.25	- .84	2.58	2.23	1.04	1.45	2.52	-2.66[a]
9.	Office Supplies	2.06	2.06	.01	2.44	2.05	1.21	1.57	2.21	-1.77[a]
10.	Snack Foods	4.11	3.62	1.48[b]	3.98	3.28	1.59[b]	4.14	4.42	- .53
11.	Soft Drinks	4.84	4.26	1.72[a]	4.63	4.16	1.08	5.12	4.82	.57
12.	Ice Cream	3.45	2.89	1.86[a]	3.23	2.64	1.58[b]	3.56	3.30	.50
13.	Health Items	3.10	2.70	1.38[b]	2.89	2.55	.92	3.09	3.00	.17

* one tailed t-test

[a] p less than .05
[b] p less than .10

AN ANALYSIS OF DISCRIMINATING CRITERIA AS A CONSEQUENCE OF CONSUMER INVOLVEMENT WITH A FINANCIAL SERVICE DECISION

Joseph J. Belonax, Jr., Western Michigan University
Lowell E. Crow, Western Michigan University

Abstract

Although considerable progress has been made by consumer researchers in understanding the role of involvement in decision making, their scope of interest has been confined largely to the study of product and message involvement. In an effort to broaden the scope of interest, this paper focuses on service involvement. An empirical study is presented that identifies which criteria are the most discriminating as a consequence of varying levels of consumer involvement with a financial service decision.

Introduction

The concept of an individual's "involvement" and its effect on consumer behavior has been an expanding area of interest to consumer researchers. Beginning with the work of Krugman (1965), its growing importance is typified by Mitchell (1979), who states that it "has the potential of being an important mediator of consumer behavior," and by Kassarjian (1981), who suggests that the concept of involvement "may well qualify as one of the more important scientific ideas to emerge in consumer research in recent years."

For all the interest it has generated amongst researchers, the construct has proven to be difficult to define and consequently, operationalize. Given these problems, it is little wonder why the literature reflects two major shortcomings.

First, the studies narrowly focus on the consumer's involvement with either a message or a product. Typically, studies of message involvement seek to identify the communication effects under varying conditions of involvement (Park and Young 1983). Unlike message involvement, the few studies that focus on product involvement have not evolved much beyond the product classification and scaling stages (Lastovicka 1979; Black 1981). The emphasis on product/message involvement has resulted in a lack of attention to the concept's application to a service decision.

Second, although some researchers have suggested that conceptually, consumer decision making differs under varying levels of involvement (Robertson 1976; Houston and Rothschild 1978), few have sought to identify, empirically, the nature of the differences (Lastovicka and Gardner 1978).

Accordingly, the purpose of this paper is to report some preliminary findings concerning how a consumer's involvement with a financial service might influence one particular aspect of his/her decision making: the attributes considered important when making a decision to establish a savings account in a local financial institution.

Perspectives on Involvement

Attempts made by researchers to conceptualize and operationally define a variable are never easy and oftentimes reflect a good deal of ambiguity during its gestation period. It appears that the concept of involvement has followed a similar path.

Precisely what is involvement? Although some researchers have responded in different ways (Krugman 1965 and 1966; Mitchell 1979; Batra and Ray 1983), the conceptualization offered by Houston and Rothschild (1978), has been empirically supported and captures the multi-dimensional nature of involvement (Arora 1983). They suggest that the construct of involvement is made up of three separate types: situational involvement, enduring involvement and response involvement.

Situational involvement refers to the ability of a situation to elicit varying levels of concern, interest and arousal. Because two major stimuli (products/services, social psychological) combine to represent a situation, situational involvement recognizes that situations differ in their tendency to arouse individuals (Houston and Rothschild 1978).

Unlike situational involvement that is likely to disappear once a product or service is selected, enduring involvement is likely to exist on a long term basis because it reflects the pre-existing relationship between the individual and the situation. The nature of this relationship is a function of either prior purchase/consumption experience or the product/service relationship to individual needs, values, or the self-concept (Houston and Rothschild 1978).

Response involvement refers to the extensiveness or complexity of the consumer decision process. The complexity is likely to vary, (1) across products or services as suggested by situational involvement, (2) across individuals as suggested by enduring involvement, (3) as a consequence of the interaction between situational and enduring involvement (Kassarjian 1981). The exact form that response involvement takes will depend on the stage in the decision process (Houston and Rothschild 1978).

Given this conceptualization, for the purposes of this paper, service involvement may be defined as an internal state reflecting the amount of interest, arousal or emotional attachment evoked by the service in a particular individual. This definition represents a synthesis of past formulations provided by Houston and Rothschild (1978), Mitchell (1979), and Bloch (1981). Like product involvement, service involvement may exist in two different forms: situational and enduring. In the former, characteristics of the service decision determine the level of situational involvement. In the latter, the level of enduring involvement reflects an interest in the particular service because of its pre-existing relationship to an individual's values, self-concept or life-style. Response involvement refers to the complexity of the service decision and is likely to vary across services, individuals or as a consequence of the interaction between services and individuals.

Although primarily concerned with the intangible nature of political choice behavior, the antecedents and consequences of involvement identified by Parameswaran and Spinelli (1984), provides us with an operational framework for the study of a decision to acquire an intangible service. Of the eight antecedents tested, personal relevance, impact of the decision, importance of the decision, and interest in the decision had a statistically significant influence on the level of involvement. Further, as a consequence of their involvement, subjects manifested, (1) greater amount of exposure to the candidates, (2) greater depth of evaluation, and (3) greater amount of thought and use of attributes by the decision making process.

Interpreting this study within the context of situational involvement for a service suggests that responses that occur subsequent to the onset of involvement are likely to vary as the level of antecedents vary. Said another way, the importance attributed to criteria used by individuals when making a financial decision to establish a savings account will vary as a consequence of their involvement with the decision. Accepting this representation of situational involvement for a service leaves us with the question, "which antecedents determine an individual's involvement with the decision to open a savings account in a local financial institution?" Lacking any empirical support from studies of consumer choice behavior, we rely on the conclusions drawn from political choice behavior to answer the question (Parameswaran and Spinelli 1984). We reason that, (1) personal impact of the decisions, (2) the importance of the decisions, (3) interest in the decision, and (4) difficulty in making a decision, will singularly or in combination influence the level of involvement in the decision.

In summary, the importance attributed to criteria used by individuals when making a financial decision to establish a savings account will vary as a consequence of their involvement with the decision. In turn, the level of involvement in the decision may be determined by the singular or combined influence of personal impact, importance, interest, and difficulty associated with the decision.

Methodology

A sample of 958 households was drawn using a systematic sampling method from the city directory of a medium size midwestern city. A questionnaire was mailed with a stamped return envelope and a cover letter explaining that the researcher was doing a comprehensive study of the saving characteristics of the consumers. Each questionnaire was identified with a coded number which was to be used for follow up purposes only, however, each respondent was insured complete anonymity. After a two week waiting period, each sample member who had received a questionnaire but had not responded was telephoned and reminded of the questionnaire. In all, 406 questionnaires were returned with sixty-seven being undeliverable. The follow up telephone calls suggested that approximately an additional five percent never received the questionnaire.

Given the undeliverables and those persons who indicated they never received the questionnaire, it is estimated that 846 subjects received the questionnaire. From these 846 subjects, a total of 319 questionnaires were usable. The response rate of 37.7% is exceptionally high given that the questionnaire was sent to the general public and asked questions concerning savings institutions, family income, and savings levels, subjects generally considered family private information.

It is important to note that nonresponse bias (the possibility that those who chose not to respond are in some way different from those who responded on dimensions important to the study) can occur in any survey. To determine the bias in our study, we compared the demographic characteristics provided by the respondents with those for the population for that geographic area. Tables 1, 2, and 3 show this comparison. From these tables it can be seen that the nature of our study produced a sample that is biased toward a more educated, older, and higher income level respondent. Traditionally, we would not expect a significant number of lower income, younger, and lower educated people to respond to a study that focused on savings accounts. This study confirmed those expectations.

Table 1
Age of Respondent

Classification	Sample %	Total Population %
18-34 years	32.0	42.0
35-49 years	27.9	24.4
50-64 years	27.9	21.0
65 and older	14.4	12.5

Table 2
Total Household Income of Respondent

Classification	Sample %	Total Population %
Under $5,000	1.7	11.1
$5,000-$9,999	5.6	11.8
$10,000-$14,999	11.3	14.2
$15,000-$24,999	36.2	30.3
$25,000-$49,999	39.2	25.4
$50,000 and over	6.0	7.2

Table 3
Education of Primary Income Earner

Classification	Sample %	Total Population*
0-8 years	2.3	13.8%
9-12 years	27.9	54.8%
13-16 years	42.8	
over 16 years	27.0	31.3%

*Education levels for State of Michigan 1980 census

The research questionnaire, developed for this study is, in part, the result of three focus group interviews. In addition, previous research on financial institution selection criteria was used (Durand, Eckrich, and Sprecher 1973; Anderson, Cox, and Fulcher 1976; Mandell, Lachman, and Orgler 1981). Together, these sources produced eighteen factors that were considered important when consumers make the decision to establish their largest savings account.

The concept of involvement was operationalized using as a basis the discussions generated in the focus group sessions. We observed that participants appeared to be more interested in the decision, believed that the decision was more important and would have a greater impact on their lives when they were asked to consider the deposit of large sums of money into their newly established savings account than when they were asked to consider small sums of money. Accordingly, the amount of money an individual planned to deposit to open a savings account was used as an operational measure of involvement in the decision. It might be argued that this is really an operational measure of perceived risk with the decision. The discussions in the focus groups did not support this argument. In fact, participants indicated that there was little risk in the decision because they could easily withdraw their funds and deposit them somewhere else. In this study, involvement was defined as a trichotomy, (low, medium, high) rather than a dichotomy to represent the concept more as a continuum rather than a discrete entity. Such an orientation finds support in the literature (DeBrucher 1983). The high involvement group represents individuals who planned to deposit $10,000 dollars or more; whereas the low and medium involvement groups represent individuals who planned to deposit $3,000 or less, and between $3,000-$10,000, respectively. A list of the eighteen attributes and their average importance ratings and significance across the three levels of involvement is presented in Table 4.

In addition to other tasks, respondents were asked to, (1) rate the eighteen factors on a seven point scale from not important to extremely important, and (2) provide demographic and economic information.

The analysis of the data consisted of four stages.

In the first stage the average level of importance for the eighteen attributes across the three levels of involvement was determined. A review of the average importance ratings for the attributes shown in Table 4 indicate that differences on these ratings may be used to assign individuals to involvement levels. Accordingly, a discriminate analysis was chosen as the most appropriate method of analysis.

In the second stage, a stepwise discriminant procedure was performed on the entire sample. A review of the canonical correlations, the Welks Lamba, and the confusion matrix indicated that involvement levels and importance ratings were related.

In the next stage, the entire sample was split into two samples. This was accomplished by taking every other case as the analysis sample with the remaining cases used as the holdout sample.

In the final stage, a stepwise discriminant analysis of the analysis sample resulted in three classification functions with ten importance variables. The reliability of the results obtained in this stage were examined by attempting to predict the level of involvement of respondents in the holdout sample by using the three functions.

Results

In situations where the number of predictor variables is greater than the number of groups, the maximum number of discriminant functions (j) that can be determined is equal to one less than the number of groups (see Cooley and Lohnes 1971). In the present three group analysis, two functions exist. Both these appear quite significant when using canonical correlation (.59 and .36). This indicates that the individuals who differ in their level of involvement are very different in terms of their evaluation of the importance characteristics.

Table 4
Average Importance Rating for Attributes Across Levels of Involvement

Attribute	Total Sample	Low	Medium	High
1. HOURS OF OPERATION	4.01	4.23	4.02	3.76
2. LOCATION/CONVENIENCE	4.97	5.08	5.07	4.76
3. REPUTATION IN COMMUNITY	5.20	5.10	5.15	5.34
4. OBTAINABILITY OF MORTGAGE LOAN	3.48	3.61	3.41	3.40
5. OBTAINABILITY OF OTHER LOANS (AUTO, FURNITURE, ETC.)	3.87	4.61	3.84	3.10
6. PHYSICAL FACILITIES	2.97	2.93	3.23	2.80
7. PERSONAL RECOGNITION BY EMPLOYEES	3.24	3.10	3.17	3.45
8. FREE CHECKING WITH MINIMUM BALANCE IN SAVINGS ACCOUNT	4.01	4.00	3.95	4.07
9. OVER-DRAFT PRIVILEGES	2.98	3.57	2.85	2.44
10. SERVICE CHARGE ON CHECKING ACCOUNT	3.83	3.99	3.82	3.66
11. RECOMMENDATION BY OTHERS (FRIENDS, RELATIVES, CO-WORKERS)	3.26	3.53	2.99	3.22
12. INTEREST CHARGES & TERMS OF OTHER LOANS (AUTO, FURNITURE, ETC.)	4.20	4.72	4.36	3.51
13. INTEREST CHARGES & TERMS OF MORTGAGE LOANS.	4.01	4.24	3.86	3.91
14. INTEREST RATES ON SAVINGS ACCOUNTS	5.53	5.23	5.67	5.72
15. FULL SERVICE OFFERING (CREDIT CARDS, TRUST SERVICES, SAFETY DEPOSIT BOXES)	3.82	4.09	3.59	3.73
16. EASE OF FINANCIAL TRANSACTIONS (WALK-UP & DRIVE-IN WINDOWS, MAIL DEPOSIT, AUTOMATED TELLER	4.31	4.59	4.59	3.79
17. DIRECT DEPOSITS OF CHECKS (SOCIAL SECURITY, PAYROLL)	3.47	3.66	3.70	3.08
18. COMPETENT & EFFICIENT SERVICE	5.83	5.89	5.83	5.76

1 = Not important; 7 = Extremely Important

In order to assess the reliability of the findings, a classification analysis was performed on the holdout sample. The objective was to determine how well the discriminant functions derived from the analysis sample could predict the actual group membership (low, medium, high) for the members of the holdout sample. The classification procedure used the coefficients for Fisher's linear discriminant function provided in the discriminant analysis output of SPSS.

Predictions based on this method were then compared to actual behavior. A convenient way to display how well the predictive functions perform is to use a classification matrix. Such a matrix is presented in Figure 1. In this matrix, the rows represent the actual group membership while the columns indicate the predicted group membership. The values along the diagonal represent correct classification while the off diagonal represent misclassification of respondents. In this particular case it can be observed that 44.1% of the respondents in the holdout sample were correctly classified. Figure 2 is a similar classification matrix in which the frequencies have been transformed into proportions. For example, 54.3% of the low involvement consumers have been correctly classified.

Figure 1
A Frequency Classification Matrix

Actual Involvement		Predicted Involvement: Low	Med.	High	n
	Low	25	10	11	46
	Med.	21	9	10	40
	High	14	5	22	41

Correct Classification: $\frac{56}{127} = 44.1\%$

Figure 2
A Percentage Classification Matrix

Actual Involvement		Predicted Involvement: Low	Med.	High
	Low	54.3	21.7	23.9
	Med.	52.5	22.5	25.0
	High	34.0	12.2	53.7

The question arises as to how well did the classification function perform. Certainly a total classification would be ideal but not expected. Significance may be calculated for the multi-group case by using an approach suggested by Brown (1980) whereby a confusion matrix is converted into a matrix of those correctly and incorrectly classified and a Chi square is used to test if the classification functions provide a higher level of accuracy than would occur by chance alone. Using this procedure, the calculated Chi square equals 8.36 with df=2, which is significant at $\alpha = .025$. Therefore, the discriminant functions obtained from the analysis sample are good predictors of the independent sample.

The eighteen attributes originally measured were reduced to ten predictive importance attributes. The attributes are presented in Table 5

Table 5
Discriminant Functions
Standardized Coefficients

Factor	Function 1	Function 2
Obtainability of mortgage loans	-.24	.39
Obtainability of other loans	.76	-.19
Personal recognition by employees	-.36	.23
Free checking with min. balance in savings	-.57	-.19
Over-draft privileges	.79	.18
Recommendation by others	-.06	.46
Interest rate on savings accounts	-.32	-.17
Full service	-.04	.68
Ease of transaction	.15	-.69
Direct deposit of checks	.09	-.41

The standardized coefficients for the two discriminant functions in Table 5 reflect the relative importance of each of the ten attributes in discriminating between the three levels of involvement. These coefficients suggest how each attribute influences the level of involvement. A positive coefficient for the first function suggests that as this attribute becomes more important to the respondent, there is a greater likelihood that his/her involvement will be lower. On the other hand, a negative coefficient for the first function suggests that as this attribute becomes more important to the respondent there is a greater likelihood that his/her involvement will be higher. A similar analysis is possible for the second function where a negative coefficient suggests that as the factor becomes more important, the subject will have a moderate level of involvement in his/her financial decision making.

The absolute magnitude of the standardized coefficients can be used to determine which attributes are more or less influential in the respondent's level of involvement. On function 1, which basically determines whether the subject will have a high or low level of involvement in their financial matters, the two most discriminating attributes are "obtainability of other loans" and "over-draft privileges." These factors are twice as important as "personal recognition by employees" and "interest rates on savings account" when predicting the size of the savings account and thus the level of involvement. On function 2, which basically determines whether or not an individual has a moderate level of involvement, the two most discriminating attributes are "full service" and "ease of transaction."

Discussion

The present study produced some preliminary findings concerning how a consumer's involvement with a financial service might influence one aspect of his/her decision making: the attributes considered important when making a decision to establish a savings account in a local financial institution.

Because individuals have a finite capacity to process information, one of the decisions individuals must make is which attributes to attend to when making a financial service decision. It appears that the attributes attended to, as reflected by their importance ratings, are, in part, a consequence of the individual's involvement with the decision. If the study is interpreted within the large context of information handling, the results suggest that different levels of involvement may cause individuals to acquire different types of information. Thus, future information handling research should consider the differences in information acquisition when examining the nature of the decision making for high involvement or low involvement products and services.

References

Anderson, Thomas, Eli P. Cox, and David F. Fulcher, "Bank Selection Decisions and Market Segmentation," Journal of Marketing, 40 (January 1976), 40-45.

Arora, Raj, "Validation of an S-O-R Model for Situational, Enduring, and Response Components of Involvement," Journal of Marketing Research, 19 (November 1983), 505-516.

Batra, Pajeev and Michael L. Ray, "Operationalizing Involvement as Depth and Quality of Cognitive Response," in Advances in Consumer Research, Vol. 10 (1983), 309-313.

Bloch, Peter, "An Exploration Into The Scaling Of Consumer's Involvement With a Product Class," in Advances in Consumer Research, Vol. 8, ed. K. Monroe, Ann Arbor, MI: Association for Consumer Research (1981), 61-65.

Brown, F.E. Marketing Research: A Structure for Decision Making, Reading, PA: Addison-Wesley Publishing Company, 1980.

Cooley, William and Paul Lohnes. Multivariate Data Analysis, New York, NY: John Wiley & Sons, Inc., 1971.

DeBruicker, F. Stewart, "An Appraisal of Low Involvement Consumer Information Processing," in Attitude Research Plays for High Stakes, J.C. Maloney and Bernard Silverman, eds. Chicago, IL: American Marketing Association, 112-130.

Durand, Richard, Donald W. Echrich and Donald C. Sprecher, "Bank Image: An Adequacy Importance Approach," Journal of Bank Research, 9 (Autumn 1978) 168-172.

Green, Paul and Donald Tull. Research for Marketing Decisions. Englewood Cliffs, NJ: Prentice-Hall, Inc., 4th ed., 1978.

Houston, Michael L. and Michael L. Rothschild, "Conceptual and Methodological Perspectives on Involvement," in Educator's Conference Proceedings, ed., S. C. Jain, Chicago, IL: American Marketing Association (1978) 184-187.

Kassarjian, Harold H., "Low Involvement: A Second Look," in Advances in Consumer Research, Vol. 8, ed. K. Monroe, Ann Arbor, MI: Association for Consumer Research (1981) 31-34.

Klecha, William R. Discriminating Analysis in Quantitative Application in the Social Services. Ed. John F. Sullivan. Sage University, Paper No. 19, Beverly Hills, CA 1980.

Krugman, Herbert E., "The Impact of Television Advertising: Learning Without Involvement," Public Opinion Quarterly, 29 (Fall 1965), 349-356.

__________, "The Measurement of Advertising Involvement," Public Opinion Quarterly, 30 (Winter 1966-67), 583-596.

Lastovicka, John L. and David M. Gardner, "Low Involvement Versus High Involvement Cognitive Structures," in Advances in Consumer Research, Vol. 5, ed. H. Keith Hunt. Ann Arbor, MI: Association for Consumer Research (1978)87-91.

__________, "Questioning the Concept of Involvement Defined Product Class," in Advances in Consumer Research, Vol. 6, (1979) 174-179.

Mandell, Lewis, Dan Lachman and Yair Orgler, "Interpreting the Image of Banking," Journal of Bank Research, Vol. 12, No. 2 (Summer 1981) 96-104.

Mitchell, Andrew A., "Involvement, A Potentially Important Mediator of Consumer Behavior," in Advances in Consumer Research, Vol. 6, ed. W. L. Willie, Ann Arbor, MI: Association for Consumer Research, (1979) 191-196.

Parameswaran, Raui and Teri Spinelli, "Involvement: A Revisitation and Confirmation," in Educator's Conference Proceedings, Chicago, IL: American Marketing Association (1984) 57-61.

Park, Whan C., and Mark S. Young, "Types & Levels of Involvement and Brand Attitude Formation," in Advances in Consumer Research, Vol. 10 (1983) 320-324.

Robertson, Thomas S., "Low-Commitment Consumer Behavior," Journal of Advertising Research, 16 (April 1976) 19-24.

INDIVIDUAL-, PRODUCT-, AND SITUATION-SPECIFIC FACTORS: IS PERCEIVED RISK AFFECTED BY THEIR INTERACTION?

Kathleen A. Krentler, San Diego State University
Angelina Villarreal, San Diego State University

ABSTRACT

An exploratory study was undertaken to investigate possible interaction effects between three classes of variables traditionally identified as influencing perceived risk. The three classes of variables are individual-specific, product-specific, and situation-specific. Prior research has focused on the main effects of one of these three classes of variables, but little attention has been paid to the extent to which they interact. Results indicate that interaction effects do exist between the three classes of factors and that they influence the amount of perceived risk. Marketing strategies to reduce the influence of situational variables are suggested as a means of improving the marketing strategy for high-risk products.

INTRODUCTION

The concept of perceived risk among consumers has received considerable attention in the marketing and consumer behavior literature over the past twenty-five years. The construct's beginnings are found with Bauer's (1960) first identification and introduction of the concept,

> Consumer behavior involves (perceived) risk in the sense that any action of a consumer will produce consequences which (s)he cannot anticipate with anything approximating certainty, and some of which, at least, are likely to be unpleasant.

The exploration of perceived risk in consumer behavior appears to have branched into two major areas of interest: (1) the investigation of the factors that contribute to perceived risk, the variables that account for variation in perceived risk levels, and people's willingness to take on risk; and (2) exploration of the means by which consumers handle perceived risk. Both streams of investigation are important to a complete and practical understanding of the concept. Without an understanding of consumers' risk-handling methods and the implications those methods have for purchase, there would be little practical value in knowing the factors that contribute to it. Conversely, however, without an understanding of what accounts for the phenomenon, identification will be difficult and techniques to deal with it unpredictable.

Research in the first area (factors contributing to perceived risk) has primarily focused on definition and categorization of variables. While useful, such research neglects to consider the extent and the ways in which variables interact and how such interaction affects perceived risk. The purpose of this paper is to explore the extent to which various categories of variables and their interaction effects contribute to the amount of perceived risk a person feels. Insight into the nature of interaction between variables represents a valuable step forward toward a better understanding of perceived risk.

FACTORS AFFECTING PERCEIVED RISK

Researchers investigating the variables that account for variation in perceived risk have identified three categories of factors: individual-specific variables, product-specific variables, and situation-specific variables.

Individual-Specific Variables

The individual-specific category includes all factors that vary by the decision-maker. As early as 1967, Popielarz was investigating variation in consumers' willingness to try new products and how the concept of perceived risk played a role in the decision. His findings revealed that regardless of product or situation, some consumers are more willing to take risks than others. The existence of high- and low-risk perceivers has been further substantiated by Roselius (1971). The focus in the area of individual-specific factors has been on identification of the individual factors that account for variation across consumers. Kogan and Wallach (1964) attempted, without much success, to relate personality characteristics to propensity for risk-taking. Robertson (1971) investigated the degree to which individuals are upwardly, socially mobile and their income levels, and found both positively correlated with risk-taking. Furthermore he found needs for excitement, change, and dominance all to be positive predictors of an individual's risk perception levels and willingness to take on risk.

While the above studies have focused primarily on variation in willingness to take on risk, the issue of individual factors that account for variation in risk perception has not been as widely explored. Coughlin and O'Connor (1984) looked for differences in risk perception based on gender. The study reported some variation across gender, but it varied by situation. Males or females might be more likely to perceive risk at various times depending on the nature of the risk situation. Nothing conclusive could be said about variation in risk perception by gender across situations.

A second individual factor that has been explored with respect to risk perception is self-confidence. Bauer (1967) reports findings of significant variation in perceptions of risk between high and low self-confidence individuals.

Self-esteem is a third individual factor that has been related to risk perception. Taylor (1974) found self-esteem variation accounting for variation in risk perception. The study found high self-esteem individuals, in general, report lower levels of risk perception across products and situations than do low self-esteem consumers.

Product-Specific Variables

Much investigation of variation in risk perception across product-specific factors has focused on product-type categories. Cunningham (1967) has suggested that, "perceived risk is a product-specific phenomenon" (p. 108). Investigation of variation in perceived risk, using Copeland's (1923) traditional tripartite product classification system, has proven fruitful. Furthermore, Holbrook and Howard's (1976) revision of Copeland's system, which adds preference goods as a fourth category, has further refined the concept and is a useful framework for investigating variation in perception and behavior.

Other product-specific factors and their influence on risk perception have also been investigated. Bettman (1973) and Bauer (1967) both investigated quality level of the product. Findings generally indicate that as mean quality level increases, perceived risk decreases. The presence or absence of warranties was investigated by Shimp and Bearden (1980). Perceived risk was found to decrease in the presence of a warranty. This factor could conceivably be confounded by the warrantor's reputation. Shimp and Bearden did find the directionality they anticipated (i.e., as source credibility increased, perceived risk declined); however, the findings were not statistically significant.

Price has also been explored in its effect on risk perception of a product. Dommermuth (1965) found that the greater the price, the lower the perception of risk. This finding was partially supported by Shimp and Bearden (1980) as well.

Slovic et al. (1981) attempted to relate the annual death rate attributed to a product and individuals' personal fatality estimate to perceptions of risk but found no evidence supporting a relationship.

Situation-Specific

The third category of factors hypothesized to affect perceived risk are situational variables. Numerous consumer behavior textbooks (see, for example, Assael 1984, among others) identify situation-specific factors as important determinants of perceived risk. Empirical investigations of the effect of situational variables on perceived risk are scarce, however.

Bauer (1967) studied the effect of prior experience on risk perception and generally found that as amount of prior experience with the product category declined, perceived risk levels increased. Schaninger (1976) found similar results when investigating product familiarity.

Whether the individual was making a joint decision or an individual decision was investigated by Coughlin and O'Connor (1984). Variation in perceived risk between these two situations was found to be dependent on the type of risk and type of loss involved.

INTERACTION AMONG PERCEIVED RISK FACTORS

Few studies have investigated the interactions between the various types of factors that affect risk perception. Shimp and Bearden (1980) considered the interactions of price and warranty as well as the warranty and the warrantor's reputation. Both situations were looking at two product-specific factors, however. Cox (1967) looked at uncertainty and consequences, two situation-specific variables. Bauer (1967) did consider several situation-specific variables (importance of purchase, price, prior experience) in conjunction with low self-confidence individuals, but the emphasis was not on the interaction between the two classes of variables.

In order to begin to fully understand the influence of the various factors on risk perception, it is necessary to consider whether and to what extent they affect one another. The present, exploratory study investigates interaction between the three classes of variables. The research questions upon which this exploratory study is premised, then, are:

1. Do the three classes of factors shown previously to affect perceived risk interact with each other in affecting perceived risk?
2. To what extent do the interactions, if they exist, affect the influence of the variables on perceived risk?

Answers to these research questions will provide important additional insight to the current understanding of the factors affecting perceived risk. Should interaction be found to be a significant and important factor among the classes of variables, the groundwork will exist for further investigation and hypothesis-testing of interaction among variables in this area.

The variables selected from the individual and product-specific categories were those that have appeared most promising or received the most attention in previous literature. Situation-specific variables include factors that meet those criteria as well as those that seem to hold promise for further perceived risk investigation. A given situational variable's potential for promise as an antecedent of perceived risk has been determined based on the attention it has commanded as a situational variable in the investigation of other consumer-behavior related topics. This approach to the selection of situational factors was necessary due to the scarcity of specific empirical studies on the effects of situation-specific variables on perceived risk.

Since situational variables have been stressed as important contributors to perceived risk, despite lack of strong empirical support, it was deemed critical to the present investigation to include a variety of such factors in the experimental design. The following situation-specific factors appear to have received the most attention in not only perceived risk literature, but in the investigation of a variety of consumer-behavior related topics: amount of prior experience, decision-making situation (i.e., alone or with others), ambiance of surroundings, amounts of funds and time available, and mood of the individual at the time of decision-making.

The variable included from the product-specific category is product type, using Holbrook and Howard's revision of Copeland's typology. The four nominal categories are convenience, preference, shopping, and specialty goods. Individual-specific attention was focused on self-esteem; the levels identified as high, medium, and low. Finally, the six situation-specific variables identified above were employed: Mood (good or bad), time (limited or unlimited), money (limited or unlimited), prior experience (some or none), the shopping situation (alone or with others), and the surroundings (pleasant or unpleasant).

METHODOLOGY

Three different phases of data collection were completed in this study. The first one consisted of the identification of several convenience, preference, shopping, and specialty goods. The second one consisted of the selection of one product class for each of the four different types of goods and the measurement of individual self-esteem. The third and final phase included the actual measurement of risk perception.

In Phase One, a sample of individuals similar in demographic and life-style characteristics to those used in the other phases was asked to identify convenience, preference, shopping, and specialty goods using sets of statements describing the characteristics of these goods (see Horton 1984 for a detailed description of the instrument). Each respondent identified three product classes in each of the four categories of goods for which their personal shopping habits corresponded to the description provided by a set of potential product classes in each product-type category.

A sample of forty-six students was used in the remaining phases of data collection. Phase Two consisted of two parts. In the first part, respondents were asked to choose the one product from the set provided for which the accompanying set of statements best described their personal shopping habits. The set of products offered in each of the four product-type categories was comprised of the products suggested for the category in Phase One. The actual products used were those four most frequently identified in the second phase. This two-step approach identified products for each product type that were accurate representations of the category for the sample of respondents used. The four products were: convenience--laundry detergent; preference--liquor; shopping--clothing; and specialty--computers and/or terminals.

In the second part of Phase Two, respondents received the Coopersmith Self-Esteem Inventory Questionnaire (1967). This psychological test measures attitudes toward the self and has been found reliable and valid in a number of trials (Taylor and Reitz 1968; Coopersmith 1967; Getsinger et al. 1972; Ziller et al. 1969). Respondents were classified as either low, medium, or high in self-esteem based on the Coopersmith scale.

Finally, in Phase Three of this project, respondents were asked to evaluate their perceived risk on a scale that ranged from 0 to 10 for each of the four products representing the four product-type categories across a range of situations. Bauer's definition (see p. 1) was used to define perceived risk to respondents. The situations represented all possible combinations of two different levels of the six situational variables of interest (a total of sixty-four situations). To prevent respondent fatigue, the data were collected over a two-week period, with subjects responding to no more than ten situations at any one time.

RESULTS

In order to determine the influence that the three main factors under research--self-esteem, product-type, and situational variables--have on the amount of perceived risk, several different analyses were undertaken.

First, self-esteem and product-type were analyzed independently and then cross tabulated in order to determine their interdependency. As was expected, it was found that the amount of perceived risk decreases as self-esteem increases. In other words, the higher the self-confidence, the lower the perceived risk (see Table 1). Also, the type of product being considered in the decision process influences the amount of perceived risk. The results show that specialty products are ranked as the highest in perceived risk when compared to shopping, preference, and convenience products. Shopping products were the second highest in perceived risk, preference products ranked third, and convenience products were the lowest in the amount of perceived risk (see Table 1). Again, these results were expected given that the classification schema proposed by Holbrook and Howard uses the amount of perceived risk as one of the criteria for classifying products. The cross-tabulation of self-esteem and product-type indicates that there is a dependency between these two factors (X^2 - 1.3171). As self-esteem decreases, and the complexity of the product increases, the amount of perceived risk tends to increase. Table 1 shows the results explained above.

TABLE 1
AMOUNT OF PERCEIVED RISK

Product-type	Self-Esteem Low	Self-Esteem Medium	Self-Esteem High	Mean Values
Convenience	2.41	1.76	1.05	1.74
Preference	2.88	2.58	1.99	2.48
Shopping	4.76	5.13	4.56	4.82
Specialty	7.90	6.18	7.32	7.13
Mean Values	4.48	4.35	3.73	. .

An interesting but unexpected result for shopping and specialty goods is also shown in Table 1. For shopping goods, medium self-esteem resulted in the highest perceived risk. Specialty goods, on the other hand, resulted in the lowest perceived risk. Although no theoretical explanation can be offered for explaining these results, several interpretations may be applied. First, shopping goods are characterized by an intensive and deliberated decision process. An individual with low self-esteem does not expect to do well in this process, and an individual with high self-esteem, on the other hand, expects to do well. But, an individual in the middle does not know what to expect from him/herself. Therefore, a situation where the individual has ambivalent expectations about him/herself may result in a very high perceived risk. Second, in the case of specialty goods where the decision process is minimized because the individual has a specific product in mind, self-esteem may not be an important determinant of the amount of risk perceived. The second analysis focused on the situational variables manipulated in this study. A t-test was used to determine if there was a significant difference in the amount of perceived risk between the two levels at which each situational variable was manipulated (e.g., good mood versus bad mood). The results show no significant differences (at p .05) for mood, social surroundings, and time pressure. However, significant differences were found in three situational factors: physical surroundings, budget, and prior experience. Table 2 presents the results of the t-test.

TABLE 2
PERCEIVED RISK AND SITUATIONAL FACTORS

Factor	Mean	t-Value	Probability
Physical Surroundings			
Pleasant	3.850	1.492	.0451
Unpleasant	4.212		
Mood			
Good	4.018	.623	.6359
Bad	4.045		
Social Surroundings			
Others	3.924	1.182	.0392
Alone	4.140		
Budget			
Limited	4.446	8.576	.0000
Unlimited	3.620		
Time			
Limited	4.051	.224	.4880
Unlimited	4.012		
Prior Experience			
Yes	3.657	7.929	.0000
No	4.430		

In order to test for the interaction effects between individual, product, and situational factors, an analysis of variance for unequal cells (cell sizes varied from 12 to 17 individuals per cell) was performed. The previous two analyses show that five variables influence the amount of perceived risk: self-esteem, product-type, physical surroundings, budget, and prior experience. These variables were used to test interaction as well as main effects. The results show main effects for the five factors being analyzed. Two-way interaction effects were found between self-esteem and product type, budget and prior experience. These results indicate that the amount of perceived risk depends not only on the amount of self-esteem an individual has in his/her decision-making abilities, but also depends on the complexity of the product, the amount of available money, and his/her prior experience (see Tables 3 and 4).

Interaction between product type and budget and prior experience were also found. This means that consumers with an unlimited amount of money available or with prior experience are less likely to be intimidated by the complexity of the product. Therefore, the risk they perceived is relatively low (see Tables 3 and 4).

Finally, an interaction between budget and physical surroundings was found. This means that consumers with an unlimited budget are less likely to be influenced by the physical surroundings. However, consumers with a limited budget are more susceptible to the influence of a shopping environment (see Table 4).

Since gender has been found to affect perceived risk in some situations (Coughlin and O'Connor 1984), in this study the gender of the respondent was used as a covariate, and it shows a significant influence on the amount of perceived risk. Females, in general, tend to perceive more risk regardless of the amount of self-esteem. However, males tend to perceive more risk regardless of the type of product, the amount of budget, and their prior experience. Therefore, it can be concluded in this study that individual factors tend to have more influence on females while product-type and situational factors tend to have more influence on males. Just one situational factor, shopping surroundings, was found to influence risk perception of female shoppers.

TABLE 3
A N O V A
PERCEIVED RISK: SIGNIFICANT EFFECTS*
(Main, Two- and Three-Way Interactions)

	F	Probability
Main Effects		
Esteem (E)	18.74	.0000
Physical Surroundings (PS)	9.34	.0022
Budget (B)	56.88	.0000
Prior Experience (PE)	61.40	.0000
Product Type (PT)	503.56	.0000
Two-Way Interactions		
E X B	5.76	.0032
E X PE	8.21	.0003
E X PT	8.50	.0000
PS X B	6.59	.0103
B X PT	11.31	.0000
PE X PT	11.21	.0000
Three-Way Interactions		
E X PS X B	12.38	.0000

*Nonsignificant effects have been omitted due to space limitations.

TABLE 4
PERCEIVED RISK
TWO-WAY INTERACTION EFFECTS

	Budget		Prior Experience	
	Unlimited	Limited	Yes	No
Self-Esteem				
Low	3.86	4.29	3.71	4.24
Medium	3.49	3.96	3.42	4.05
High	3.24	3.71	3.20	3.79
Product				
Convenience	1.30	1.56	1.27	1.59
Preference	1.99	2.45	1.96	2.49
Shopping	4.17	4.90	4.22	4.85
Specialty	6.38	7.28	6.40	7.29
Physical Surroundings				
Pleasant	3.08	3.90		
Unpleasant	3.63	4.88		

DISCUSSION

The purpose of this paper was to explore the extent to which individual, product, and situational factors and their interaction effects contribute to the amount of perceived risk. The results show that these three factors are important in the evaluation of the amount of perceived risk, and their interaction may increase/decrease the influence of the other factors. In other words, situational variables (for example) may increase or decrease the influence that self-esteem or product-type has on the amount of perceived risk.

Specifically, with respect to the research questions raised, then,

1. The three classes of factors do interact to some extent in their effect on perceived risk; and
2. Each of the three classes' impact on perceived risk is intensified in the presence of certain levels of the variables from the other classes

(see the Results section of this paper for specifics).

Therefore, on the basis of these findings, sufficient evidence exists to proceed with hypothesis-testing research of the interaction effects of the three classes of variables.

An important finding in this research is the influence of situational variables on the amount of perceived risk. In particular, the shopping environment seems to influence the amount of perceived risk, and also it decreases the influence that a limited budget has on the amount of risk.

Although the results are interesting and promise to broaden our understanding about the amount of risk consumers perceive in different situations, the results must be taken with some reservation given the manipulations used in this study, the type of subjects, and the sample size. In this project, consumers (46 students) evaluated a set of eight to ten situations at a time when, in real life, they evaluate just one situation. This multiple evaluation procedure may have affected the results obtained. Nevertheless, it is clear that many factors simultaneously account for the amount of risk consumers perceive, and to ignore their interaction effects may reduce the value and usefulness of the results obtained.

IMPLICATIONS FOR FUTURE RESEARCH

Further research into the extent and influence of interactions between the three classes of variables on perceived risk is called for by this exploratory study. Specific hypotheses about the nature of how the variables interact and the influence those interactions have on perceived risk is necessary for a more thorough understanding of the antecedents of perceived risk.

Beyond this future research, the present study suggested that the role of situational variables is a particularly important and unexplored area in the understanding of perceived risk. This finding suggests a practical implication. Both marketers and consumers engage in strategies to reduce the amount of risk perceived in the decision-making process. Assael (1984) has identified two different types of marketer-controlled strategies: (1) reduction of the consequences of product failure strategies, and (2) increase of the certainty of the purchase outcome strategies. The first strategy focuses on the product and the services offered to protect the consumer, and the second strategy focuses on improving communication about the product. The findings of this study suggest a third strategy: control of situational variables. Marketers may reduce the perceived risk by making more pleasant the shopping environment, by providing free samples, and allowing the potential consumer to try the product at the store (these actions generate some product experience), or by providing a low-priced product, a deal in the purchases, etc.

Although several studies have examined consumer risk reduction strategies, the research on marketer risk reduction strategies is scant. More research in this area, focusing in particular on situational variables that influence the amount of perceived risk and that can be controlled by the marketer, seems promising in this field. It is important to consider strategies for decreasing perceived risk because the lower the risk perceived, the higher the probability of product trial; and the higher the trial rate, the higher the product adoption rate.

REFERENCES

Assael, Raymond (1984), Consumer Behavior and Marketing Action, 2nd edition, Boston: Kent Publishing Company.

Bauer, Raymond A. (1960), "Consumer Behavior as Risk Taking," Dynamic Marketing for a Changing World, Proceedings, 43rd Annual Conference, American Marketing Association, 389-98.

Bauer, Raymond A. (1967), "Source Effect and Persuasibility: A New Look," in Risk Taking and Information Handling in Consumer Behavior, D. F. Cox, ed., Boston: Division of Research, Graduate School of Business Administration, Harvard University, 559-587.

Bettman, James R. (1973), "Perceived Risk and Its Components: A Model and Empirical Test," Journal of Marketing Research, 10 (May), 184-90.

Copeland, Melvin T. (1923), "Relation of Consumers' Buying Habits to Marketing Methods," Harvard Business Review, 1 (April), 282-89.

Coopersmith, S. (1967), The Antecedents of Self--Esteem, San Francisco: W. H. Freeman & Co.

Coughlin, Maureen and P. J. O'Connor (1984), "Risk Shifting in Joint Consumer Decision Making," in Advances in Consumer Research, Vol. II, T. C. Kinnear, ed., Provo: Association for Consumer Behavior, 165-169.

Cox, Donald F., Risk-Taking and Information Handling in Consumer Behavior, Boston: Harvard University.

Cunningham, S. M. (1967), "The Major Determinants of Perceived Risk," in Risk-Taking and Information Handling in Consumer Behavior, D. F. Cox, ed., Boston: Harvard University Press.

Dommermuth, William P. (1965), "The Shopping Matrix and Marketing Strategy," Journal of Marketing Research, 2 (May), 128-132.

Getsinger, S. et al. (1972), "Self-esteem Measures and Cultural Disadvantagement," Journal of Consulting and Clinical Psychology, 38, 149.

Holbrook, Morris B. and John A. Howard (1977), "Frequently Purchased Nondurable Goods and Services," in Selected Aspects of Consumer Behavior: A Summary from the Perspective of Different Disciplines, RANN Program, Washington, DC: National Science Foundation, 182-222.

Kogan, N., and Wallach, M. A. (1964). Risk-Taking: A Study in Cognition and Personality, New York: Holt, Rinehart, and Winston.

Popielarz, Donald T. (1967), "An Exploration of Perceived Risk and Willingness to Try New Products," Journal of Marketing Research, 4 (November) 368-72.

Robertson, Thomas S. (1971), Innovative Behavior and Communication, New York: Holt, Rinehart and Winston.

Roselius, Ted (1971), "Consumer Rankings of Risk Reduction Methods," Journal of Marketing, 35 (1), 56-61.

Schaninger, Charles M. (1976), "Perceived Risk and Personality," Journal of Consumer Research, 3 (September), 95-100.

Shimp, Terrence A., and William O. Bearden (1980), "Warranty and Other Extrinsic Cue Interaction Effects on Consumers' Confidence," in Advances in Consumer Research, Vol. 7, J. C. Olson, ed., Ann Arbor: Association for Consumer Research, 308-313.

Slovic, P., B. Fischoff, and S. Lichtenstein (1981), "Facts and Fears: Societal Perception of Risk," in Advances in Consumer Research, Vol. 8, K. B. Monroe, ed., Ann Arbor: Association for Consumer Research, 497-502.

Taylor, James R. (1974), "The Role of Risk in Consumer Behavior," Journal of Marketing, 38, 54-60.

Taylor, J. and W. Reitz (1968), "The Three Faces of Self-Esteem," Research Bulletin #80, Ontario: Department of Psychology, The University of Western Ontario, April.

Ziller, R. et al (1969), "Self-Esteem: A Self-Social Construct," Journal of Consulting and Clinical Psychology, 33, 84-95.

INTERNATIONAL MARKETING

THE GROWTH OF INTERNATIONAL JOINT VENTURES

Lyn S. Amine, University of Wisconsin-Whitewater
S. Tamer Cavusgil, Bradley University
Attila Yaprak, Wayne State University

Abstract

Although not a new phenomenon, joint venture activity has seen tremendous growth in the international business scene during the past decade. Companies from particularly the industrialized nations have led the way in international business partnerships, motivated by a variety of reasons. By way of reviewing recent developments, this discussion paper addresses three issues: What are the long-term implications of joint ventures for national industry structures? How will the gradual move from a spirit of competition to one of collaboration affect established patterns of international competition? What types of competitive realignments between nations are likely to affect the success of current joint ventures?

INTRODUCTION

Between 1973 and 1980, the number of joint ventures (JVs) involving U.S. companies only exceeded 200 in one year, 1976. In 1981 this number was 219, in 1982 it was 281, and in 1983 it reached 348 (Mergers and Corporate Policy, 1983). In recent years joint ventures have increased in number and popularity, leading Cateora (1983) to comment: "Joint venture fever has been sweeping the world" (p. 389). This is confirmed by continuing reports in the business news of new joint venture contracts being signed (Business Week 1984a,c). Moreover, academic interest has kept pace with this innovation as shown for example by the special issue devoted to JVs in the Columbia Journal of World Business (1984).

Joint ventures are not a new phenomenon, however, nor are they uniquely American. As early as 1977, the U.S. Department of Commerce reported that American companies abroad had more JV affiliates (by number, but not by value) than fully-owned subsidiaries. A Conference Board study in 1980 showed that 40 percent of Fortune 500 companies with more than $100 million in sales were engaged in one or more international JVs (Janger 1980). Contractor (1984) also draws attention to the fact that the propensity to use international JVs is greater in multinationals based in Europe, Japan, and Canada than in the U.S.

Thus, the issue is not new but is certainly growing in significance. A review of the literature on JVs reveals three types of contributions:

- Studies evaluating the pros and cons of the JVs (Killing 1980, Berten 1984, Conrads and Mahini 1984, Hall 1984, Moskal 1984, Harrigan 1984, and Contractor 1985);
- Analyses of how to make JVs work (Killing 1982, Contractor 1984); and
- Case studies of specific successes and failures (Barkas and Gale 1981, Karlin 1984).

The approach to JVs in these studies consistently adopts the point of view of a large Western corporation, if not a multinational. Only three notable contributions examined issues of changing international market trends from a different viewpoint, albeit peripheral to the subject of JVs. Heenan and Keegan (1979) have studied the rise of Third World multinationals; Walters and Monsen (1979) examined the role of state-owned business abroad; and Wortzel and Wortzel (1981) have studied export strategies among NIC and LDC-based firms.

The issue addressed in this paper is the failure by previous researchers to "see the wood for the trees." Some fundamental questions on the future of JVs remain for consideration. We have grouped these into three broad categories as follows:

- Joint Ventures: What are their long-term implications for national industry structures?
- Business Attitudes: How will the gradual move from a spirit of competition to one of collaboration affect established patterns of international competition?
- Trading Relations: What other types of comprehensive realignments between nations are likely to affect the success of current joint ventures?

JOINT VENTURES: LONG-TERM IMPLICATIONS FOR NATIONAL INDUSTRY STRUCTURES

The most frequent reports of new JVs formed by U.S. companies during 1984 and 1985 concern links in the Japanese companies. Reich (1984) presents a strong argument in favor of viewing these U.S.- Japanese JVs with caution. As a result of examining a vast array of JVs and purchase agreements, Reich states that:

"The national interests underlying our trade policy with Japan - never terribly clear to begin with - have grown even foggier. Just who is us? And who's them?" (p. 19)

Reich identifies a pattern behind these innovative strategies, with U.S. firms taking charge of the two ends of the production process - the new innovations, and the final assembly and sales, while the Japanese concentrate on the complex manufacturing process in between. This arrangement may result in a "single, integrated, trans-Pacific production system" (p. 20), affecting a variety of industries, as shown in Table 1.

TABLE 1

A SAMPLE OF NEW AND PLANNED U.S.-JAPAN JOINT VENTURES

Industry	Examples of Joint Ventures
Automobiles	GM-Toyota, GM-Isuzu, Ford-Mazda, Ford-Toyo Kogyo, Chrysler-Mitsubishi Motors
Computers	IBM-Matsushita Electric, Speery Univac-Nippon Univac, National Semiconductor-Hitachi, Honewell-NEC, Tandy-Kyolera, Sperry-Mitsubishi
Copiers, Photographic Equipment Glass Making	Kodak-Canon, Asahi Glass Company-West Virginia Flat Glass, Inc.
Disc Players, Air Conditioners	GE-Matsushita
Pharmaceuticals	Merck & Company-Torii
Jet Airplanes	Boeing-Mitsubishi Heavy Industries-Kawasaki Heavy Industries-Fuji Heavy Industries
Lightweight Plastic Composites	Armco-Mitsubishi Rayon
Machine Tools	Bendix-Murata Machinery Company, GM-Fujitsu Fanuc, Houdaille-Okuma, Houdaille-Mayekawa, Le-Blond-Makino Machine Tool Company
Financial Services	Fuji Bank-Walter E. Heller, Mitsubishi Bank-Ban Cal Tri-State Corporation
Programmable Controls and Sensors	Allen Bradley-Nippondenso
Robots and Small Motors	Westinghouse-Komatsu, Mitsubishi Electric-IBM-Sanyo Seiko

Source: Robert B. Reich, (1984), "Japan Inc., U.S.A.", The New Republic, (November 26), p. 21, and other sources.

In the short-term, U.S. firms make money by transferring technological expertise and innovation to their Japanese partners who also make money by selling back to the U.S. sophisticated, high-quality finished products. The potential source of imbalance for the longer-term lies in the greater benefits which accrue to the strengthened Japanese manufacturing base. Reich comments on the essentially social nature of production experience which is safeguarded in Japanese firms through the well-known practices of lifetime employment and strict company loyalty. In contrast, many U.S. firms appear unwilling or unable to revamp production facilities and re-train current employees whose personal mobility offers no assurance of future loyalty, once re-trained. Somewhat pessimistically, Reich concludes that, as a result of these JVs, "the fruits of our research are taking seed abroad."

Ironically, these words remind one of the lament of many European and particularly British post-war innovators who claimed that valuable technological and commercial innovations were "lost to America" for lack of funds to pursue commercial production. Even now, private European firms suffer from inadequate venture capital markets although the British conservative government has actively sought to remove this deterrent to industrial growth and renewal (Minard 1983). The EC members face daunting competition from the alignment of U.S. and Japanese producers and marketing companies through JVs. One response has been the creation of a consortium of governments and large companies named ESPRIT (the European Strategic Program for Research and Development in Information Technologies) with a budget of $1.3 billion. Although not a JV, this grouping serves a similar purpose of consolidating strengths and eliminating weaknesses, as in the case of those U.S.-Japanese JVs listed in Table 1.

When we examine European JVs and agreements with various U.S. or Japanese partners, a less distinct pattern appears than in the case of U.S.-Japanese JVs. This makes it all the more difficult to assess the long-term implications of these alignments. In some instances, they are probably pragmatic arrangements intended to last only a short time, as opposed to the longer 12-year contract between General Motors and Toyota for example. French companies demonstrate considerable opportunism. JVs with Japanese companies are, in part, a ploy both to bring greater direct investment to France and to open the Japanese market for French exports. However, France has maintained import restrictions on a range of Japanese goods. France is also promoting EC-wide controls on Japanese imports. This ambivalence in policy is dismissed with the argument that, in France at least, imports and foreign direct investment are unrelated issues (Business Week 1984c). In contrast, in the U.S. both issues are clearly related and have resulted in an increasingly visible Japanese "presence" in the domestic market, as illustrated in Table 2.

BUSINESS ATTITUDES: COLLABORATION VS. COMPETITION

In 1969, Perlmutter defined the geocentric corporation as the ultimate global thinker, in contrast to ethnocentric, regiocentric, and polycentric attitudes. In 1983, Levitt asserted that the multinational corporation would be superceded by the "global corporation" spanning world markets which are becoming increasingly homogenized. Buzzell's (1968) analysis of the possibilities for standardizing multinational marketing, together with Levitt's globalization argument, have been synthesized recently. Simmonds (1985) discusses ways of achieving the geocentric ideal through "geographic and adjustment" Simmonds sees "cross-unit actions" as the key to global performance by MNCs.

TABLE 2

JAPANESE MANUFACTURING PLANTS IN THE U.S.

Parent Company	Product	Plant Location	Employment
Bridgestone Corporation	Tires	LaVergne, TN	900
Mitsubishi Corporation	Plastic Pipes	2 Plants	115
Maruhachi Ceramics Company	Roofing Tiles	Corona, CA	30*
Tokyo Yogyo Company	Furnace Brick	Irvona, PA	30
Sumitomo Metal Industries, Limited	Welded Steel Tube	Little Rock, AK	150*
Minebea Limited	Ball Bearings	3 Plants	1,400
Nissho Iwai Corporation	Steel Processing	Memphis, TN	30
Kato Spring Works Limited	Precision Springs	2 Plants	18
Fuyi Koki Manufacturing Company	Air Conditioner Valves	Dallas, TX	32
Komatsu, Limited	Earth Moving Equipment	Chattanooga, TN	300*
Fujitec Company	Elevators	Lebanon, OH	100
Ebara Corporation	Pumps	Sacramento, CA	30
Stanley Electric Company	Auto Lighting Parts	London, OH	60
Nippondenso Limited	Heaters and Blowers	Battle Creek, MI	50
Nikon Radiator Company	Auto Air Conditioners	Shelbyville, TN	200
Kanto Seiki Company	Auto Dashboards, Grilles	Lewisburg, TN	100*

Note: * Projected Figures>

Source: Douglas R. Sease, (1985), "Japanese firms set up more factories in U.S.", Wall Street Journal, (March 29), p. 16.

This stream of thought focuses on the survival and mutation of the MNC through the use of enlightened global strategies. An opposing school argues that the MNC is past its heyday already and must visualize new types of global activity and new attitudes. As Robinson (1981) has pointed out, our past and continuing preoccupation with MNCs may already be out-of-date and prove quite fruitless in the future. Given the growing rate of technological innovation, the maturing of both products and processes, rising production costs, and increased competition for NIC producers, many U.S., European, and even Japanese MNCs may find increasingly that the uniqueness of their offering lies primarily in the marketing and information functions.

A factor affecting the power and role of Western and particularly U.S. MNCs in world markets is the emergence of Third World MNCs (Connolly 1984). Table 3 presents a partial listing of major Third World MNCs. It is important to note that South Korean companies especially have chosen the JV as a means of achieving rapid penetration of sophisticated and highly competitive markets in the West. Table 4 illustrates some of the most recent JVs formed by South Korean companies which, incidentally, were all created as ETCs with the exception of the Lucky-Gold Star group (Cho 1984; Amine 1985b).

TABLE 3

A PARTIAL LISTING OF MAJOR THIRD WORLD MULTINATIONALS

Company	Country of Incorporation	Industry	1983 Revenue in Millions of Dollars
PEMEX	Mexico	Petroleum	$20,756
National Iranian Oil	Iran	Petroleum	19,000 (Est.)
Petrobras	Brazil	Petroleum	16,085
Petroleos de Venezuela	Venezuela	Petroleum	14,897
Kuwait National Petroleum	Kuwait	Petroleum	12,237
Indian Oil	India	Petroleum	9,308
Hyundai Group	S. Korea	Shipbuilding, Transportation	9,305
Samsung Group	S. Korea	Industrial Equipment Electronics, Textiles	7,171
Lucky-Gold Star Group	S. Korea	Petroleum, Electronics, Appliances	7,163
Daewoo	S. Korea	Construction, Shipbuilding	6,317
Sunkyong	S. Korea	General Trading, Textiles	6,213
Schlumberger	Neth.Antilles	Oil service & Supply	5,513
Chinese Petroleum	Taiwan	Petroleum	5,333
Yukong	S. Korea	Petroleum	3,406
Ssangyong	S. Korea	Building Materials, Paper, Oil	3,159
Steel Authority of India	India	Metal Refining-Iron and Steel	3,026
ICC	S. Korea	Tires and Rubber, Steel	1,968
Philippine National Oil	Philippines	Petroleum	1,914
CODELCO-CHILE	Chile	Mining and Metal Refining-Copper	1,774
Thyssen-Bornemisza	Neth. Antilles	Shipbuilding, Farm Equipment	1,581
Jardin, Matheson	Hong Kong/ Bermuda	General Trading	1,367
Bharat Heavy Electricals	India	Electrical, Electronics	1,176
Vale do Rio Doce	Brazil	Mining, Iron	1,011

Sources: Forbes (1984), "The 200 Largest Foreign Companies", (July 2), 134-138. Business Week (1984c), "International Corporate Scoreboard: 1983", (July 23), 161-182.

TABLE 4

JOINT VENTURES FORMED BY SOUTH KOREAN COMPANIES

Company	Type of Activities
Lucky-Gold Star Group	19 JVs and technological cooperation agreements with 50 foreign companies including U.S., West European and Japanese partners.
Daewoo	50-50 JV with General Motors in two parts: a $427 million project to build a new sub-compact automobile in Korea, and a $60 million project to produce auto parts.
Samsung	Proposed JV with Chrysler to produce auto parts in Korea. Possible future joint car production in Korea.

Source: Compiled by the authors from various sources.

These emerging trends and changes in competitive strategy must be monitored and their implications assessed for all types of U.S. companies in world markets. In the future, it may be that international marketing involvement will polarize into three distinct and perhaps correlated types of business: (1) direct or indirect exporting either independently or through intermediaries such as export management companies (EMCs) or ETCs; (2) extended export trading company activity which includes global sourcing, offshore production and countertrade; and (3) joint ventures of all types ranging from limited prospects to long-term co-production agreements.

Thus, the MNC as we have known if for several decades would tend to evolve into an ETC or into a joint venture between giants. The ETCs established by General Electric (GETC) and Sears, (Sears World Trade) illustrate well the first case. JVs between GM and Toyota, IBM and Hitachi, AMC and Renault are examples of the second case.

If these trends toward cooperation in international markets continue, the concept of a continuous "path of internationalization" followed by exporting companies may no longer be valid (Cavusgil 1980). International marketing activities may be more realistically depicted by a step-function with companies needing to reach a critical mass before being able to change the nature of their activity (Terpstra 1983). For example, a growing export firm may leave the protective ring of an ETC (Williamson and Bello 1984) and progress directly to joint ventures, franchising or licensing. Another case would be that of two ETCs setting up reciprocal arrangements between themselves which parallel the JV format but on a much larger scale. The Japanese Sogo Shosha have already demonstrated such a willingness to link up with new U.S. ETCs. A third scenario may witness JVs of the IBM-Hitachi type assuming ETC responsibilities for the coordination of suppliers of intermediary or related goods and services such as software, peripherals, electronic equipment, advertising, personnel training, etc.

TRADING RELATIONS BETWEEN NATIONS: IMPLICATIONS FOR CURRENT COMPANY JOINT VENTURES

Thus far, our focus has been principally on JVs between corporations, both public and private. The recent opening up of the People's Republic of China to Western markets has resulted in a plethora of JV-formations. Table 5 presents a sampling of the variety of sectors and the range of international companies which have formed JVs with Chinese state agencies and companies. This optimistic development must however be seen in the context of continuing apprehension in the U.S. particularly over the question of how to handle strategic exports. This ambivalence between enthusiasm and caution reminds us of the similar paradox in French attitudes toward Japan, discussed earlier. It is probably symptomatic of the uneasy and evolving shift in attitudes from competition to cooperation which we have identified in other world markets.

TABLE 5

SOME RECENT JOINT VENTURES WITH THE PEOPLE'S REPUBLIC OF CHINA

Sector	Foreign Partners	Purpose
Advertising	Interpublic Group and Jardine Matheson	Advertising of Foreign Goods
Aerospace	McDonnell Douglas	Co-Production of 25 MD-80 Jetliners
Automobiles	AMC	Manufacture of Jeeps
	VW	Manufacture of a New Sedan the Santana
Consumer Products	Beiersdorf AG	Nivea Skin Cream Production
	Coca-Cola	Bottling Plants
	Kodak	Color Photo Film and Paper Production
	R.J. Reynolds	Camel, Winston, and Salem Cigarette Production
	Sony	Manufacture of VCRs
	Suntory (Japan)	Beer and Malt Beverage Production
Electric and Electronic Equipment	3M Company	Manufacture of Telecommunications and Electric Power Distribution Equipment and Electrical Machinery
	Hewlett-Packard	Manufacture of Computers
Financial Services	Societe Generale (France) Bank of East Asia (Hong Kong) and Bank of China	Heavy Equipment Leasing
	First Chicago, Industrial Bank of Japan, Bank of China and Another Chinese Company	Merchant Banking
Food Products	Beatrice	Snack Food and Soft Drink Production
	DelMonte	Canning of Corn and Tomatoes
	General Foods	Coffee and Tang Production
	H.J. Heinz	Baby Food Production
	Nabisco	Ritz and Saltine Cracker Production
Industrial Goods	Pilkington Glass	Glass Production
	Harnischfeger	Assembly of Electric Mining Excavator Shovels
Medical	Biogen NV (Netherlands)	Production of Gamma Interferon
	Promega Biotec (USA)	Genetic Biochemical Manufacturing Plant
Nuclear	British and Hong Kong Governments and Suppliers	Construction and Management of a Nuclear Power Plant
	Japanese Government and Suppliers	Joint Development of Chinese Uranium Resources Joint Research or Nuclear Waste Disposal
Offshore Oil	5-Company Consortium: BP (UK), Braspetro (Brazil), Broken Hill Pty. (Aus.), Ranger Oil (Can.), and Petro-Canada Exploration Inc., (Can.)	Drilling in the Pearl River Basin
	Also Other Major International Petroleum Companies	
Restaurants, Hotels	Club Mediterranee	30-Year Lease for Coastal resort site
	Pierre Cardin	Open and Manage a Maxim's Restaurant in Beijing
	Welton-Beckett Associates, E-S Pacific Corp. and China International Travel Service	Build and Manage The Great Wall Hotel in Beijing

Source: Compiled by the authors from multiple sources.

Newly industrializing countries are striving to develop their strengths and extend their presence in international markets. For the NICs, the JV has become a valuable strategy even at the national level. This is illustrated by the proposed Agreement on Industrial Joint Ventures among the members of ASEAN which will promote joint industrial projects among private companies. Special tariff treatment will be offered to goods produced by these ventures (Wall Street Journal, 1983b). A similar move toward collective action is seen in the creation of a new 14-member African economic community (uniting Zimbabwe, Kenya, Somalia, Zambia, Uganda, Burundi, the Cormoros Islands, Djibouti, Ethiopia, Lesotho, Malawi, Mauritius, Rwanda, and Swaziland) (Wall Street Journal 1984b). Inter-regional trading blocs in sub-Saharan Africa have been notorious in the past for their lack of success due mainly to lack of suitable goods and services for inter-group trading and a tradition of colonial trading patterns. Clearly, a new initiative has now been launched to achieve more effective collaboration. A similar, but less formal agreement, has been reached by Iraq and India relating to cooperation in industry, agriculture, transportation, and construction. Over 60 Indian companies employing some 40,000 Indian workers and technicians are involved in projects in Iraq (Wall Street Journal 1984a).

The trend toward greater articulation of trading between neighboring countries is taken one step further by the five-year trade cooperation agreement signed by EC members and Andean Pact nations in 1983 (Wall Street Journal 1983a). Of course, the EC itself is scheduled to admit two new members, Spain and Portugal, in 1986. However, a counter trend against increased cooperation must be recognized. The EC Associates in North Africa, Morocco, Algeria, and Tunisia will lose many of their trading privileges with Western Europe to the benefit of the two new EC members whose principal exports (wine, citrus fruits, olive oil, fish, apparel, shoes, and manual laborers) would otherwise compete with those from North Africa (Mufsan, 1984).

In the face of all this grouping and re-grouping among nations, emerges an opposing trend toward bilateral trade agreements. The most recent and controversial example of this is the U.S.-Israeli approach which provides for staged mutual tariff reductions to zero over ten years. This move should be seen in the context of the thorny multilateral discussions on tariff reduction which the U.S. has been pursuing in recent years with its major trading partners. The choice of Israel is seen as a strategic political move to gain acceptance for the concept of bilateral governments. Other partners for consideration by the U.S. may include Canada, Japan, and ASEAN countries (Krestin 1985).

CONCLUSION

In reviewing the variety of changes coming about among national trading partners, we see a general trend toward integrated trade within regional blocs as well as increased cooperation between these multi-country groups. In contrast, we recognize a move toward two-country agreements such as France and Japan, the U.S. and Japan (with the removal of import quotas on automobiles), and the U.S. and Israel. At the company level, JVs between two or more MNCs, smaller companies, SOEs and government agencies all appear to be consistent with the general trend toward cooperation. However, the fragility of JVs between companies is well known. Similarly, the alternative to trade cooperation among nations is a stark return to market protectionism. Thus, if "joint venture fever is indeed sweeping the world" as suggested earlier, we must recognize the inherent risks of failure. JVs may be only a short-lived trend leading to a dramatic shake-out of new partners in several years. Or JVs may be the expansion of a more profound phenomenon resulting in the permanent redistribution of competitive advantages across world markets, as Reich (1984) argues. It is appropriate here to recall Wells' (1968) concept of an international life-cycle for trade between nations which to some extent appears to be materializing. The implications for public policy planners in the areas of international trade development, export promotion, and control of foreign direct investment in the home market are significant. However, the reluctance of successive U.S. administrations to develop and support a "national trade development policy" suggests that the full import of these changing trends may not be assessed effectively.

As we have argued, the prevailing attitude in global markets is currently one of cooperation. However, if JVs fail to produce the desired results for companies, and if regional or bilateral trading agreements result in more benefit to one partner than another, the battle-lines could very rapidly be drawn up. Then the old competitive values would surely re-surface. Companies should be alerted to this eventuality and should strive to include contingency plans in their joint venture R & D, production, distribution, or marketing agreements. However, a fundamental problem remains unresolved. It may be that the process of joint venturing will have permanently shifted competitive advantages from one company to another or one nation to another. Thus a return to pre-joint venture conditions and strategies may not be possible. Seen in this light, the JV will become a catalyst provoking long-term changes in both companies and markets. At the present time, JVs tend to be considered as short-term, reversible, take-it-or-leave-it options. This is certainly a case of failing "to see the wood for the trees".

REFERENCES

Anders, George (1983), "ICL, Siemens and Machines Bull to launch joint venture in basic computer research," Wall Street Journal, (September 2), 14.

Barkas, James M. and James C. Gale (1981), "Joint Venture Strategies: Yugoslavia - A Case Study," Columbia Journal of World Business, (Spring), 30-39.

Berlew, F. Kingston (1984), "The Joint Venture - A Way Into Foreign Markets," Harvard Business Review, (July/August), 48ff.

Business Week (1984a), "AT&T and Olivetti Initiate A Strategy To Win Europe," (July 16), 41ff.

__________________________ (1984b), "International Corporate Scoreboard: 1983," (July 23), 161-182.

__________________________ (1984c), "Trying To Turn A Rival Into A Partner," (October 15), 56.

Buzzell, Robert D. (1968), "Can You Standardize Multinational Marketing?" Harvard Business Review, (Nov./Dec.), 102-113.

Cavusgil, S. Tamer (1980), "On the Internationalization Process of Firms," European Research, 8 (November), 273-281.

Columbia Journal of World Business (1984), special issue featuring joint venture strategies, (Summer).

Connolly, Seamus G. (1984), "Joint Ventures with Third World Multinationals: A New Form of Entry to International Markets," Columbia Journal of World Business, (Summer), 18-22.

Conrads, Robert J. and Amir Mahini (1984), "The Risks and Advantages of Cooperative Ventures," Wall Street Journal, (January 16), 18.

Contractor Farok J. (1984), "Strategies for Structuring Joint Ventures: A Negotiations Planning Paradigm," Columbia Journal of World Business, (Summer), 30-39.

Forbes (1984), "The 200 Largest Foreign Companies," (July 2), 134-138.

Hall, Duane (1984), "International Joint Ventures: Pros and Cons," S.A.M. Advanced Management Journal, Vol. 49, No. 4, 1-11.

Harrigan, Kathryn Rudie (1984), "Joint Ventures and Global Strategies," Columbia Journal of World Business, (Summer), 7-16.

Janger, Allen R. (1980), Organization of International Joint Ventures, Report No. 787, The Conference Board, Inc.: New York, NY.

Karlin, Beth (1984), "IBM Beefs Up European Operations," Wall Street Journal, (March 13), 36.

Kestin, Hesh (1985), "The Meaning of Tomatoes At $2.99 A Pound," Forbes, (April 8), 106-108.

Killing, Peter (1980), "Technology Acquisition: License Agreement or Joint Venture," Columbia Journal of World Business, (Fall), 38-46.

______________ (1982), "How To Make A Global Joint Venture Work," Harvard Business Review, (May-June), 120-127.

Levitt, Theodore (1983), "The Globalization of Markets," Harvard Business Review, (March/April), 92-102.

Mergers and Corporate Policy (1983), Cambridge Corp.: Boston, MA.

Minard, Lawrence (1983), "Can Europe Catch Up?", Forbes, (July 4), 84-92.

Moskal, Brian S. (1984), "Joint Ventures: For Better Or Worse?" Industry Week, (February 20), 39-45.

Mufson, Steven (1984), "Admission of Spain and Portugal to EC May Harm North African Economies," Wall Street Journal, (December 18), 36.

Perlmutter, Howard V. (1969), "The Tortuous Evolution of the Multinational Corporation," Columbia Journal of World Business, (Spring), 9-18.

Reich, Robert B. (1984), "Japan Inc., USA," The New Republic, (November 26), 19-23.

Robinson, Richard D. (1981), "Background Concepts and Philosophy of International Business from World War II to the Present," Journal of International Business Studies, 12, (Spring/Summer), 13-21.

Sease, Douglas R. (1985), "Japanese Firms Set Up More Factories in U.S., Alarm Some Americans," Wall Street Journal, (March 29), 1ff.

Simmonds, Kenneth (1985), "Global Strategy: Achieving the Geocentric Ideal," International Markering Review, Vol. 2, No. 1, 8-17.

Terpstra, Vern (1983), "Critical Mass and International Marketing Strategy," Journal of the Academy of Marketing Science, 11, (Summer), 269-282.

Visvabharathy, Ganesan (1984), "Trading Companies As Vehicles for Export Promotion," Asia Pacific Journal of Management, (January), 120-132.

Wall Street Journal (1983a), "EC, Andean Nations To Meet To Discuss Trade Agreement," (October 26), 6.

______________ (1983b), "Joint-Venture Pact, Stalled Since June, amended by ASEAN," (October 20), 36.

______________ (1984a), "Iraq and India Sign Agreement for Industrial Cooperation," (May 18), 29.

______________ (1984b), "African Nations Prepare to Form Economic Bloc," (July 3), 25.

Walters, Kenneth D. and R. Joseph Monsen (1979), "State-Owned Business Abroad: New Competitive Threat," Harvard Business Review, (March/April), 63-73.

Wells, Louis T. (1968), "A Product Life Cycle for International Trade?" Journal of Marketing, (July), 1-6.

STRATEGIC MARKET PLANNING IN THE IRISH BANKING SECTOR

Tevfik Dalgic, Peter Ryan, Dublin Institute of Technology, College of Commerce, Ireland.

Abstract

This paper analyses the basic issues in the strategic market planning process as an important part of the strategic marketing and tries to see whether Irish Banking system formally applies this concept. A mail questionnaire was used to carry out a survey covering all the banks in the Greater Dublin Area, which hosts 90% of the banks operating in Ireland. Although the main findings of the survey show similarities with earlier studies, Irish banks have shown some distinct characteristics in their approach to the strategic planning.

Introduction

Planning has become an important area of interest to the scholars of management in general and marketing in particular within the last two decades. As a consequence, there has been a large accumulation of literature in the areas of business policy/strategy/corporate strategy/long term planning and marketing strategy/strategic marketing. The developments in the area of general management have triggered the studies in the area of marketing and as a consequence a different literature has emerged particularly in the strategic marketing field. Both fields have affected each other by taking and giving some methods and frame of reference. According to Schendel (1985), marketing has contributed to the development corporate level strategy, but marketing strategy itself "needs to be viewed primarily in the context of business level strategy, and as a set of actions to be undertaken in consort with the other functional areas, all of which are ultimately contributing to the entrepreneurial components of business level strategy". In a very recent study, Armstrong and Reibstien (1985), concluded that "marketing planning frequently lacks formal linkages to corporate planning, it is narrow in its generation and evaluation of strategies, it lacks formal schemes for monitoring the success of the plan, and formal approaches are not used to implement the plan .... We found no empirical evidence on the value of formal planning for marketing strategy. Nor did any of the corporate planning or in organisational behaviour". A similar conclusion has been reached by other marketing scholars. Zallocco, Scotton and Jeresko have found that "empirical evidence on the adoption of planing is usually limited to case studies of individual firms or general descriptive papers" (1983). This conclusion has been shared by Gardner and Thomas (1985) in their survey of the marketing literature. They concluded as saying that: "Our review of the literature leads us to believe that much potential confusion exists, mainly because of the current emphasis on corporate strategic planning. This type of planning has a clear environmental and future-based orientation and it leads to the examination of longer-term issues such as what set of businesses a firm should be involved in and the allocation of resources between business units. In other words, marketing strategy is viewed not so much as a process, as in corporate strategic planning, but as a specific set of 'how to plans'. Therefore it often appears that what corporate planners hope will emerge as strategic marketing planning (a process) at the Strategic Business Unit (SBU) level, is thought of not as a process, but as a plan (marketing strategy). Ansoff (1984), accepts that "strategy and objectives are interchangeable; both at different points in time and at different levels of organisation. Thus, some attributes of performance (such as market share) can be an objective of the firm at one time and its strategy at another. Further, as objectives and strategy are elaborated throughout an organisation, a typical hierarchical relationship results: elements of strategy at a higher managerial level become objectives at a lower one". His view on the strategic management makes marketing strategy an element of the top management level and an objective for the marketing department. Kotler (1980), in his definition of strategic management shares the same view, seeing the strategic marketing activity within the context of strategic management, as being concerned with the development of marketin positions and programs at product and market levels. Other researchers, like Abell and Hammond (1979), have similar views on the strategic market plan, seeing it as a "plan of all aspects of an organisation's strategy in the market place". As a conclusion of this introductory discussion we may say that strategic marketing/marketing strategy and strategic market planning are the elements of strategic management of the organisation, but they form, as Ansoff said; objectives of the functional area of marketing. From this point of view, to think strategic marketing/marketing strategy and strategic market plans as distinct and independent activities from the strategic management of the organisation seems unrealistic and unattainable. Then we may accept that strategic marketing/marketing strategy as an "extension of strategic management into the areas of marketing (Dalgic 1985-1). Although marketing strategy/strategic marketing is not an activity to be thought of "independent" and "autonomous" than the strategic management of the organisation, the relationship between strategic management and its' extension to the marketing area as a "strategic function" or as a "SBU" will differ according to the type of the organisation. The organisation's structure, its' environment and its' area of business, will change its' context, its' functions and responsibilities. This difference reflects itself in the objectives, alternative strategies, their selection, implementation and control processes. This will lead us to think strategic marketing/marketing strategy/strategic marketing plan activities as "functional area of strategic management" of the total organisation itself. Then, discussions to be made will be "within the context of strategic management".

Strategic Market Planning and Banking Sector

There seems a considerable literature exists in the area of strategic market planning and especially in the banking sector. Kudla (1982), states that "banking has traditionally been a transaction orientated, people-intensive business, focusing on day-to-day operations. Primary goals were to maintain public confidence, preserve liquidity and earn a satisfactory return. The bank environment was viewed as relatively stable and clearly defined with innovations taking place at a relatively stable pace. However, the nature of the banking industry has dramatically changed in the past decade primarily because of a much more dynamic environment. The shift from a relatively static to a relatively dynamic banking environment has led some practitioners in the banking industry to perceive long range planning as an essential management tool". This explains the competitive nature of the market environment of the banks. Thompson, Berry and Davidson (1978), went further to investigate the impact of environment and concluded that "the markets in which a bank or thrift must perform against the competition provide a valid reference point for evaluating the likely impact of more competitors, greater competition, and other forms of environmental influence. Moreover, performance in competitive markets is common to all facets of the banking business, thereby providing a framework for establishing the purpose, objectives and alternative action strategies". Handscombe (1976) shares this view as saying that; "any bank defining its' purpose and objectives will have to steer a course between the demands of its' stakeholders; its' shareholders, depositors and borrowers - company or private, and the public at large". The need to have an overall corporate strategy and as a consequence of this, to have a marketing strategy as an extension of strategic management becomes a prerequisite for the banking sector under this turbulent market environment. Thompson, Berry and Davidson (1978), explain that strategic marketing activities are not separate from the strategic management of the company as saying: "many banks and thrifts still adhere to the misconception that marketing mission is separate and distinct from the overall management mission. Many bank executives view marketing as a set of specialised activities (such as research, public relations or advertising) that are planned and developed by a specific group of personnel who comprise the marketing department. Actually, these activities are the basic tools to implement marketing strategies". Baker (1985), accepts the following activities as the objectives of marketing strategy, and the responsibilities of marketing management:-

1."Identification of a need which can be satisfied profitably within the constraints and opportunities represented by the potential supplier's portfolio of resources, and which is consistent with the organisation's declared objectives.

2. Definition of a particular segment or segments of the total demand which offers the best match with the producer's supply capabilities (the target audience).

3. Development of a specific product or service tailored to the particular requirement of the target audience.

4. Preparation of a marketing plan specifying the target to be followed in bringing the new offering to the attention of the target audience in a way which will differentiate it from competitive alternatives. (The main elements of such a plan will comprise pricing, promotion, selling and distribution policies).

5. Execution of the plan.

6. Monitoring of the results and adjustments as necessary to achieve the predetermined objectives".

As a conclusion, we may accept that in the strategic market planning, these steps will stay the same, but the application of these steps into the banking environment shows its' own characteristics. Strategic market planning of the banks will be consistent with the bank's overall strategic management and play a functional area role in this process.

Irish Banking Sector

Irish banking sector is composed of national and foreign banks. According to the Irish law, foreign banks can open subsidiaries on the basis of establishing them as separate legal entities registered in Ireland. They are expected to perform according to the Irish banking and company regulations and the Irish government's decisions. From this point of view there is no difference between the national and foreign banks. Only difference may come from the ownership and management of them. The Greater Dublin Area is the largest metropolitan region of Ireland in which nearly 1/3 of the Irish population lives and it hosts the majority of business organisations and the banks. 90% of the head offices of the banks registered in Ireland are concentrated in this area.

Methodology

Institute of Public Administration of Ireland produces an Administration Yearbook annually, in which important public and private organisations are listed together with other relevant information about them. 1985 Yearbook was used as the source of information about the Irish banks and the ones whose head offices located in the Greater Dublin Area were surveyed. There were 36 bank head offices in this region and no sampling method was used because of the small number. A structured questionnaire was used as a survey medium. The objectives of the survey were to see the existence of strategic management and as a consequence the existence of strategic marketing plans and their applications. The administration of the planning activities, their ranges, objectives and targets were also among the aims of the survey as well as the problems, claimed benefits and sizes of the banks. Out of 36 questionnaires 19 were returned in useable form for our purpose, which represented 53% of the total banks covered in the survey.

TABLE 1
TIME HORIZON FOR STRATEGY

No. of Banks	%	Years
3	15,7	No strategic plan
4	21,0	3
9	47,3	5
3	15,7	10

This shows that being strategic means more than 5 years for the majority of the banks that responded, which means 63% of them. This result is in line with the general understanding of the long-term and strategic time horizon concept. 15.7% of Irish Banks do not have strategic plans, which means they do not have long term corporate strategies and as a consequence strategic market plans do not exist. 21% of them have only 3 year-long strategies. According to the concept of strategy, 3-year term is not a strategic time, but a middle range time horizon. In this case, these banks may not be accepted as having long term strategies. This brings the number of banks which do not have long range plans and strategies to 7 out of 19. This number represents 36.8% of the banks that responded. This is a high figure for a service industry facing a big challenge from the information technology and the competitors, (Dalgic 1985-2).

TABLE II
SEPARATE PLANNING STAFF

No. of Banks	%	No. of Planning Staff
7	36,8	No separate Staff
10	53	1-5
2	10,5	6-10

A large proportion of the banks do not have separate planning staff. It is assumed that this function is carried out by non-planning people, involved in other activities of the banks.

TABLE III
RANK OF THE MOST IMPORTANT ACTIVITIES
COVERED BY THE STRATEGIC PLANS

Rank	Most Important Activity
1	Strategy/Policy Formulation
2	Investment Planning
3	Supply/Demand Projections
4	Cash Requirements
5	New Markets/Expansion,
6	Capital Spending
7	Management Personnel needs
8	Technological Forecasting
9	Diversification
10	Other.

10 Banks indicated that Strategy/policy formulation was the most important activity for their strategic plans, which reflects 52.6% of the respondent banks. 5 Banks indicated the Investment Planning as their most important activities covered by their strategic plans. Only 1 bank said that supply/demand projections was the most important activity for their strategic plans. The other activities have been given changing importance by the banks as being subjects for their strategic plans. 3 banks have not indicated anything because of the lack of strategic plans. As explained here Expansion/New Markets, Diversification, Technological Forecasting activities which can be accepted as strategic marketing subjects were not chosen as the most important activities by the banks. This shows that majority of the responding banks of Ireland have no seperate strategic marketing objectives and no strategic marketing plans as a part of their corporate strategy. This is in line with the previous studies. Cash requirements and supply/demand projections were given more priority of importance, this may reflect the nature of the service industry. Only 3 banks have started to prepare long-range plans before 1975, 8 banks have started to have strategic planing activities between 1975-1980 and 5 of them have adopted long-range planning after 1981 to date. This result shows a similarity with the American study (Kudla 1982). But Irish banks were rather late to start planning as compared to British manufacturing companies (Denning&Lehr 1972). This may be due to the nature of service industry and conservative nature of the banking business.

TABLE IV
BENEFITS OF STRATEGIC PLANNING

Rank	Benefit
1	Better quality decision-making
2	More efficiency in planning
3	To explore more alternatives
4	Faster decision making
5	More accurate forecasting
6	More timely information
7	Cost saving

All the banks surveyed indicated that strategic planning helped them to increase the quality of decision-making. By using long-range planning strategy, Irish banks increased their efficiency in their planning activities. This reflects the fact that by gaining more expertise in planning and exercising one may expect to increase efficiency. The other benefits have ranked different degree of importance for the Irish banks.

TABLE V
DIFFICULTIES IN STRATEGIC PLANNING

Irish banks respondent to our survey have agreed to pinpoint the most important problems they have encountered during their long-range planning activities.

Rank	Difficulties
1	Obtaining useful data
2	Coordination of planning efforts
3	Credibility
4	Communication in management level
5	Staffing
6	Top Management Interest

The majority, 13 out of 19 banks (82%) indicated that obtaining useful data to be used in long-range planning activities ranked the most important problem. Coordination of planning efforts has been ranked as the second important difficulty in the long-range planning. 7 banks out of 19 indicated this problem as the second biggest difficulty. Credibility of the strategic activities in general, long-range planning in particular is ranked as the third important problem being faced by the Irish banks. Communication problems have been placed as the fourth most important difficulty in the long-range planning. This was followed by the staffing problems, then the difficulty of the top management interest. This shows that top management has created less problems for the long-range planning activities of the Irish banks surveyed.

TABLE VI
CLASSIFICATION BY SIZE

Banks who have responded as having long-range plans more than one year have the following characteristics by size;

No. of Employees	%
1-30	19
31-100	37
101-500	19
Over 500	25

19% of respondent banks have between 1-30 employees. 37% of the respondent banks have between 31-100 employees. 19% of banks responding to the survey have between 101-500 employees. 1/4 of the responding banks have over 500 employees.

Conclusions and Recommendations

The basic conclusion of this survey is that Irish banks have a practice of strategic planning. The majority of the surveyed banks have long-range plans covering 3-5 years. Only 6% of them have more than 5 years covered by their long-range plans. A significant number of Irish banks initiated written strategic plans within the last 10 years. Irish banks have recognised the importance of long-range planning and the majority of them have separate planning staff. Top management of the Irish banks support strategic planning activities. Strategy/Policy formulation and investment planning are two key areas in the long-range planning activities. Expansion does not seem a very important area for long-range planning, this may reflect the intentions of the Irish banking sector in terms of expansions/diversifications, new markets. They do not see significant changes in their structures. The benefits gained from strategic planning show a variety of points. The most important benefit is better decision-making. This means Irish banks are ready to spend money on better decision-making. Banks have difficulties in obtaining data for strategic planning activities. This reflects the importance of strategic information. This result is in line with earlier studies in this field (Dalgic-1985-3). Irish banks do not differentiate marketing as a separate activity for their strategic planning processes. They include marketing related activities as part of their strategic planning practices. There seems no difference between strategic management and strategic marketing practices. This indicates the fact that Irish banks do not differentiate strategic management and strategic marketing practices.

Future Research Directions

Irish banking sector may have several problems especially in the areas of management and marketing. Strategic management is not only strategic planning itself. Further studies are needed to investigate their activities in the areas of strategic management and strategic marketing. The methods of environmental scanning, target setting, alternative creation, alternative selection, application and control of the selected alternatives are worth investigation. Irish banks have a standing committee and some kind of central organisation to coordinate their activities and they publish a journal, called "The Irish Banking Review". This publication may be used to encourage further research. Irish banks may provide financial support for it. The conclusion of this study supports the fact that there is a lack of formal linking between strategic management and strategic marketing plans.

References

1. Abell, Derek and Hammond, John S. Strategic Market Planning (Prentice-Hall, New Jersey)

2. Ansoff, H. Igor Implanting Strategic Management (Prentice-Hall, New Jersey)

3. Armstrong, J. S. and Reibstein, D.J. "Evidence on the Value of Strategic Planning in Marketing: How Much Planning Should a Marketing Planner Plan?" in Thomas, Howard and Gardner,David (Ed's) Strategic Marketing and Management (John Wiley & Sons, Chichester)

4. Baker, Michael T. Marketing Strategy and Management (MacMillan, London)

5. Dalgic, Tevfik "Strategic Marketing and Information Technology" Second World Marketing Congress (Stirling, Scotland)

6. Dalgic, Tevfik "Information Technology: Opportunity or Threat" Transnational Data Report (Vol. III, No. 2)

7. Dalgic, Tevfik "Searching for a Strategic Light in the Information Jungle" Transnational Data Report (Vol. III, No. 5)

8. Denning, B. W. and Lehr, M. F. "Corporate Long-Range Planning in the United Kingdom" Journal of Management Studies (No. 9)

9. Gardner, David and Thomas, Howard (Ed's) Strategic Marketing and Management (John Wiley & Sons, Chichester)

10. Thompson, Thomas W; Berry, Leonard L. and Davidson, Philip H. Banking Tomorrow: Managing Markets Through Planning (Van Nastrong, New York)

11. Handscombe, Richard Bankers Management Handbook (McGraw-Hill, London)

12. Kotler, Philip Marketing Management - Analysis, Planning and Control (Prentice-Hall, New Jersey)

13. Kudla, Ronald "The Current Practices of Bank Long-Range Planning" Long-Range Planning Journal (Vol. 15, No. 3)

14. Schendel, Dan "Strategic Management and Strategic Marketing: What's Strategic About Either One" in Thomas, Howard and Gardner, David (Ed's) Strategic Marketing and Management (Wiley & Sons, Chichester)

15. Zallocco, Ronald L.; Scotton, W. Donald and Jeresko, David A. "Strategic Market Planning in the Commercial Airline Industry" Journal of the Academy of Marketing Science (Vol. II, No. 4)

KEY FACTORS FOR SUCCESSFUL MARKETING IN JAPAN

C. P. Rao, University of Arkansas
A. Ben Oumlil, University of Dayton

Abstract

The need for close politico-economic relations between the U.S. and Japan are essential and beneficial not only to these two nations, but to the entire free world. While many problems and hurdles may be encountered by U.S. firms attempting to do business in Japan, the financial rewards can be significant. This paper discusses and identifies the specific U.S. corporate experiences which reflect how these companies have overcome the many trade barriers in Japan. This paper also attempts to identify and discuss marketing management implications of key strategic factors to U.S. firms for successful marketing in Japan.

Introduction

In spite of periodic irritations and tensions arising out of trade relations between Japan and teh U.S., the need for close politico-economic relations between these countries is fully recognized by both sides. Cordial relations between Japan and the U.S. are considered essential for peace and prosperity of not only these two countries, but the entire free world. One of the significant aspects of these relationships is concerned with trade flows between Japan and the U.S. Promotion of trade flows is generally considered beneficial to all parties considered. However, the ever widening trade-gap between the U.S. and Japan, favoring the latter, is making both countries intensify efforts aimed at increasing the U.S. exports to Japan. This is evidenced by the protectionist threats and pressures in the U.S. as well as negotiations for the removal of trade barriers in Japan for the AMerican products. [1] Simultaneously, the Japanese are intensifying their efforts to open up their markets to the U.S. products. These efforts dramatically culminated in the Japanese prime minister recently appealing to his countrymen to buy more imported goods. As a result of these various trade promotion efforts on both sides, there is some evidence to indicate that more and more American companies are attempting to break into the Japanese market. These American companies include many small and medium sized companies. [2] This trend of flocking to the Japanese market by American companies is likely to continue in the future in spite of the many trade barriers. [3]

After initial angry reaction to the huge trade imbalance with Japan in 1984, more realistic thinking is prevailing in the U.S. [4] Despite many problems and pitfalls encountered by the American firms attempting to do business in Japan, the results can be worthwhile. The American firms which had the tenacity, patience and drive to cultivate the Japanese markets systematically, have done well. [5] Thus, while many problems and hurdles may be encountered by American firms, for those who persist, the rewards could be very significant in the world's second largest economy. Hence, the major purpose of this paper is to identify and discuss the specific American corporate experiences which reflect how these corporations have overcome the many trade barriers in Japan.

From such a discussion it will be attempted to delineate the key factors for successful marketing in Japan. Such identification of the key strategic variables would alert the American companies as to what is needed to market their products and services successfully in Japan.

American Corporate Successful Marketing Strategies in Japan

A. IBM Japan, Ltd. -- Superior Product - Organization Strategy

IBM Japan has long been the leader of the top ten foreign-affiliated firms in Japan, occupying the top position for 9 out of the past 10 years. [9] The supremacy of IBM Japan was usurped only once, in 1980, when, because of the appreciation of the yen against the U.S. dollar, oil refinery firms which imported large quantities of crude oil rose to first and second places. Although its profits rose over those of the preceeding year, IBM Japan was forced to end the year at third place.

IBM Japan was incorporated in Japan in 1937, before the outbreak of World War II. Except for the chaotic years of the immediate post-was period, all of the firm's presidents have been Japanese. By having all of its management be Japanese, IBM Japan has been relatively advanced in its efforts for localization.

IBM Japan, Ltd., recently inaugurated sales of the IBM 4000 communication system. This system is designed to promote more efficient operations by tellers in banks, and it is regarded as the wave of the future for banking in the 1980s. Other newly developed products include the IBM 308X series, which is based on IBM's most advanced technology, and the IBM 4300 series of medium-sized computers.

As the range of its products has expanded into large, mediu, and small sizes, IBM Japan has carried out a revamping of its business structure. Under the previous structure, research and development, manufacturing, sales, and maintenance were separately conducted for each type of product. Under the new organization, the various responsibilities have been divided between those products purchased by large corporations and those by small and medium-sized businesses. IBM Information System Account Marketing-East and West departments are in charge of the former, while the Information and General Account Marketing department is in charge of the latter. Also, in order to meet the growing demand for small-scale machines, the firm's management introduced a system of IBM System 123 are carried out by this network of agents. For the purpose of supervising its agents, which presently number about 56, IBM Japan established the IBM Japan Sales Co., totally owned by IBM Japan, in June, 1982. In September, 1982, IBM Japan and Kanematsu-Gosho Ltd. jointly created Nippon Office

Systems, Ltd.

Buttressed by an active management that has close ties with the various regions of the country, IBM Japan's sales for this year are expected to rise 20% over last year's figures, resulting in an increase in profits, as well, for 1983. [7,9]

B. McDonald's--A Successful Joint Venture Using Product-Communication Extension Strategy

The well-known fast-food company, McDonald's, has become the largest retaurant chain in Japan by following many of the same methods it uses in the United States. McDonald's has boosted sales in 1982 to 293 million dollars, up 16.3% from the year before. McDonald's serves the same menu of hamburgers, French fries, soft drinks, and other foods that it does in the U.S., and the restaurants look the same. Because much of the beef and other food items are produced in Japan, McDonald's has not encountered some of the trade problems faced by other firms. McDonald's found a joint-venture partner that knew the country and how to set up franchises and get through government "red tape."

McDonald's has tried to tailor the product to Japanese styles - restaurants are built closer to adjoining buildings than in the U.S., and TV commercials show how McDonald's is a part of Japanese life. However, only one major difference exists: The McDonald's trademark character, Ronald McDonald, is called Donald McDonald in Japan because it is easier for the Japanese to pronounce that way. [7]

C. Corning Glass--Piggybacking Strategy

Corning has succeeded in the Japanese market by piggybacking American products with those made in Japan. A Japanese firm produces Pyrex bakeware and mixing bowls, and Corning puts its U.S. made Corelle tableware with it and offers it as a complete set.

Corning entered the Japanese market relatively early. The company established a Japanese office with two people in 1966 and has slowly added sales staffs. Now Japan is Corning's No. 1 export market, accounting for 25% of its international businexx.

Much of its business is conducted through joint ventures, but Corning has also set up a wholly owned distribution company in Japan. Most profits go to the U.S., but managers are primarily Japanese. Corning attributes much of its success to having had some sort of uniqueness or advantage in their products and maintaining the high quality requirements set by Japanese consumers themselves. [7]

D. Allstate--Service-Communication Extension Strategy

Allstate Insurance has established sales offices inside Seibu retail stores in Japan in the same manner it has sold insurance for years in the U.S. in Sears, Roebuck & Company stores. Before 1975, Allstate had been doing reinsurance business with Japanese firms, but then Seibu's chairman told Allstate he wanted to explore the possibility of a joint venture in the life insurance business being established. Today 100,000 Allstate insurance policies are in force in Japan with total coverage of about 4 billion dollars. Allstate branched into its own form of fire-and-automobile insurance company in 1980. The fire-and-automobile insurance company is fully owned by Allstate, but its staff are primarily Japanese. [7]

E. Sheaffer Pen Company--Quality Product & Distribution Adaptation Strategy

Sheaffer started in Japan 12 years ago with a reputation for fine pens when American products were of great interest to the Japanese. Murray Eisner, President of the Sheaffer Eaton Division of Textron, feels that "you have a good chance of selling in Japan if you have a quality product that stands out." Since all Sheaffer products are "designed to meet the requirements of the most discriminating," they have "only one standard and can sell everywhere," especially in quality-oriented Japan. [10]

To ascertain the marketplace mentality in Japan, Sheaffer took the leads of the people who were already selling writing instruments in Japan. Sheaffer asked the Japanese firm what they needed to know, implemented their recommendations, and then the Japanese firm distributed the products for Sheaffer. They were able to distribute Sheaffer products in virtually every department store and writing instrument outlet in Japan.

The Japanese prefer fountain pens to ballpoints because in forming Japanese characters they use a calligraphic style with broad and fine lines to form symbols not required in Western script. However, the Japanese buy Sheaffer fountain pens rather than Japanese pens. Sheaffer styling is different, also, from Japanese products. For example, the inlaid nib on the Sheaffer pens in unique, and no one has been able to copy that. [10]

In some department stores, Sheaffer products are displayed with "Status Symbol" written in English, making use of the prestige products marketing strategy, also. In Japan a set of two Sheaffer writing instruments will range in price from $25 to $250.

Pens are manufactured in Sheaffer's plant in Fort Madison, Iowa. Eisner reflects that there are tariffs on pens exported to Japan, but he feels they are not substantial, and they are being reduced. Present tariffs are about 10%, which is similar to the U.S. tariff. Although it is true that tariffs do push up the price of products in Japan, Sheaffer has overcome that disadvantage by being able to warrant the higher price because of superior design and craftsmanship of its products. [10]

F. American Hospital Supply--Superior-Specialized Products Strategy

American Hospital's superiority in the field of health products and making a product that was hard to duplicate were keys to this company's success. American Hospital Supply produces about 3,000 products for export, ranging from cardiac pacemaker equipment to laboratory diagnostic supplies. The firm has had increases of about 40% per year in sales and earnings in Japan over the past 10 years. The products are so specialized that it would be difficult for Japanese firms to duplicate them on a mass-production basis. At least 60% of the products are produced in the U.S., but Japanese are hired for operations in their own country. Some American Hospital Supply's success is attributed, also, to hiring as manager a Japanese national, who was effective in getting the products through the Japanese regulatory process. [7]

G. Merck & Company and Phizer Taito Co.--Innovation Products Strategy

The pharmaceutical industry in Japan is characterized by considerable investment from abroad. This is borne out in the case of Merck & Company of United States, which recently purchase 30% of the capital stock of both the BAnyu Pharmaceutical Company, a firm listed in the first section of the Tokyo Stock Exchange, and the yet unlisted Torii Pharmaceutical Company, in March, 1982.

The favorable performance of pharmaceuticals is due to the introduction and successful sales of new major drugs in the domestic market, which has been made possible through the emergence of a more favorable domestic environment. Numerous seminars on antibiotics, hyperpiesia, rheumatic diseases, etc., were held throughout the country to provide opportunities for the education of the public.

The Phizer Taito Company begain in 1955 as a joint venture between Phizer, Inc., and Taito Company. The majority of the firm's present capital, however, is owned by Phizer. Management is based on both the American system of rationalization and on such Japanese practices as lifetime employment.

Phizer Taito's sales for 1982 totalled 67 billion, representing a 34% gain over the levels of the preceeding year. [9]

H. Coca-Cola (Japan) Co.--Distribution Innovation Strategy

Coca-Cola (Japan) Co., the only enterprise in the food industry among the top ten foreign affiliates, has dominated the Japanese market through its special marketing techniques.

In 1957, the Coca-Cola Company began the operations of Coca-Cola (Japan) Co., a subsidiary incorporated in Japan and totally subscribed by its U.S. parent company. The only distribution system existing in Japan at that time was a complicated network through which foods flowed from manufacturers to consumers through primary and secondary wholesalers (agents) and terminal retailers. The Coca-Cola (Japan) Co., called the "pioneer of the distribution revolution," introduced a new distribution system which enables manufacturers to deal directly with retailers without the intervention of wholesalers. A direct link between manufacturers and retailers makes possible not only a reduction of distribution costs, but also a promptness of response. In addition, the case settlement of transactions improves the efficiency of cash flows.

The new distribution system met with some initial resistance, but Coca-Cola products are now delivered from bottlers directly to some 1.1 to 1.2 million outlets, such as supermarkets, food stores, bars, and cafeterias. Coca-Cola's income as declared on its 1982 tax returns, represented a 40% increase from the previous year. Although total sales of soft drinks in Japan declined in 1982, Coca-Cola's sales rose by 3%.

In addition to the recovery of its main products, Coca-Cola (Japan) has successfully introduced new items: Georgia Coffee, Real Gold, and Sprite. Just as Sprite is already leading the list of non-colored soft drinks in Japan, officers of Coca-Cola (Japan) hope these other products will also obtain first or second ranking in their respective sector. [9]

I. Disney Productions--Product-Communications Extension STrategy

The first Walt Disney cartoon film of Mickey Mourse, "Steamboat Willie", was released in October, 1928. This work, however, was not officially released in Japan. THe first Mickey Mouse film released in Japan was in September 1929, with "The Opry House", produced in march of that year. From Disney's cartoon characters, the Japanese came to grasp the image of America.

In Japan today, as in many other countreis throughout the world, Walt Disney is synonymous with family entertainment which parents can offer their children without hesitation.

Japan, which had frantically welcomed Disney movies from the latter half of the 1940s through the 1950s, turned rather calm toward them around 1970. This was because Japanese cartoon art itself had made unique development over the last thrity years which have had significant influence upon animated films.

Cartoons shown on television or in theaters which are now extraordinarily popular among Japanese children mainly focus on the amazing activities of giant robots, or on martial adventures in space. In action and in mood they are remarkably different from the entertainment of Disney.

However, when "Cinderella" and "Lady and the Tramp" were re-released for the umpteenth time in 1980, they were once again received with pleasure. The romantic "Cinderella" especially found acceptance among teenage girls as well as children.

As time has passed, the perception of Disney's movies has changed. In Japan, as well as in America, there is a growing tendency to re-evalute the classics of the so-called "golden age of cartoon films," when Walt Disney was alive.

If you get on the subway in Tokyo, you're sure to see a girl carrying a notebook with Donald Duck on it, or a boy wearing a Mickey Mouse T-shirt. The popularity of Disney characters has never faded since the war. At the new Tokyo Disneyland, opened on April 15, 1983, it's a headache to the strolling costumed characters that visitors inevitably touch and pull Mickey Mouse somuch that the man inside the suit becomes exhausted. Now Tokyo Disneyland is a place for a new generation to feel American, though America, too, has changed since the time Walt Disney was alive. [8]

J. AmEx: Prestige Services Strategy

When AmEx introduced its luxury gold yen card in Japan in May, 1980, it was interested in attracting only the affluent end of Japan's small credit card market. However, the country's consumer credit card market has exploded, lauded as the "largest growth area in the world" by AmEx Vice-President & General Manager of American Express International, Allan R. Hinman. AmEx has now decided to introduce its middle-income green card to the marekt.

To sell its credit cards, Hinman says American Express made a corporate commitment unlike anything they had done in the past in any of their 25 other worldwide markets. It is believed that American Express invested close to $20 million in its Japanese start-up.

AmEx, an emerging U.S. firm int he Japanese market, has high hopes for its green card. To promote the card to middle-income spenders, the company has launched an extensive advertising campaign featuring U.S. golfer, Jack Nicklaus. To secure its market niche, AmEx will emphasize its international identity as well as travel-related and cahsing services. [6]

Conclusions

The existence of various trade barriers in Japan is an irrefutable fact. But this trend is towards more liberalization and removal of these barriers. Despite such hurdles, it was illustrated that many American corporations have pursued successful business operations with appropriate marketing strategies. These successful marketing strategies in Japanese markets may briefly be summarized as below:

1. Successfully adapting products and services so that they suit the Japanese consumers' tastes and preferences.

2. Adapt their business practices to the peculiarities of the Japanese business environments.

3. Develop and carefully cultivate good management-labor relationships and/or manufacturer and channel member relationships.

4. Learning and adapting the necessary marketing skills which deeply identifies the company with the Japanese environment.

5. Learning to live with the cultural and marketing system complexities which are totally different from the corporate experiences in other major industrialized countries.

Many of the American companies which have been successful in the Japanese markets have persisted with their marketing efforts over an extended period of time even in the face of disappointing results in the beginning. Many of these firms recognized the potential of the Japanesemarkets at an early stage and set out establishing joint ventures or finding Japanese distributors who are reputable to market their products. This allowed them to capitalize on their Japanese partners' knowledge of the market and their established distribution network and ties.

Despite all the difficulties, most U.S. companies cannot ultimately afford to shun as vast and potentially lucrative market as Japan. Only by straining to understand and surmount its barriers can U.S. businesses hope to profit in the Japanese markets. The U.S. government is paving the way by pressuring the Japanese into reducing many of the barriers which have hitherto inhibited U.S. corporate business efforts in Japan. Besides, there is growing evidence that Japan will liberalize the past trade restrictions. The time is opportune for the U.S. business corporations to mount concerted efforts aimed at entering and expanding their businesses in Japan.

References

1. Time, "Pounding on Tokyo's Door: The U.S. Presses Japan to Dismantle Its Barriers to American Products," Time, March 25, 1985, pp. 54-55.

2. Browning, E.S., "Tough Nut to Crack: Small Exporters Face Problems Breaking into the Japanese Market," Small Business: A Special Report, The Wall Street Journal, May 20, 198 , p. 49.

3. "Japanese BArriers to U.S. Trade and Recent Japanese Government Initiative," Office of the U.S. Trade Representative, November 1982.

4. Stevensen, Adlai E., "More Japan-Bashing Can Only Cloud U.S. Thinking," The Wall Street Journal, May 2, 1985, p. 26.

5. Kraar, Louis, "Inside Japan's Open Market," Fortuen, October 4, 1982.

6. Alexander, Charles P., "Fighting it Out," Time, Special Edition, August 1, 1983, pp. 38-41.

7. Doan, Michael, and Hidchiro Tanakadete, "Ways Some U.S. Firms Crack Japan's Market," U.S. News & World Reprot, August 29, 1983, pp. 33-34.

8. Ono, Kosei, "Disney and the Japanese Maintain a Dream Over Half a Century," Look Japan, July 10, 1983, pp. 6-8.

9. "Successful Adaptation and Performance in the Japanese Market," Look Japan, October 10, 1983, pp. 4-5.

10. Walczak, Lee, "Half a Loaf is Better Than None," Business Week, November 28, 1983, p. 148.

IMITATIVE INNOVATIONS: A PRODUCT STRATEGY FROM A NEWLY INDUSTRIALISED COUNTRY - THE TURKISH CASE

Tevfik Dalgic, Dublin Institute of Technology, College of Commerce, Ireland

Abstract

This paper attempts to underline the difference between the innovative imitations and imitative innovations; two transfer of technology mechanisms by giving examples from a newly industrialised country: Turkey. The author surveys the structures of the top 50 Turkish manufacturing companies and classifies them according to their adoption categories and innovative/imitative characteristics.

Introduction

The role of science and technology in the process of industrialisation in general and new product developments in particular has created a great interest among the researchers after the 1950's. The dynamics of technological diffusions and main characteristics of innovations and innovative organisations have become the focal points of these studies. Research and Development (R&D) Management has become an indepentent area of management and a separate activity of many business organisations. The increasing value of science and technology-based products and services in the trade among the countries, productivity and international competition, the encouragement of different national and international organisations for further research in these fields have induced further interest among the researchers from different branches of basic and social sciences. Science policy phenomenon of the public sector has an accelerating impact on these studies. Baker (1983) believes that "too much emphasis is given to the early research and development stage to neglect of the later market launch and development phase". Rogers and Eveland (1981) said that more than 2400 studies had been carried out by several researchers. Some other studies found that the number of studies in this field was around 4000 (Kelly & Kranzberg 1981). Despite these large number of studies in the literature, "present knowledge and understanding of innovation process remains at a relatively underdeveloped stage", while some authors are saying that "factors found to be important for one innovation in one study are found to be considerably less important, not important at all, or even inversely important in another study" (Bigonese & Perrault 1981). Some other authors give a different reason for this problem by saying "contradictions might be the results of the diverse characteristics of researchers from different fields, using different techniques". (Kimberly & Evanisko 1981). All these studies reflect a "production orientation rather than a market orientation" (Baker 1983), and we still need futher studies to link these two approaches and to give them an equal importance.

Imitation Studies

The role of imitations as a product strategy has not been investigated intensively as in the case of innovations, although imitations are accepted as "innovative activities" by some authors (Kingston 1977). Havacek and Thompson (1977) found imitations as "one of the characteristics of being a good inventor". Kotler (1980) accepts imitations as "new product development strategy". Baker (1983) on the other hand calls "the strategy of the fast second" for imitations and attributes the success of Japanese companies to this strategy. According to a UNCTAD study; imitations are accepted as "a channel of technology transfer" (Oldham, Freeman & Turkcan 1967). Levitt (1966) is one of the very few researchers who investigated the phenomenon of imitations from a marketing point of view. He calls "Innovative Imitation" a process of "reversing the R&D, simply working backwards from what the others have done, and by trying to do the same thing for oneself". Another marketing scholar identifies the imitation activities as "me too" approach and labels these companies as "imitative segmenters" (McCarthy 1981). Baker (1983) has a different title for the imitators by calling them "Imitative Innovators" and accepting Japanese companies as being successful examples of them. He defines the activities of Imitative Innovators as in the following sentence; "Monitoring competitive activity has assumed increasing importance in recent years with the growing popularity, whereby firms depend more on their ability to copy or improve upon a new product and cash in on the market as it moves into the growth phase than on being first to market with a new product. The Japanese are past masters of this strategy and are Imitative Innovators of the first order across almost all classes of goods, depending upon an enhanced product, competitive prices and excellent distribution and after-sales service to ensure a dominant position in almost all the world's growth markets. Significantly the Japanese have been responsible for no major technological innovations themselves". The concept of Innovative Imitations of Levitt (1966) and Kotler's source of idea generation by imitating the competitors are similar to each other. Kotler (1980) accepts this approach as "buying the competitor's products,take them apart and build a better one. Their growth strategy is one of product imitation and improvement rather than product origination". There seems a difference of opinion among the marketing scholars for the concepts of Innovative Imitations and Imitative Innovations. Innovative Imitations are taking place in "industrialised and highly competitive markets, like the United States" while " Imitative Innovations are taking place in some countries, like earlier Japan, in which the national market was not as competitive and developed as the U.S. market. Then, if the concept of Innovation is accepted as the "newness in the sense that it has not been done before by the industry or by the company now doing it" (Levitt 1966), events which took place in Japan become "Innovative" rather than "Imitative" in nature. As a conclusion, we may continue to accept the "Imitations" taking place in the less competitive markets as "Innovations" and "Innovations" taking place in highly competitive and developed markets as "Imitations". Although, the main mechanism of this process is the same for both cases; in a less developed market, the original product does not exist, it has to be brought by the local producer from a foreign market, as in the case of Japan, importing the original products from the U.S.A. or Europe and in a highly competitive developed market;

the original product to be imitated exists in the national market itself. In the first instance this difference creates an international transfer of technology problem which in some cases may become expensive and time consuming, controlled by import-export restrictions and regulations. The main purpose of this paper is to try to underline this mechanism in the case of Turkey and to investigate the basic characteristics of the Turkish firms which have used this product strategy as a formal marketing activity.

The Case of Turkey

The world has observed the economic development processes of some Asian countries in the late 1970's. In the literature of economic development those countries have been called "newly industrialising" and "newly industrialised" as well as "lately developed countries". These countries are different than the majority of the less developed ones in terms of their rapid characteristics of development (Heenan & Keegan 1979).

Turkey, as a country which is situated between Europe and Asia, has shown dual characteristics. It is one of the newly industrialised countries of Asia, like Korea, Taiwan, Singapore and Hong Kong, as well as European countries which have developed lately, like Spain, Greece, Portugal and Yugoslavia. From this point of view, special attention has been paid to the Turkish Case. As a country of 52 million population with vast resources, a disciplined work force and trained managers, mainly U.S. style, Turkey has emerged as one of the fastest developing countries in the OECD (OECD 1982). Turkish multinationals have achieved £10 billion book totals in 1982 and the export has increased 34% in the same period and 54% in 1981. (Tonge 1982) Turkey is one of the highest growth rate obtained countries of the OECD. A five year development policy which was based on liberal economic measures and export promotion as well as foreign investment encouragement strategy have started to produce positive results. Turkish firms, prior to these economic measures, have been forced to find solutions to their problems of scarcity of spare parts, machinery, semi-finished goods and finished goods due to the economic crisis period of 1976-1980.

The lack of foreign currency was the main reason for severe restrictions imposed on imports to the country, because of huge petrol bills. And politically the country was in a chaotic situation caused by rival political parties and leaders. The crises period had a positive effect on the Turkish industry by forcing it to find alternative ways of production of spare parts, machinery, semi-finished and finished goods as well as manufacturing technologies.

Research Methodology

The Tax list of the Turkish Finance Ministry was used as the basis of the survey. From that list the top 50 private manufacturing firms were chosen and a structured questionnaire was sent to them. After a follow-up letter and some telephone calls 50 of them returned but only 41 of them were in useable form for the purpose of the study. 9 companies were working under licence contracts, so they are not covered in this study. 6 companies out of 41 have shown similar characteristics. For that reason, the author interviewed the Chief Executive Officers of them later; trying to see their characteristics and discuss their policies in detail. These 6 companies have shown an Imitative Innovator characteristic while 35 of them could be classified as Innovative Imitators. 50 firms subject to this survey represent more than 50% of the total production of the Turkish Private sector. The public sector companies which are called State Economic Enterprises were not included in this study, because of the difference in their approach to the acquisation of technology. State Economic Enterprises are centrally directed in their major strategies by the State Planning Organisation, an office under the control of the Turkish Prime Ministry.

Research Findings

35 firms out of 41, can easily be grouped under the title of Innovative Imitators, and the remaining 6 as Imitative Innovators. Although basic characteristics have shown some similarities, Imitative Innovators seem to be more "open" to foreign markets and technologies. They have also shown some differences in their organisation structures, approaches to the future, personnel characteristics, R&D appreciations and some other aspects. They can also be classified as the Innovators because of the nature of the products in the market. They introduced some of the products to the local market themselves. Innovative Imitators have shown Early Adopter characteristics (Baker 1975). These firms have shown some similarities to the Characteristics of Technically Progressive Firms, as analysed by Carter and Williams (1959). The following tables show the characteristics found common among the 6 Imitative Innovator and 35 Innovative Imitator firms.

TABLE I
DISTRIBUTION OF MANUFACTURING FIRMS ACCORDING TO THEIR PRODUCTS AND INNOVATIVE CHARACTERISTICS

Products	Innovative Imitators	Imitative Innovators
Refrigerator	1	1
Washer	1	1
Chemical	5	1
Radio	2	-
Heating Appliances	3	2
Auto Spares	8	-
Electronics	6	-
Television	2	-
Building Material	7	1
Total	35	6

TABLE II
CHARACTERISTICS OF THE FIRMS

Nature	Innovative Imitators	Imitative Innovators
Market	Local	Local and foreign
Technology Adoption Characteristics	Early adoption	Innovators
Structured Organisation	Low	High

Nature	Innovative Imitators	Imitative Innovators
Information Personnel	As a member of production team	As a specialist
Customer Contact	High	High
Market demand	High	High
Relationship of Personnel	Highly informal	Informal
R&D Appreciation	Low	High
No. of Technical Graduates	Low	High
No. of Marketing Personnel	Low	High
Machinery	General Purpose	Highly specialised
Production	Manual & Semi-Auto	Semi-Auto & Automatic
Management	Non-structured	Structured
Advertising Campaign	Agency & No Agency	Special Dept. & Agency
Legal Form	Single Prop.& & some Corp.	Corporation with Stock Exchange
Export	None or few	More than one
Anti-EEC Feeling	High	None
Nationalistic Feelings	High	Moderate
Using Turkish Workers as Advisors	High	Moderate
Defined Reward System	Low	High
Selling shares to Immigrant Workers	High	High
Using State Information Sources	High	High
Belief in the importance of Imitation	High	High
View of being Middle East Japans	High	High
View for future	Short or Mid-Term	Long-term
Belief in Social Involvement	High	High

Common Characteristics of the Imitative Innovators

1. Availability of technically minded top managers, mainly engineers by origins, either by way of formal education or by way of experience.

2. A group of design and engineering personnel, continuously searching new options, new products and manufacturing systems, by visiting international trade fairs, attending technical congresses and following the technical literature at international level.

3. Special visits to main customers and sales organisations to seek advice on the features and designs of the products.

4. A common nationalistic belief to be successful and to be proud of producing something in the country.

5. A participative and democratic management for the designers and engineers.

6. Defined reward system for the successful designers and imitators.

7. A stringent financial policy, which led them to create ways to save inputs.

8. To sell shares in Western European Countries to the Turkish immigrant workers and use this source to finance the transactions taken place abroad.

9. To visit and seek advice from the state, mainly Turkish Scientif & Technical Research Council (TUBITAK) and its' Technical Information Centre (TURDOK), as a source of technology transfer, based on documents and publications.

10. An appreciation of R&D in the process of technology generation.

11. To have a long-term view of being "the Japanese Entrepreneurs of the Middle East".

12. An informal relationship among the top management and the production and marketing personnel.

13. A common belief that "innovation starts with copying".

14. Using some friends and relatives of the work forces of the companies employed in the Western European Countries as technical advisors for critical stages of production.

Conclusions and Implications

The Turkish example may be used by some other industrialising countries, who are facing severe foreign currency restrictions, for a certain period of time. When things get better in the economy, this way of production methods might be applied in more structured and planned manner, leading to similar activities as carried out by the Japanese firms in the early days of Japanese industrialisation. Expatriate workers, their financial supports, as well as their expertise might be utilised by their home countries. Nationalistic feelings may be used to play a stimulant role to induce the desire to produce something locally and may also be seen as a factor to encourage entrepreneurial activities. Although there are very few studies made in the area of Imitative Innovations and Innovative Imitations, this case study coming from a newly industrialised country may affect other researchers in different countries to carry out similar studies. In order to generalise some conclusions worldwide; several studies need to be made on a comparative basis.

References

1. Baker, J. Michael Market Development (Penguin, Middlesex)

2. Baker, J. Michael Marketing New Industrial Products (MacMillan, London)

3. Bigoness, T. William and Perrault, Fr. William D. Academy of Management Journal (Vol. 24, No.1)

4. Carter, C.F. and Williams, B.R. "The Characteristics of Technically Progressive Firms" Journal of Industrial Economics (March)

5. Havacek, J. D. and Thompson, V.A. "Bureaucracy and New Product Innovation" Academy of Management Journal in Midgley, F. David, Innovation and New Product Marketing (Croom Helm, London)

6. Heenan, A. David and Warren, J. Keegan "The Rise of the Third World Multinationals" Harvard Business Review (January/February)

7. Kelly, P. and Kranzberg, M. Technological Innovations: A Critical Review of Current Knowledge in Kimberly, John R. and Evanisko, T. Michael "Organisational Innovation" Academy of Management Journal (Vol. 24 No. 4)

8. Kingston, William Innovation; The Creative Impulse in Human Progress (John Calder, London)

9. Kotler, Philip, Marketing Managements: Analysis, Planning & Control (Prentice-Hall, London)

10. Levitt, Theodore "Innovative Imitation" Harvard Business Review (Sept./Oct.)

11. McCarthy, Jerome, E. Basic Marketing (Richard, D. Irwin, Illinois)

12. OECD - Economic Outlook (December)

13. Oldham, Freeman and Turkcan, The Transfer of Technology to Developing Countries (UNCTAD,TD/28)

14. Rogers, E.M. and Eveland, T. D. "Diffusion, Communication and Innovation in Organisations" in Bigoness and Perrault, op.cit

15. Tonge, David "Turkey: Export Successes on a Grand Scale" Financial Times Survey (December 17)

TEACHING MARKETING IN CHINA

James M Livingstone, The Queen's University of Belfast

Abstract

This paper describes an introductory marketing course taught to MBA students of the State Economic Commission, Beijing, China. The linguistic, cultural and ideological background of the students required a unique 'hands on' approach in a society where marketing is in its infancy.

Initially class assignments concentrated on marketing problems of a very familiar product, the bicycle. At later stages, two major assignments were a market audit of a Chinese Enterprise, and a MR survey of a Beijing Department store - almost certainly the first such survey carried out in China.

The paper analyses the problems and advantages of such an approach.

Background

This paper describes some of the problems of teaching marketing and related management subjects in China, at a time when that society is undergoing vast ideological and social change.

The background to the paper was the inauguration of an EEC sponsored MBA programme for the State Economic Commission, one of the central Departments in the Chinese government machine. The course which was held in Beijing was taught in English by academic staff selected from major business schools throughout the European Community and was administered jointly by a European Dean and his Chinese counterpart. It was funded for a period of five years by the European Economic Community via the European Foundation for Management Education. During the five years it was hoped that two complete MBA courses could be run, and that, at the end of each course, the students could be placed in European enterprises for about six months.

The programme also called for the training of Chinese lecturers to replace the European staff at the end of the period; these lecturers would be supplemented by the recruitment of a number of the successful graduates.

Although there are a number of Western and Japanese training courses operating in China, the only directly comparable course is probably that offered by a teaching team from the University of Buffalo at Dalian, which began at approximately the same time (early 1985). The educational philosophy behind the Dalian MBA appears to be markedly different from that of the European course, and there can be little doubt that in time, the pooled experience of the two approaches will make a useful contribution to management education in China, and other Marxist oriented societies.

The Beijing course consisted broadly of nine modules, each of eight weeks spread over a two year period, with related requirements in work experience and 'hands on' experience in Chinese Enterprises. In the initial stages each module consisted of a teaching programme of three related management subjects. The first module to be taught consisted of courses in Accounting, Marketing, and Production, and involved approximately 42 hours of classroom teaching in each subject. The students themselves (35 in all) were graduates, mainly in engineering.

The general pattern was that during the first five weeks of the eight week course, students would have three hours classroom work daily Monday through Saturday; the afternoon was used for group work and reading. In the sixth week the students in groups of five or six were engaged in research in selected Chinese enterprises. Six enterprises had agreed to co-operate for the two year period and during each of the first seven or eight modules the student teams would spend one week full-time in the plant in effect applying the knowledge acquired during the module. In the seventh week, the normal classroom pattern was resumed but the groups spent the afternoons in preparing a report on the enterprise visit. The eighth week consisted of oral presentations of the reports, the final lectures, followed by the examination.

The Problems in Teaching Marketing

The preliminary discussion, as well as the collective experience of academic staff who had taught in other developing countries suggested that there would be a number of problems, which could be conveniently classified under two headings:

Language
Ideological and Cultural.

Language

The thirty-five students had been selected after rigorous examination and testing; part of the requirements was some knowledge of English. After selection and before the MBA programme began, they were given a very intensive six months English teaching programme by language specialists sent across from the Manchester Business School, England. At the same time four Chinese instructors, whom it was intended should become part of the permanent teaching faculty when the European teachers were phased out after five years, were brought over to the Manchester Business School for an English learning course, combined with visits to industrial concerns in Western Europe.

It could be assumed therefore that students had a reasonable grasp of English, and could, if necessary, seek advice from the Chinese academic staff. In practice of course it was realised that there would be considerable difficulties, not only in aural comprehension and discussion, but also in the speed at which the students could be expected to read text books. The situation was also complicated by the fact that not only were the students working in a foreign language, so also were staff drawn from continental Europe. Although all the latter spoke English fluently, the variation in accent could cause problems. Indeed the problems were not confined to non-native English language Europeans. In the first module the students as well as having to cope with a Dutch accent, were also exposed to an Irish and a Scottish accent - and had least difficulty with the Dutch Professor!

To an extent however, the problem went beyond the students' need to acquire a working knowledge of English very quickly; part of the problem lay in the structure and content of the Chinese language, where no ready equivalent of some management terms could be found, and where for example, the absence of a conditional or subjunctive mood in the Chinese verb made it desirable where possible to avoid too heavy a reliance on abstract terms, "would", "should" etc. Some of the written material issued might appear stilted, but was deliberately written in this manner to avoid use of verb moods not available in Chinese.

In the event, the students after some initial difficulties, coped remarkably well in understanding spoken English and taking part in discussion. A summary of the proposed lesson issued in advance helped considerably, but the difficulties of reading, particularly of texts of an unfamiliar subject, remained. As a rough and ready guide, it was possible to require only about twenty pages of reading from text books per night during the first module, although reading speed could be expected to improve throughout the course.

Ideological and Cultural Issues

Some of the former in particular, are fairly obvious in the context of a Marxist society. The problem of dealing with some marketing concepts where prices are fixed by the State are clear, and there were clearly a number of potential pitfalls on the ideological side. The lectures and examples were, as far as possible, presented in ideologically neutral terms, but the situation was not eased by the fact that there was a degree of confusion among the Chinese staff and students about the extent to which the New Economic Reforms being pursued by the Government were, in effect, changing the ground rules. To what extent, for example, could one assume that enterprises would in future have some discretion in fixing prices, choosing their own suppliers, and finding their own customers?

The Chinese economy has operated substantially as a seller's market, where virtually any products had a guaranteed sale, usually within the same municipality or province. Even where an enterprise or a customer was supplied with products of an unacceptable standard it was difficult to reject them because any loss of goodwill on the part of the supplier could have unfortunate effects on future supplies.

Three other less expected phenomena were quickly identified. The first was that the ideological and cultural system tended to produce a situation where personal responsibility was minimalised. There were relatively few rewards for outstanding individual effort, but more obvious punishments where an individual's actions were disapproved of by his or her work unit or the community in general. China in this sense is not a risk taking society, and this was marked among the students who in general had experienced considerable personal hardships during the cultural revolution. Indeed it could be argued that the biggest risk the students themselves had taken in recent years was to apply for a place in the course which might seem a route to rapid promotion. The students had been sought by press advertisements which encouraged them to apply for a place without if necessary the prior agreement of their work unit, on the basis that if they were accepted, the State Economic Commission would negotiate their release by the work unit.

The second factor in the situation was the degree of verticalisation and in consequence suboptimisation in society. There appeared to be little interest in or knowledge of other institutions even within China, outside the work unit or the Ministry in which an individual worked. This appeared even to be reflected in the provincialisation of the economy. Before the Economic Reforms, regions and municipalities were almost autonomous city states accepting the authority of Beijing and the Central Committee of the Communist Party, but more concerned with their relations to the central authority and within their regional boundaries, than with other parts of China. Work units and the institutions above them tended to maximise their own advantage, rather than assume a national view. Enterprises traded with other local enterprises, and even if the same product was available from another source or at better quality elsewhere in China, it was not very easy to secure alternative sources or customers. The factors of verticalisation, the relatively weak financial disciplines created by a situation where costs and profits alike were absorbed by the State, and relatively poor infrastructure effectively destroy the theory of China as a market of one billion individuals. More realistically it is a string of semi-isolated communities mostly near the coast, based on the cities and municipalities.

The third factor is the enormous importance of personal relationships, rather than strict adherence to organisation charts. The Chinese administrative system works in part in terms of authority, in part in terms of guanxi, ie. influence and personal friendship and obligation. The equivalent in relationship to the foreigner is probably the concept of the 'Friend of China' who is acceptable. But the practical effect is that in Chinese terms it is difficult to get clear cut, quick decisions based on impersonal relationships, or relationships, based on respect for qualifications, in which the state of friendship between the two parties is not really vital. Negotiations in this sense could be prolonged and frustrating; but the obverse side of this was probably that as confidence builds up, the strain on the foreign teaching staff will become progressively less over the five years during which the EEC project is to run.

The Marketing Course

The structure of the course was fairly orthodox; an introduction to the Marketing Concept: Market Research: Product Policy, Advertising and Promotion: Pricing Policy: Packaging:

Distribution: and International Aspects of Marketing. The major problems however were likely to be to develop materials to reinforce the textbooks which were of limited relevance having been written in a Western context; at the same time to co-ordinate with the other two subjects being taught simultaneously, in order to emphasize the fact that all three subjects were interdependent facets of the general management situation; and to meet the need for 'hands on' experience, as far as this was practical.

Another problem which loomed large in the first week or two, but which declined with increasing familiarity, was the teaching style. A Chinese acquaintance had previously remarked to the author, vis a vis teaching, "We Chinese have good ears". Traditional Chinese educational methods have depended on very intensive rote learning and repetition - and if one considers the problem of learning to read and write the minimum of several thousand ideograms which even a moderately literate Chinese has to master, the merits of the system are obvious. Nevertheless an environment where the students on an MBA course, with a wealth of practical experience behind them, would simply listen attentively, take notes, and if required reproduce these notes without comment or interpretation, would have been unacceptable in Western MBA training. It did not come easily to the students to express any degree of difference of opinion with their professors, and they were clearly highly anxious to avoid creating a bad impression by disagreeing with the foreign instructors. They had to be persuaded that their own experience was highly relevant and that they were not in the classroom to engage in a one way communication system from teacher to student. It took some time, but by the end of the first module, a more relaxed attitude, and a readiness to express individual views had begun to appear. The students were beginning to enjoy the course.

In a sense however, Marketing and the Marketing Concept was arguably a fuzzier concept to teaching in an alien culture than the more quantitative courses in accounting and production. Marketing did initially cause more anxiety to the students, than more overtly quantitative disciplines.

In spite of the orthodox nature of the Marketing Course structure, the course began in a slightly unorthodox way. The instructor having introduced himself, simply chalked up on the blackboard the Chinese expression zhùyì

注意!

This and its Japanese version which also uses the Chinese ideograms, is a familiar traffic sign in both countries. It simply means "Caution", "Beware" or "Be Careful".

When the students had absorbed the symbol, the instructor made the point that it was essential to beware of a too facile application of Western techniques in Marketing to China. Marketing techniques were not textbook formulae or cook-book recipes which could be applied indiscriminately to conditions anywhere. An elementary point perhaps, but one which has to be emphasized again and again in any non-Western Developing Country. On this occasion the point was made at perhaps inordinate length, and the ideogram was repeated in later weeks when necessary, to emphasize that western techniques and western textbooks had to be used with extreme care, not simply memorised and applied.

The first three hour session thereafter consisted of the distribution of a series of statements or opinions about the lives of men and women in Western Europe which were broadly true in all of the (then) ten members of the European Community, followed by a discussion.

These statements/assertions were intended to bring out the implicit assumptions about society on which American or European textbooks were based. They were not likely to appear in such textbooks because they could in effect be taken for granted by the authors and their western readers.

The intention of the discussion was to drive home the point already made about the danger of assuming that what was true of one society in marketing terms was necessarily true of others; a secondary point was to illustrate that most of the statements, although superficially social or political, could readily be reinterpreted as clues to market segments, among elderly people for example, or followers of specific hobbies developed in cultures with considerable leisure etc: to emphasize in fact that there was no homogeneous market, but an almost infinite number of market segments in a society, which might be identified and catered for.

All of this and the comments on the Marketing Concept, as it could be applied in China, were less concerned with hard facts than beginning the process of getting the students in a frame of mind to challenge assumptions about what was possible in Chinese markets or indeed the status quo which appeared to prevail in a given market situation.

The need for such a 'stirring up' was graphically illustrated by the other activities which were being carried out in parallel with the formal lecturing. Each student group of five or six had, it has been noted, been allocated for the next two years to one of the six enterprises which had agreed to co-operate. As a first stage before even being introduced to the enterprise, each group had been required to produce a sectoral report on the industry represented by the appropriate enterprise. What emerged from these first reports was evidence of extensive research for information, but a totally uncritical acceptance of the optimistic picture of the industry which emerged. The students had not appreciated that a chart showing a steady growth of the production of motor vehicles, but which aggregated everything from earth moving vehicles to saloon cars, was meaningless; or that an equally rosy picture of the steady growth in the output of tape-recorders in China, which did not distinguish between the total assembly of imported components, production with local content, or production of locally designed and produced units, was of little value. Nor could for example statements of consumer satisfaction from producers, but not from the customers, always be accepted as objective fact. During the presentation the students were given a fairly severe interrogation about the detail of the statistics they had presented, simply to reinforce the point that an enquiring frame of mind, rather than uncritical acceptance of statements (including statements made by foreign experts like the faculty members) was a sine qua non of progress in a Western style of management education.

The course was now developing along orthodox lines so far as subject matter was concerned. The problem was to set tasks for the student groups which would simultaneously test their comprehension of the lecturers and the accompanying limited readings from Western textbooks on the one hand, and the need for immediate relevance to Chinese conditons, on the other.

For the first three weeks of the course, much of the student work load in all three subjects was centred on a very familiar product - the bicycle. There are some four million bicycles in Beijing and the students arrived every morning at the management centre on a variety of bicycles from a humdrum battered machine to the Rolls Royce of Chinese bicycles, the Flying Pidgeon. The first exercise was simply to compel students to think in terms of possible market segments for a new type of bicycle, by requiring them to produce up to 20 market research type questions on what the man or woman in the Beijing street wanted in a bicycle. It was paralleled on the Accounting and Production courses by related exercises on the same bicycle theme.

The second exercise expanded the bicycle theme. The groups were each given a special interest bicycle magazine together with a brochure containing specifications of the Sinclair C5 an electric three-wheeled vehicle launched in Britain some four months previously, and some background material on its possible market. They were then asked to produce a customer 'profile' for the magazine and questions about a possible market strategy for the Sinclair vehicle. The answers required from the students were less important than the lessons to be learned, namely the need to identify market segments for a product, including a magazine, and awareness of an ongoing (and potentially risky) decision to launch a brand new product, which was incidentally taking the manufacturer into a wholly new market with all the attendant risks and possible rewards of product diversification.

The timing of the Sinclair C5 launch was particularly apposite, because it was manifestly not a textbook case but a current situation, the results of which were likely to be available long before the MBA course had finished.

This material had been prepared in advance, but it was clear that in this relatively new management education field, some decisions would have to be made in mid-stream, so to speak, and such a situation developed at the end of the first week, to be implemented during the next four weeks. A stroll around Beijing at the end of the first week not only showed how rapidly the economic situation had changed even during the two years since the author's previous visit; more importantly, it identified a large western type departmental store, which was to prove an excellent subject for 'hands on' experience by the students in carrying out consumer market research.

Details of this Market Research project and the results are to be found in a separate publication, but in brief, the management agreed to a survey being carried out, and during the next month in addition to all the other work in hand, the student teams found themselves preparing and revising a questionnaire, learning in the process the problems of setting questions and coding questionnaires, before administering the questionnaires to over 400 shoppers during the seventh week of the course- a highly educational experience for all the students concerned.

To return to the situation by the end of week 3, the theme of the bicycle was now dropped because the students were becoming more and more involved in preparing for the enterprise audit which was to occupy all their time in week 6. Again it was important that all three topics taught in the module should be co-ordinated; what in effect the students were going to have to do was to examine the enterprises, using the Western techniques they were being taught, and to reproduce as far as possible in terms of inputs and outputs, the activities of the enterprises in Western terms. As an aid to the process the students were given a tentative series of questions, from which they were to derive questions which would be more appropriate in the Chinese context, and use to carry out an audit of the enterprise.

It has to be admitted that initially at least, the question frame issued to the students had only limited success. As one participant remarked, it was regarded as an Imperial Decree to be implemented without argument, and it was only after the students reported back on their deliberations after some ten days, and were fairly ruthlessly criticised for failing to develop the original questions, that they realised how much success or failure in the enterprise audit would depend on their own efforts.

In the meantime however, apart from the students' work on readings, preparing the Market Research Questionnaire, and the Audit questions, the lecturing programme continued. The students who had felt rather underworked during the first week were beginning to appreciate the degree of concentrated work which was required in a Western type MBA.

At this stage ie. during discussions on advertising another 'hands on project' was introduced, to be developed at a later stage in terms of packaging. The instructor had brought to China six sets of fifteen examples of British packaging, varying from detergent packets and breakfast cereal containers to processed food, both British and foreign, cigarette packets etc. Seventeen features had been identified and numbered on one or two of the packages. The students were required firstly to identify the features on the other packaging material, and over the next week or two collect as many specimens of the equivalent Chinese packaging for comparative purposes. By the time the class were ready to discuss packaging in week 7, they were in a position to make some judgement on which features of the British packaging were desirable or acceptable in the Chinese context: they were also asked to reverse the situation and discuss what lessons might be drawn for British manufacturers from Chinese packaging.

Although the intention was to collect questionnaires on the packaging, pressure of time and the imminence of the final examination in the event precluded this, and a general discussion had to be substituted.

To revert back, however week 6 consisted of research and the gathering of material inside the enterprises for the audit. In week 7 in addition to lecturing and preparation of the Report on the Enterprise Audit, students carried out their Market Research Survey in the Departmental Store. In week 8, the presentations were made on the results of the Enterprise visits, and the examinations were held. Finally, some weeks after the end of the module, and before the next module began, each group had to produce a detailed report on the Enterprise visited, on the lines already indicated.

Conclusion

After only the first module of a nine module, two year, course it would be foolish to draw definitive conclusions. Nevertheless some encouraging points emerged. Firstly, and most striking, was the degree to which the students' relationship with the European instructors relaxed and became rather similar to the western type of relationship between MBA students and staff; secondly there was already evidence of a far more critical analysis and frame of enquiry, when the final reports were delivered. Compared with the sectoral reports on industry, the final reports were a good deal more critically focussed, with the teams identifying positive strengths and weaknesses, not only in the Enterprises but in the applicability of Western techniques to Chinese conditions.

The objective of the course is not to substitute Western management techniques for those which have developed in China from tradition and ideology, but rather to provide an alternative approach which may be more appropriate on occasion. In time the Chinese will have to develop their own synthesis of their traditional methods and Western methods, as the Japanese have done. The first indications are encouraging.

RETAIL FOOD DISTRIBUTION IN A SOCIALIST STATE: THE POLISH EXPERIENCE

Robert L. King, The Citadel

Abstract

Retail food distribution in Poland is essentially the responsibility of a cooperative organization, SPOŁEM, rather than a state enterprise. However, SPOŁEM's operating practices reflect traditional socialist thinking with regard to product availability, pricing, and promotion. This paper examines the status of SPOŁEM's physical facilities, product assortment, and pricing and promotional practices, and identifies some current social and economic trends in Poland which will require SPOŁEM's management to reevaluate its marketing practices.

Introduction

This paper examines the institutional structure and methods of operation of one sector of the Polish economy, retail food distribution. It describes the general system of retail food distribution, and identifies some of that system's unique operating procedures and their implications for consumers. Since socialism takes various forms in different countries, it cannot be assumed that the Polish experience is closely representative of the socialist world. However, more detailed knowledge of the Polish situation provides a factual basis for initiating cross-system analysis, and for building better understanding of socialist distribution systems in general.

Background -- The Past Forty Years

Over the centuries Poland had been essentially an agricultural land, but the socialist government preceived post-1945 Poland as an industrial state. As recently as 1946 approximately two-thirds of the population resided in rural areas. However, as new industrial centers were created and existing ones expanded, the urban population grew dramatically. By 1965 about one-half of the Polish people resided in urban areas. Today, approximately 60 percent of the nation's population of 38 million are urban residents.

Migration from rural to urban areas has been accompanied by increased reliance on specialized institutions of mass food distribution, rather than on a high degree of self-sufficiency, as in the past. The new situation is fraught with social, economic, and political implications, encompassing a variety of marketing concerns such as food shopping convenience, product availability, and prices, for example. These concerns have been sufficiently strong to test the political stability of Poland's government in recent years.

While much has been published in the popular press about the low prices of subsidized food products in Poland, the fact is that food remains by far the largest item of expenditure in the Polish family's budget. Official statistics inidicate that food expenditures represented approximately 40 percent of per capita expenditures by Polish families in recent years (Rocznik Statystyczny). Food purchased in restaurants typcially represents only about 6.4 percent of per capita food expenditures by "workers'families," and well under one percent by farm families. Consequently, the nation's retail food stores occupy a position of singular importance in the life of the Polish people.

The SPOŁEM Organization

Privately-owned retail shops and individual farmers' sales account for only a small part of Poland's retail food sales. By far the largest retail food distribution organization is SPOŁEM, a cooperative which is responsible for food retailing throughout the nation's cities and towns. A separate cooperative serves the rural areas, providing consumers in the countryside with food products, general merchandise, and farming equipment and supplies, and in turn buying agricultural surpluses from them. It is the SPOŁEM organization, however, that bears the greatest responsibility, and upon which this discussion of food retailing in Poland will focus.

SPOŁEM was not created by the post-war socialist government of Poland. Rather, its origins are found in the nineteenth century Rochdale cooperative movement in England. SPOŁEM has operated in Poland as a cooperative since 1869, although its present activities extend far beyond retail food store operation. Today the organization provides its own wholesaling and warehousing support, produces bread and other products for sale through its retail outlets, and operates a nationwide chain of restaurants, candy shops, and small kiosks selling a wide variety of convenience items.

In a demonstration of belief in the view that "social control is more effective than state control," at least in so far as quality and freshness of food products are concerned, the government gave SPOŁEM full responsibility for urban-area food retailing in the mid-1970's. Previously, SPOŁEM shared this responsibility with a state enterprise. SPOŁEM executives take pride in the organization's membership committees which provide some consumer-oriented feedback to management.

The political district (voivodship) of Wrocław provides a useful example of SPOŁEM's cooperative structure and operation. The voivodship includes the city of Wrocław, one of Poland's four largest cities with a population of approximately 600,000. In total, the voivodship includes 800,000 "consumers," of whom 80,000, or ten percent, are SPOŁEM cooperative members. They pay a token charge for membership (500 złotych, or about $10.50 at the official exchange rate per share, up to a maximum of ten shares), and they receive a symbolic annual dividend (approximately 21 percent of the cost of the shares).

While SPOŁEM stores sell to everyone at the same price without regard to membership in the cooperative, special benefits and privileges are offered only to members. For example, SPOŁEM provides its members with a variety of educational forums, and lower costs on tailoring and shoe repair services. But some SPOŁEM services are available to the entire population in the voivodship of Wrocław, including access to 9 general interest clubs, 11 children's clubs, 17 amateur choir and dance ensembles, 20 artistic groups for children, 30 spots organizations, 28 collectors' groups (e.g., stamps and coins), and 11 libraries.

The principal focus of SPOŁEM's management, however, is on its food retailing operations. In 1984 within the Wrocław voivodship alone the cooperative produced a sales volume of 43 billion złotych (approximately $430 million) through its 900 stores and shops, and 156 retail kiosks in the area.

SPOŁEM employs 14,500 persons in its processing, wholesaling, and retailing activities in the voivodship. The remainder of the paper is an examination of the cooperative's retail food store operations nationally, with occasional references to operational data from the Wrocław voivodship.

Physical Facilities

Even with its staggering construction programs of the past forty years, Poland has not caught up with the demand for residential and commerical building space. The pressures caused by severe property losses during the war, a continuing migration of the population to urban areas, and natural growth of the population continue to be felt throughtout the nation.

SPOŁEM, along with other organizations and individuals, is directly affected by the shortage of facilities. Its stores are a hodgepodge of old and new, of comfortably large and inadequately small, specifically designed for food retailing and makeshift conversions of general-purpose facilities, and of self-service and clerk-attended units. Operational problems associated with physical facilities are readily acknowledge by SPOŁEM's leadership which has developed proposals and blueprints aimed at correcting these problems. Ultimately, the allocation of physical facilities between residential and commerical uses is the responsibility of higher central authorities, who themselves are subject to a staggering variety of economic, social, and political pressures in making their decisions.

Some physical features of the Polish self-service supermarket are similar to those in their American counterpart: shopping carts or baskets are located near the entrances, stores are organized along departmental or "related items" lines, and a bank of checkout counters separates the shopping area from the exits. However, the differences between Polish and American supermarkets are pronounced. For example, a typical urban area in Poland is served by a comparatively large number of relatively small stores, conveniently located near consumer's places of residence. Official guidelines in Wrocław, for example, presently set a "goal" of 300 meters maximum travel distance from places of residence to the nearest SPOŁEM store. Not surprisingly, even in the densely populated apartment areas of Wrocław, this severe test typically is not met, and the "goal" will be revised. Even so, few urban shoppers presently must travel more than a few city blocks to reach a SPOŁEM store.

But these stores typically are extremely small by American standards. SPOŁEM management has indicated minimal floor space needs of 400 square meters for a satisfactory retail store operation. Presently in Wrocław, however, only about 60 percent of SPOŁEM's sales are made in stores of this size or larger. The area's largest store contains only 1,500 square meters of floor space, but two larger stores are under construction. A "typical" store has three operating checkout positions. Automobile parking space specifically provided for supermarket shoppers is extremely limited. This is in keeping with the low level of private automobile ownership in Poland (there is approximately one privately-owned vehicle available for every ten families), and with the custom of consumers making frequent shopping trips on foot to neighborhood food stores (See King, 1980).

Whether this arrangement of numerous, small food stores produces the desired consumer convenience, however, is a matter of some speculation. In so far as the retail units may be too small to carry an inventory of the desired assortment of available goods, thereby requiring shoppers to go to additional stores in search of items not available in the first store, inefficiency and inconvenience are introduced into the shopping process. Similarly, these conditions generate substantially more "store traffic" than would exist if the first store had the full line of merchandise in stock. As as result, the small stores become very crowded (see King, 1979 and 1980).

Store aisles tend to be quite narrow, barely permitting two customers with small sized shopping carts to pass each other. Since much restocking of shelves must be done by store personnel during operating hours, the traffic flow through stores is seldom smooth, especially during the hours of heavier shopping activity. Interestingly, all four wheels on Polish shopping carts are hinged, permitting the shopper to reverse the cart's direction of movement within the area of its own dimensions. This "technical capacity" to maneuver, in combination with the Polish shopper's erratic path of movement through the supermarket, creates a disruptive and inefficient flow of traffic. A more planned or directed traffic flow within stores seems warranted.

Related to in-store traffic flow is the operation of shopper queues. Queues are more common at meat shops than at supermarkets, given the chronic shortage of meat in Poland. However, queues also form occasionally outside of supermarkets which do not have meat departments, or which simply do not have meat available. There are two primarly reasons for such queues: (1) some typically scarce item (e.g., bananas) is momentarily available, and area shoppers quickly become aware of the fact, generally by watching the shopping bags of customers exiting the supermarket; or (2) all shopping carts or baskets momentarily may be in use, causing a line to form at the store entrance, and to advance as carts or baskets are released by their previous users. The latter use of the queue (or, more correctly, limiting the number of shopping carts and baskets available) provides store personnel with some control over the volumme of traffic in the store. However, some observers have noted that the managerial intent may be directed more toward pilferage control than traffic control (see King, 1980).

Queues also form inside the self-service supermarket. The most persistent queue (as is also true in the American supermarket) is at the checkout counter. Given the heavy store traffic and limited number of checkout positions in operation, queues of eight to ten shoppers at each position are common. Surprisingly, the queues advance quickly, probably more a reflection of the small number of items typically being purchased than of the efficiency of frequently surly checkout personnel. However, queues at the checkout positions occupy much of the limited aisle space in the store, often reaching one-third to one-half of the depth of the limited shopping area, and significantly impeding the movement of shoppers (see Turcan, 1977).

A second type of in-store queue forms in specific departments of a food store which either (1) is strictly non-self-service (e.g., clerk-attended alcoholic beverage and meat departments), or (2) has available temporarily a normally scarce product (e.g., bananas). In the latter example, the shoppers who waited in a queue outside the store because of the scarce item's availability must join a second queue inside the store to gain access to it. Disinterested shoppers can bypass the second queue, but not the first. While the checkout facility physically resembles its American counterpart, its operating procedures do not. Items being purchased are not placed individually on the checkout counter. Rather, they are left in the shopping cart or basket, where they are visually observed and registered by the attendant. This procedure is workable due to the small number of items typically purchased (generally five to ten). Stores do not provide bagging services and supplies. The shopper advances his cart or basket to a counter beyond the checkout position, where he places his purchases into his own shopping bag, and returns the cart or basket to its original location or turns it over to another shopper who is waiting for one. The few shoppers who travel by automobile to the supermarket (estimated to be no more than one in one hundred) carry out their own purchases, whether few or many.

In clerk-attended (i.e., non-self-service) food stores, items are organized into departments, or natural groupings of merchandise. Several sales positions are established around the store, usually one for each of the departments. One or more clerks at each position serve the shoppers who form a queue at that position. Consequently, the shopper who wishes to buy items from throughout the store must wait in each of the respective queues, a time-consuming process. Not surprisingly, the average family invests one hour or more per day in food shopping (King, 1980).

Store maintenance, especially with regard to store cleanliness, appears to be an unresolved operating problem in the Polish supermarket. In part, the problem reflects the very heavy use made of the facility. Also, it reflects the condition in which the store receives its inventory. Processers often ship containers which overflowed when originally filled, without cleaning them properly. Consequently, containers become sticky, and the residue is carried over to display shelves, shopping carts and baskets, and eventually to the customer's shopping bag and kitchen counter and cabinet. Frequently, labels are not securely attached to product containers, creating unsightly displays and littered shelves and aisles. Some stores place large baskets or other containers for returned bottles at the head of the checkout positions, adding clutter, slowing down the checkout operation, and sometimes stopping it altogether when the checkout clerk must move a full container to the storage area (often with the assistance of a second checkout clerk). There appears to be widespread indifferences on the part of store personnel toward store maintenance, and toward store operations generally. Polish observers note that low wages paid to supermarket personnel and to retail workers generally are responsible for much of this situation.

Product Assortment

Retail food stores in Poland are much more limited in their product assortment than are the American counterparts. Food items represent approximately 85 percent of SPOŁEM store sales, and most of the remaining 15 percent is accounted for by health and beauty aids, household soaps and cleaning supplies, and closely related items. SPOŁEM's expansion into additional non-food lines is restricted by the conflicting interests of various state organizations. The product assortment available in a particular Polish supermarket appears to be determined by several factors, the most important of which are: (1) the category of the individual store, (2) the size of the store, (3) central planners' decisions concerning breadth and depth of product lines, and (4) specific product shortages.

Relatively few SPOŁEM stores are operated as full-assortment stores, while many are limited assortment stores. The latter units typically provide only limited meat and produce departments, if any. Their bakery lines may be restricted to basic bread and rolls, while other stores offer a variety of cakes and confectionery items. In many respects the product assortment offered by a typical SPOŁEM store is more like that of an American convenience store, rather than a supermarket.

The amount of floor space available in a particular store places severe limitations on the breadth and depth of product selections which can be offered. As noted previously, SPOŁEM stores are often quite small. For example, in the Wrocław voivodship forty percent of SPOŁEM's sales are made in stores with less than 400 square meters of floor space. The greater part of such limited space is required for the offering of a single size of a single brand of each basic product type carried. Physically, it is impossible for most stores to offer customers much selection.

Decisions of central planners, whether reflecting limited available store space or basic socialist philosophy, restrict product assortment. Many products are offered only by generic type (e.g., butter, jam, and ceylon tea). Even when branded products are available, there is typically no brand competition within the store. For example, only glass containers of "Bulgar" (Bulgarian processed) mixed fruit may be found on the shelves. Or, if Coca-Cola is available, Pepsi-Cola probably will not be, and vice versa. Most of the available items are processed in eastern Europe. While a few products carry western European and American brand names, typically they are processed in Poland or other eastern European countries under licensing agreements. Most items are available in a single size only, further restricting consumer choice.

Finally, product assortment is restricted by a chronic shortage of consumer goods in Poland. It seems useful to identify several dimensions of the problem of shortages. First, there are "real" or quantifiable shortages of some items. As of summer 1985 sugar, meat, and chocolate were still rationed, although the rationing imposed during martial law on butter, flour, cooking oil, rice and other grains had ended. Second, the existing system of small retail stores seems to have created "artifical," or apparent, shortages. Since many of these stores are physically inadequate to carry in stock all items which are available and wanted, the appearance of shortages is exaggerated. Third, consumer hoarding, whether based upon recollection of past shortages or anticipation of future ones, adds to the problem. Finally, a system of "preferred statuses" among consumers has developed, based sometimes on official practices and sometimes on personal relationships, but in either case marginally aggrevating the condition of shortages (see King, 1979; and Matthews, 1978).

Even with existing shortages, Polish supermarket shelves were generally filled until the period of extreme economic difficulty which accompanied the imposition of martial law. When out-of-stock situations develop, shelf-space is quickly occupied by some available product. If no related product is available to fill the display space, then an unrelated product will be displayed. It is not uncommon to see a readily available product like "Eurolemon," a lemon-flavored carbonated beverage sold in liter-sized bottles, displayed in five or six locations within a single small store, even if the shelf display is only a single unit in depth. Before martial law space was not left empty, whether the reason was efficiency of operation or an effort minimize the appearance of shortages.

Pricing Practices

For the most part, retail food prices are identical in all SPOŁEM stores. In the absence of consequential competition from other food retailers, "comparison shopping" for food products based upon price is essentially nonexistant in Poland. Typically, a shopper visits a second or third food store in search of items not available in the first store, but not in search of different brands or lower prices. "Loss-leader" pricing and other forms of price-based promotion which are widespread in American food retailing are viewed as unnecessary and inappropriate in the Polish situation.

Historically, food prices were very stable in Poland. Retail prices for a number of items (e.g., certain kinds of bread, macaroni, flour, rice, Ceylon tea, lemons, oranges and raisins) remained unchanged from 1960 through 1976. A few food items (e.g., cocoa) actually experienced price decreases over the sixteen year period. Most items recorded long-term price increases which are modest by American standards. While Polish food price increases are relatively infrequent, they tend to be substantial when they occur. Since 1982 annual price increases for many food items have exceeded the twenty-year increases recorded between 1960 and 1980.

Polish food price data must be interpreted with considerable caution. First, the official listing of retail prices at defined levels in no way suggests that the products are actually available in the stores. However, when they are available, the listed prices prevail. Second, price listings typically represent a "shopping basket" of items which may not be indicative of food costs, or trends in food costs, for specific families.

In any event, price uniformity from store to store, combined with traditional price stability over time, permitted machine-printing of retail prices directly onto packages and labels until the last four years. Hand-stamping of prices, and the use of gummed price stickers on containers were not common in SPOŁEM stores before 1982. Naturally, a high degree of price stability formerly aided checkout personnel in memorizing prices, possibly speeding up the checkout process and making it more accurate.

Promotional Practices

By western standards formal promotional activity plays a very minor role in food retailing in Poland. Essentially, SPOŁEM is a monopoly operating in a society which philosophically is opposed to western-style advertising. Consequently, the role played by promotion and the forms in which it finds expression are quite different in Poland.

"Pre-selling," western-style, is largely absent in food retailing. As noted previously, brand competition is almost non-existant in SPOŁEM stores. Even the labels and packages of food items seem poorly designed to promote the contents. Rather, they serve to identify the item--often only the generic identification--and to provide minimal protection for handling and to support product freshness.

In-store promotion is "low-key" at best. Few promotional signs and even fewer promotional prices--are in evidence. Large merchandise displays and multiple displays of a product throughtout the store may indicate either conscious promotion of the displayed item, or the efforts toward disguising the out-of-stock condition of other items. There is virtually no "selling effort" in the "Western" sense of the term, even in clerk-attended stores.

"Promotion" is more likely to be interpreted by SPOŁEM's management in terms of its highly visable "good citizenship," particularly in its sponsorship of educational forums and other formal publicity. Opinia, for example, receives government funds for preparing and distributing a series of consumer education booklets and brochures.

From the socialist point-of-view, this is the proper role and use of advertising and publicity.

Conclusions

SPOŁEM enjoys a unique position--and in some ways, a very uncomfortable position-- in the Polish economy. While it is not technically a state enterprise, neither is it a private business. The government is highly sensitive to consumer response to price changes and product availability, especially with regard to food, so basic to daily life and so consequential as a share of the Polish consumer's budget. In a very real sense, SPOŁEM's continued opportunity to serve in its unique status depends upon its performance. Yet, SPOŁEM's management is restricted in many ways in its access to better physical facilities and to sources of supply in the world market).

Operationally, SPOŁEM's leadership needs to be alert and responsibe to changing economic and social trends in the nation. Among eastern Europeans, the Poles are uniquely "capitalistic." Private home ownership in the suburbs and countryside, well removed from the densely populated apartment complexes, is increasingly popular. Automobile ownership, presently at a modest ten percent family ownership level, is increasing dramatically eacy year. The government itself has encouraged consumers to shop away from central city areas by building convenient small neighborhood shopping centers. Presently, approximately 80 percent of the nation's "workers' households" own refrigerators, many with frozen food compartments, and one million additional units are sold annually. Even so, the selection of frozen foods offered in SPOŁEM stores is very limited. While apartments remain small in space-conscious Poland, there is pressure for more spacious, fully-equipped kitchens. National product and retail sales data provide eloquent testimony to the progress being made in the consumer durables sector of the economy. And while most women hold jobs outside their homes, restaurants account for only a small share of the family's food bill, and convenience foods have not yet gained wide acceptance. Each of these factors demands analysis by SPOŁEM's management.

Assuming continued economic gains by the Polish consumer, in spite of dramatic setbacks during the past four years, SPOŁEM may well face a dramatically new environment for its operations in the years immediately ahead. Within the bounds set by the government, SPOŁEM management may find itself making occasionally dramatic and pioneering decisions concerning store size and location, and breadth and depth of product assortment. It should be desirable and possible to experiment with alternative pricing and promotional procedures as well. Already many of these questions are receiving attention, if piecemeal, from the national Trade Research Institute and the research centers at the several academies of economics. Watching the SPOŁEM organization adjust to the conditions of "maturing socialism" in Poland should provide a fascinating and instructive experience for the concerned and informed foreign observer. Conversely, continued economic disruption of the Polish economy would further impact negatively and dramatically upon SPOŁEM's ability to serve its urban customers. An old Polish adage observes that "a hungry Pole is an angry Pole." Ultimately, much more than the fate of marketing structure is at stake in SPOŁEM's performance.

References

Bornstein, Morris (1981), The Soviet Economy: Continuity and Change, Boulder, CO: Westview Press, Inc.

King, Robert L. (1980), "Consumer Shopping Time in Poland: Some Insights from Contemporary Polish Research," in V. V. Bellur (ed.), Developments in Marketing Science, Vol. III, Marquette, MI: Academy of Marketing Science, 104-108.

King, Robert L. (1979), "Some Observations Concerning the Study of Consumer Goods Shortages in the Polish Market," in Howard S. Gitlow and Edward W. Wheatley (eds.), Developments in Marketing Science, Vol. II, Coral Gables, FL: University of Miami, 368.

Matthews, Mervyn (1978), Priviledge in the Soviet Union: A Study of Elite Life-Styles Under Communism, London: George Allen and Unwin.

Mayer, Charles S. (1976), "Marketing in Eastern European Socialist Countries," University of Michigan Business Review, Vol. 28 (January), 16-21.

Pond, Elizabeth (1984), From the Yaroslavsky Station: Russia Perceived, New York: Universe Books.

Rocznik Statystyczny (1984), Warsaw: Glowny Urzad Statystyczny.

Shipler, David K, (1983), Russia: Broken Idols, Solemn Dreams, New York: Times Books.

Simis, Konstantin (1982), U.S.S.R: The Corrupt Society, New York: Simon and Schuster.

Smith, Hedrick (1976), The Russians, New York: Quadrangle/The New York Times Blook Company.

Trebus, Robert S. (1979), "The Socialist Countries," in S. Watson Dunn and E. S. Lorimor, International Advertising and Marketing, Columbus, OH: Grid Publishing, Inc., 349-360.

Turcan, John R. (1977), "Some Observations on Retail Distribution in Poland," Soviet Studies, Vol. XXIX (January), 128-136.

Walters, J. Hart (1975), "Marketing in Poland in the 1970s: Significant Progress," Journal of Marketing, Vol. 39 (October), 47-51.

A PROPOSED CONSIDERATION FOR CROSS-NATIONAL MARKETING RESEARCH

Nancy D. Marlow, Eastern Illinois University
Edward K. Marlow, Eastern Illinois University

Abstract

There is a growing body of research studies dealing with different cultures. Although it is widely accepted that cross-cultural differences exist, there is little empirical evidence actually documenting such differences or suggesting the particular form or pattern they take. This paper reviews some of the cross-cultural and cross-national studies and proposes some standardization of dimensions to be used to define culture. Hopefully, this would allow the development of a more coherent model of the effects of different cultures.

Introduction

When one considers that 95 percent of the world's population and 75 percent of all purchasing power is outside the United States (Terpstra 1983), the increasing importance of international marketing is not surprising. According to Kotler (1984), there are two reasons firms seek international markets. First, such factors as heavy competition, unfavorable government policies, and surplus production may push companies out of their domestic markets into foreign markets. Second, the market potential of foreign countries may pull firms into international marketing.

Conceptually, international marketing is not different from marketing in the United States; however, marketers who enter the international marketplace may find considerable differences created by the need to adapt marketing strategies to the foreign market segments. One would expect these differences to have resulted in an increased interest in marketing research in cross-national or cross-cultural research. Paradoxically, international studies are rare in marketing research, although recently there has been an increase in cross-national consumer research.

Unfortunately, cross-national or cross-cultural research is plagued with a major problem: these two terms have been used interchangeably under the assumption that different nations automatically have different cultures. Consequently, many studies have resulted in conflicting and disparate findings that are difficult to integrate into a theoretical foundation. The purpose of this paper is to propose that emphasis in international marketing research should be on the cultures rather than on the nations involved. To do this, there must be a sound method to differentiate between the cultures.

Existing Research--Cross National or Cross Cultural?

Most of the research in this area has been cross-national; the authors selected samples from different countries and compared them in some way, usually their buying habits and behavior. Some research has been termed cross-national; other research, cross-cultural. Many times the terms have been used interchangeably. However, in most cases merely the identification of the different countries in which the samples lived was considered sufficient to designate them as different cultures.

In one such study, Lorimer and Dunn (1967) studied the effects on the attitudes of French and Egyptian consumers of United States originated advertising, using four measures of advertising effectiveness. They found that three of the measures, evaluation, evaluation-difference, and willingness to buy, were correlated. However, there was not a relationship between comprehension and the other measures. In this study, no attempt was made to differentiate between the two samples, except that they were different nationalities.

Hempel (1974) compared the interactions of husbands and wives in house-buying decisions on what he called a cross-cultural basis. Again, however, no attempt was made to establish that the samples, one from Hartford, Connecticut and nearby towns and the other from the Preston-Lancaster area of Northwest England, were cross-cultural. Indeed, there may be very similar cultures underlying these two groups. It is, therefore, not surprising that he found a high degree of similarity in the household decision making processes in the two nations.

Although Hempel found little differences between cultures, Douglas (1976) found the differences between the nations to be greater than the differences within the nations between working and non-working wives. The purpose of this study was to assess whether working wives facing similar problems in the countries of the United States and France would adopt similar purchasing strategies, different from those of non-working wives within the same two countries.

The objectives of a cross-national study conducted by Hoover, Green, and Saegert (1978) were to test the levels of perceived risk associated with three common consumer products and to determine the extent of similarity of the brand loyalty/perceived risk relationship in the two countries. The two countries were represented by Houston, Texas and Monterrey, Mexico. Again, it is questionable whether these two samples actually represent different cultures.

The findings indicated differences in risk and brand loyalty and the interrelationship of the two between the two countries. The implications of these findings are that marketers will have to adjust marketing strategies for different nations. However, the findings were qualified by the fact that the study employed limited samples, covered three convenience goods, was concerned with only one other country, and employed different methods of data collection in the two countries.

Four countries, the United States, Switzerland, France, and Austria, were used as samples to determine whether consumers in different countries would have similar perceptions of product value (Chadraba and O'Keefe 1981). If similar perceptions would exist, marketers could segment markets across national boundaries. The results of the research suggested that similarities in value perceptions do cross national boundaries. Both the perception of added value and the perception of improvement to well-accepted products by innovations were likely to be valued similarly across national boundaries.

Two studies researched information sources on a cross-national basis. Green and Langeard (1975) found that the French consumer relied less on other people and on group information sources than did the United States consumer. Anderson and Engledow (1981) measured consumer perceptions of information source importance in West Germany and the United States in different time periods. They found less pronounced differences in information source importance between the two countries than did Green and Langeard (1975).

Barksdale and others (1982) noted a need in marketing of cross-national studies of consumer attitudes toward marketing. This study provided comparative data on consumer attitudes toward and perceptions of marketing in six countries: Australia, Canada, England, Israel, Norway, and the United States. They hypothesized that the attitudes reflected by the respondents in these countries should reflect the relative stage or position that that country occupied in the consumerism life cycle with Israel in the crusading stage, England, Australia, the United States, and Canada in the middle stages, and Norway in the bureaucracy stage. However, the response patterns did not support this concept. No clear patterns of opinion emerged that would suggest that any particular nation would fit neatly into a particular stage of the consumer movement life cycle.

These studies all share a common feature; none of them made any attempt to differentiate between the cultures involved. They assumed that different nations had different cultures. Consequently, it is not surprising that their findings are so disparate. The findings of cross-cultural research cannot be integrated without an understanding of what a culture is and some method of determining that the cultures being researched are indeed different. Logic dictates that perhaps Connecticut and England may have very similar cultures; so may Monterrey, Mexico and Houston, Texas.

Two studies (Hempel 1974; Green and others 1983) are expecially illustrative of the cross-national/cross-cultural problem. Both dealt with family decision-making; yet, their findings differed greatly. Hempel (1974) found that perceived roles of husbands and wives varied more by sex and stage in the decision process than they did by culture. However, Green and others (1983) found significant cultural differences in family purchasing roles. Why did these disparate findings occur? One possible reason could be that Hempel's sample came from the United States and England, two countries that may have the same or a very similar culture. Further, he gave no conceptual basis for differentiating between the two countries on a cultural basis.

However, Green and others (1983) provided a basis for differentiating the countries culturally. They used Rodman's typology of ideal-type societies. The four ideal types are patriarchy, modified patriarchy, transitional equalitarianism, and equalitarianism. Each of these types is characterized by certain family norms based on the balance of marital power. Given the importance of culture's influence on consumer behavior, marketing researchers should consider wider use of such methods for differentiating between cultures in cross-cultural research.

Culture and its Analysis

Culture is not easy to define. Linton (1973), an anthropologist, defined culture as "the configuration of learned behavior and results of behavior whose component elements are shared and transmitted by a particular society." Rokeach (1968) defined cultural values in psychological terms as beliefs that some general state of existence is personally and socially worth striving for. Few marketing studies have utilized cultural values as descriptors of consumer behavior. Yet, cultural values should be regarded like other factors that influence consumer behavior.

Assael (1981) stated that culture is the broadest environmental factor affecting consumer behavior, referring to the norms, beliefs, and customs that are learned from society and lead to common patterns of behavior. According to Kassarjian and Robertson (1981), the impact of culture on consumer behavior is pervasive yet difficult to measure. One reason it is so difficult to measure is the lack of agreement among the definitions. Douglas and Dubois (1977) highlighted the importance of the cultural environment in international marketing. The study of culture would especially aid international marketing in transferring marketing strategies from one culture to another and for designing effective marketing strategies for particular cultures.

According to Kassarjian and Robertson (1981), world cultures can be analyzed on the basis of three dimensions: demographic, organizational, and normative. The demographic dimension is based on such variables as age, income, and education. The organizational dimension is based on such variables as social class and the structure of the family unit. The normative dimension is based on value systems.

Both the demographic and the organizational dimensions have been used in cross-cultural research as methods of differentiating between the cultures. Hair and Anderson (1973) conducted an empirical investigation of the relationships among culture, acculturation, and consumer behavior. They defined cultural heritage in terms of the state of economic development of the country; respondents from eleven different countries were classified into two groups, those from developed countries and those from developing countries. The results indicated that cultural heritage was the most important variable influencing the extent of acculturation to the United States culture. Not surprising, the respondents from developed countries generally were more acculturated relative to those from developing countries.

Rodman's typology of ideal-type societies used by Breen and others (1983) is closest to the organizational dimension. The five nations used in this study represented three of the ideal-type societies. The United States, France, and Holland were placed in the transitional equalitarianism category. Venezuela was placed in the modified patriarchy category, and Gabon in the patriarchy stage. A weakness of this typology is its lack of discrete indicators with which to classify cultures.

The normative dimension is based on value systems. A number of characteristics are common to all cultural values (Robertson and Kassarjian 1981):

1. They are learned, through socialization or acculturation.

2. They are guides to behavior.

3. They are permanent, yet they are dynamic.

4. They are socially shared.

There are methods for measuring values which have demonstrated validity and reliability. One measurement is Rokeach's value survey. Rokeach believed that the number of human values is limited and universal. This makes cross-cultural research, organized around an assessment of value systems in various cultures, conceivable.

Value Research in Marketing

Value research is not completely unknown in marketing research. Henry (1976) attempted to measure the impact of culture on consumer behavior, by examining the observable relationships between four basic culture dimensions and automobile ownership. The value dimensions used were man's relation to nature, time, personal activity, and man's relation to others. Of course, this study was not cross-cultural; it was concerned only with the American society's value orientations. The statistical results obtained provided empirical support for the commonly held theory that culture is an underlying determinant of consumer behavior.

Vinson and others (1977) followed Rokeach's view of values in conceptualizing a hierarchy of values. Global values are centrally held and enduring beliefs that guide actions and judgments across specific situations. The second level of values are domain-specific values, acquired through experiences in specific situations. The third level consisted of the less closely held descriptive and evaluative beliefs about product attributes. Applying these value measurements to two geographic regions of the United States, assumed to be culturally distinct, the findings showed that the basic value orientations of consumers can be expected to vary when various sociocultural influences exist. Value study has implications for market analysis and segmentation, product planning, promotional strategy, and public policy.

Values in Cross-Cultural Research

Value research has been used in a cross-cultural context. Sirota and Greenwood (1971) presented the results of a research project undertaken to determine the differences and similarities in work goals of thousands of industrial workers employed in 25 countries by a large international corporation. Their findings contradicted some common stereotypes. The most important goals of these workers are all concerned with opportunity for individual achievement. Occupational and national comparisons reveal remarkable similarity in the goals of workers around the world. Although the differences were rather small, it was possible to cluster the countries around nearly identical goals. The five groupings are the following:

1. The Anglo cluster is high on individual goal achievement and low on desire for security.

2. The French cluster is quite similar to the Anglos, except that the French give greater importance to security and somewhat less importance to challenging work.

3. The countries in the Northern European cluster seem to be less oriented to job advancement and more oriented to job accomplishment.

4. The individual achievement goals tend to be somewhat less important in both Latin clusters with the Southern Latins highest in their desire for security.

5. Six countries stood alone because their goal orderings were not closely related to those of any other country.

The closest marketing research has come to using values in cross-national research was a study by Plummer (1977), which used life style and three basic models for cross-cultural analyses. The three basic analytical models examined life styles across countries by examining shared cultural norms, segmentations withing cultures, and correlates of usage for products. Although they had not found the normative model to be useful in thinking about or solving advertising problems for multi-national clients, they believed that the normative model may be the most beneficial in improving understanding and appreciation of people around the world.

In his studies of fifty countries, Hofstede (1984) found that four dimensions explained 49 percent of the variance in means:

1. Power distance defines the extent to which the less powerful person in society accepts inequality in power and considers it to be normal.

2. Individualism opposes collectivism. Individualist cultures assume individuals look primarily after their own interests and the interests of their immediate family.

3. Masculinity opposes feminity. Masculine cultures use the biological existence of two sexes to define very different social roles for men and women. Masculine cultures stress material success and assertiveness. Feminine cultures stress interpersonal relationships and concern for the weak.

4. Uncertainty avoidance defines the extent to which people in a culture are made nervous by situations that they consider to be unstructured, unclear, or unpredictable, and the extent to which they try to avoid such situations by adopting strict codes of behavior and a belief in absolute truths.

A study by Gomez-Mejia (1984) examined the relationship between occupational membership and the importance to different work aspects on a sample of 5500 employees, selected from 20 countries, all working for a large multinational corporation. The work orientation measures included three sets of scales--task-related, contextual, and job involvement. The study found that cultural factors tend to be less predictive of the work orientation of managers than of rank-and-file workers. The data suggest that culture may have a differential impact by occupational level. He suggested that many of the differences attributed to a cultural effect may disappear if samples with similar occupational characteristics had been carefully matched and compared cross-culturally.

Unfortunately, to date no one has carried Plummer's ideas forward in marketing research. Therefore, cross-cultural research remains fragmented with conflicting findings. This paper proposes that cross-cultural or cross-national researchers determine the cultural differences between the subjects of their study by applying all three levels of measurement suggested by Kassarjian and Robertson (1981). By showing differences on all three dimensions, researchers can be sure they really have different cultures.

The demographic dimension could be measured on such variables as income, age, education, economic development, ethnic origin, and sex. The organizational dimension could use such measures as social class, structure of family unit, and occupation. Finally, the normative dimension could include such measures of values as religion, power distance, individualism, masculinity, uncertainty avoidance, and value of work.

Two studies have stressed the importance of equivalence in cross-national research (Davis, Douglas, and Silk, 1981; Green and White 1981). If researchers can develop and use reliable and valid measures to show that differences in culture exist, they can come closer to achieving at least some equivalence in cross-national research. Furthermore, such measures can be used to determine and identify cultural differences within national borders. It is certainly a valid assumption that the United States has more than one culture; and it is erroneous to assume that all people living in a particular country share the same culture.

Investigators in this area should devote more attention to developing a coherent model of consumer orientations that (a) delineates major cultural attributes affecting consumers, (b) explains why these attributes are likely to affect consumer orientations, (c) isolates specific cultural variables to operationalize the construct of culture, and (d) allows one to make predictions and generalizations pertaining to specific cultural attributes and how they are linked to particular consumer orientations in combination with other characteristics.

The corporate world is becoming more and more interrelated--more and more international. Improvements in transportation and communication and lower production costs abroad have made global markets more accessible. Increased multinational operations mean increased contact with and exposure to multiple cultures. Cross-cultural effects influence marketers in two ways. First, cultural norms and values in foreign countries must influence the manner in which business is conducted there. Second, the customs of consumers in other countries must influence marketing strategy. International marketers must seriously consider whether one promotional campaign can be directed to all their foreign markets or whether separate campaigns have to be developed to take into account local differences. Knowing whether the markets encompass different cultures or not would be of great help here. If American companies wish to market their products on a multinational basis, the American marketers must correct the cultural myopia. This can be done through marketing research aimed at increased understanding of cultural differences and their impact upon consumption.

REFERENCES

Anderson, Ronald and Jack L. Engledow (1981). "Perceived Importance of Selected Product Information Sources in Two Time Periods by United States and West German Consumers," Journal of Business Research 9 (December): 339-51.

Assael, Henry (1981). Consumer Behavior and Marketing Action. Boston, Massachusetts: Kent Publishing Company.

Barksdale, Hiram C., William D. Perreault, Jr., Johan Arndt, J.A. Barnhill, Warren A. French, Michael Halliday, and Jehiel Zif (1982). "A Cross-National Survey of Consumer Attitudes Towards Marketing Practices, Consumerism and Government Regulations," Columbia Journal of World Business 17 (Summer):71-85.

Chadabra, Peter and Robert O'Keefe (1981). "Cross-National Product Value Perceptions," Journal of Business Research 9 (December):329-37.

Davis, Harry L., Susan P. Douglas, and Alvin J. Silk (1981). "Measure Unreliability: A Hidden Threat to Cross-National Marketing Research?" Journal of Marketing 45 (Spring): 98-103.

Douglas, Susan P.,(1976). "Cross-National Comparisons and Consumer Stereotypes: A Case Study of Working and Non-Working Wives in the U.S. and France," *Journal of Consumer Research* 3 (June): 12-20.

_____ and Bernard Dubois (1977). "Looking at the Cultural Environment for International Marketing Opportunites," *Columbia Journal of World Business*, 12 (Winter) : 102-09.

Gomez-Mejia, Luis R., (1984). "Effect of Occupation on Task Related, Contextual, and Job Involement Orientation: A Cross-Cultural Perspective," *Academy of Management Journal*, 27 (December): 702-20.

Green, Robert T. and E. Langeard (1973). "A Cross-National Comparison of Consumer Habits and Innovator Characteristics," *Journal of Marketing*, 39 (July): 34-41.

_____, Jean-Paul Leonardi, Jean-Louis Chandon, Isabella C. M. Cunningham, Bronis Verhage, and Alain Strazzieri (1983). "Societal Development and Family Purchasing Roles: A Cross-National Study," *Journal of Consumer Research* 9 (March): 436-42.

_____ and Phillip D. White (1976). "Methodological Considerations in Cross-National Consumer Research," *Journal of International Business Studies* 7: 81-87.

Hair, Joseph and Ralph Anderson (1973). "Culture, Acculturation and Consumer Behavior: An Empirical Study," in *Conbined Proceedings of the American Marketing Assoication*, ed. by B. W. Becker, No. 34, pp. 423-428.

Hempel, Donald (1974). "Family Buying Decisions: A Cross-Cultural Perspective," *Journal of Marketing Research* 11 (August): 295-302.

Henry, Walter A. (1976). "Cultural Values Do Correlate with Consumer Behavior," *Journal of Marketing Research* 13 (May): 121-27.

Hofstrede, Geert (1984). "The Cultural Relativity of the Quality of Life Concept," *The Academy of Management Review* 9 (July): 389-98.

Hoover, Robert J., Robert T. Green, and Joel Saegert (1978). "A Cross-National Study of Perceived Risk," *Journal of Marketing* 42 (July): 102-08.

Kassarjian, Harold H. and Thomas S. Robertson (1981). *Perspectives in Consumer Behavior,* Third Edition. Glenview, Illinois: Scott, Foresman and Company, 1981.

Kotler, Phillip (1984). *Marketing Management,* Fifth Edition. Englewood Cliffs, New Jersey: Prentice-Hall.

Linton, Ralph. "The Concept of Culture," in *The Cultural Background of Personality*. Engelwood Cliffs, NJ: Prentice-Hall, 1973, pp. 30-36.

Lorimor, E. S. and Watson S. Dunn (1967). "Four Measures of Cross-Cultural Advertising Effectiveness," *Journal of Advertising Research* (December): 11-13.

Plummer, Joseph (1977). "Consumer Focus in Cross-National Research," *Journal of Advertising* 6 (Spring): 5-15.

Rokeach, Milton, (1968). "The Role of Values in Public Opinion Research," *Public Opinion Quarterly* (Winter): 547-54.

Terpstra, Vern (1983). *International Marketing*, Third Edition. Hinsdale, Illinois: Dryden Press.

Vinson, Donald E., Jerome E. Scott, and Lawrence M. Lamont (1977). "The Role of Personal Values in Marketing and Consumer Behavior," *Journal of Marketing* (April): 44-50.

HALO EFFECT INFLUENCES ON THE JAPANESE PRODUCT PRICE/QUALITY RELATIONSHIP

Kip Becker, Boston University

Abstract

The relationship between price, quality and country of origin has not been fully explored. Recent attention to Japanese management styles and quality control measures could produce a generalized enhanced belief of product quality. Research indications were that a "halo effect" does exist bolstering the pervasive image of Japanese goods. This was found even when the Japanese product was of lesser price. It was interesting that nationalism appeared to be a dominant factor when price and quality were constant. It seemed that Americans desire to purchase domestic goods, but not at the expense of perceived inferior quality.

Introduction

American consumers have long been exposed to products from abroad. They have readily accepted foreign commodities and often have developed preconceptions concerning foreign goods and the prices which they would pay for those goods. Consumers have normally considered foreign commodities in realtion to specific categories. Dresses and perfumes have been sought from France, fine instruments from Germany, wools from Scotland and tulips from Holland. While consumers pursued unique items from particular countries, they did not appear to generalize the quality of one type of good to the vast number of products that the country offered. That is to say, the quality of wools from Scotland did not mean to the consumer that the country's other products were perceived to be of equally high quality. Generally, the sought after imports were considered to be of high quality and worthy of higher prices. It is only recently that low prices and quality are being associated with imports.

A number of researchers (Bedeian 1971, Gardner 1970, Hagerty 1978, Gabor & Granger 1964, Monroe 1973, Monroe & Bitta 1973) have commented on the consumer's belief that price and quality are positively correlated. Some have stated that price is the number one consumer issue (Dickinson 1982) and the greatest worry (Advertising Age 1977). Leavitt (1954) found that when individuals choose between two differently priced products they tended to select the higher priced brand when price was the only information provided. It was of interest that when subjects chose the lesser priced product, they expressed less satisfaction with the product. This study was replicated by Tull, Boring and Gonsior (1964) with similar results. There is, however, growing sentiment that only addressing price provides a narrow and often inaccurate model. This would be consistent with the findings of Jacoby (1971) that price served as an indicator of product quality when it was the only cue available but not when embedded in a multicue setting. International marketing studies have, additionally, suggested that issues other than simple price/demand relationships effect purchasing behavior. Some Venezuelan firms have indicated they would pay 30% to 40% more for American goods if adequate financing were available (Cateora, 1983). In addition, the trend in Ecuador is to buy from the supplier who offers the best payment terms rather than the lowest price (Commerce America, 1977). In this instance, the availability of credit acts directly as a variable of the willingness to purchase. This reflects both the complications associated with the simple two factor relationship of the price/demand model and the confounding part that the perception of quality plays.

In another study conducted by Allison and Uhl (1973) the perceived quality, rather than the actual quality, of a product or brand was of considerable importance in consumer preferences. Of particular importance is the research of Jacoby (1971) who found that quality perception seems to be strongly related to actual purchasing behavior. Jacoby et al. (1971) reported that brand image had a stronger effect on the image of quality than price. In support of a multicue concept he lists seven issues believed to be relevant to forming impressions of quality. These include price, packaging, manufacturer, past experience and advertising. It is highly probable that an important additional characteristic is the country of origin.

Of importance in global marketing is the research of Schooler (1965) which indicated that domestic products were evaluated more favorably than similar foreign products. It is clear that a country's status is flexible and subject to change. In a 1970 study (Nagashima) 93% of U.S. businessmen awarded the "Made in U.S." label first place. Less than a decade later Narayana (1977) reported in a replication study that the U.S. image had lost significant ground to the Japanese.

Perceived quality is becoming an increasingly pressing issue with not only industrial goods, but also consumer goods. With ever accelerating competition within the international market place, factors other than price are becoming important major issues. In a 1979 study (White) of the perception of the quality of industrial goods, West Germany and East Germany were rated higher than the United States. England, Japan and the United States shared second place. The same study revealed that Japan was rated closely behind the United States when considering service, delivery and performance. The participants in this study further ranked Japan as providing goods at the lowest price. This was a full eight places below the United States. The necessity of international pricing and the ability of the strategy to yield overall attractive profit levels is discussed by Kim & Yang (1985). Consumers are being exposed to the possibility that through international competition it may be possible to obtain higher quality goods at competitive or even lower prices.

Narayana (1981) has noted that while the flow of international trade is restricted by trade agreements it is even more dependent on consumers' perceptions of national versus foreign product offerings. Rierson (1966 1967) has further demonstrated that significant variations exist in attitudes toward the products of different countries and that a form of stereotyping exists. Hamel and Prahalad (1985) have noted that the old ways of pricing competition are not working in the international market and must be replaced by a more complex global strategy.

Quality and price have been extensively investigated but their relationship to the concept of the product's country of origin appears to be worthy of further consideration. It would seem probable that with the plethora of information concerning Japanese management and the inundation of articles concerning Japanese concern for quality, that a consumer could acquire a positive generalized belief or halo effect. If this were the case, it could be possible that consumers might acquire a belief about a country's products which would generalize to all, or the majority of, that country's goods. If such a belief existed, it would have important purchasing and pricing implications for American products. It was the intent of this research to investigate the interaction between country of origin (Japanese or American) and the variables of quality and price.

Methods

Subjects

Four hundred individuals participated by completing a brief questionnaire. Individuals were chosen using a random numbers table from all individuals passing a card table set up by the researcher. The table had an atmosphere of formality and was attended by an individual dressed in a coat and tie. Three individuals, two females and one male, acted as surveyors. The table was located in a major traffic area in the downtown Boston area. Individuals were asked if they "Would be willing to participate in a very brief four question survey that would take less than two minutes?" Any individual who declined to participate was replaced according to table dictates.

Instruments

The following four item questionnaire was verbally administered. The only instructions provided were that each subject was to respond to each of four questions as a part of a study. Subjects were than read each question and the researcher noted each response on the prepared form.

1. There are two products A and B which are similar in use and function. Product A costs $100 and product B costs $125. You need to purchase one of the two products. Your choice is:
   (a) the $100 product (b) the $125 product
2. There are two products which are similar in use and function. One product costs $100 and the other costs $125. Which is the better product?
   (a) the $100 product (b) the $125 product
3. There are two products which are similar in use and function. One costs $100 and the other costs $125. The $100 product is a Japanese product and the $125 is an American product. Which is the better product?
   (a) the Japanese product (b) the American product
4. There are two products which are similar in use and function. One product is a Japanese product and the other is American. The price for both products is the same. You need to purchase this product. Which would you choose?
   (a) the American product (b) the Japanese product

Procedures

A table was set up in the Faneuil Hall shopping area of Boston and three researchers requested individuals to participate in the survey until four hundred responses had been accumulated. A total of 487 individuals were requested to participate and 87 declined. Twenty collected responses were unusable. Data was compiled and comparisons were made using the Kolmogorov-Smirnov Test. Siegel (1956) has stated that this test may in all cases be more powerful than the chi squared alternative.

Results

The responses to each question were analyzed (Table 1) using the Kolmogorov-Smirnov Test to determine if there was a significant difference between respondent's choices for each question. The results of the Kolmogorov-Smirnov Test are displayed in Table 2. The Ho in each case represents the formal statement that there is no significant difference at the alpha = .01 level between the specific response set designated in the table.

TABLE 1
NUMBER OF RESPONSES FOR QUESTIONS 1 THROUGH 4 AND HO CONCLUSION AT P = .01

QUESTION	A RESPONSES	B RESPONSES	Ho CONCLUSION
1	330	50	reject
2	190	190	fail to reject
3	268	112	reject
4	150	230	reject

Question one was compared with each of the other questions using the Kolmogorov-Smirnov Test to determine if individuals who based initial choices on a dollar value basis would have significantly different choices on other questions. The data for this test is presented in Table 2.

TABLE 2
Ho DECISION FOR THE COMPARISON OF THE CHOICE IN QUESTION ONE WITH EACH OF THE CHOICES FOR THE OTHER QUESTIONS (P = .01)

QUESTION	Ho CONCLUSION $100 CHOICE	Ho CONCLUSION $125 CHOICE
2	reject	reject
3	reject	fail to reject
4	reject	fail to reject

Question four was compared with the choices on questions one through three. This was done to determine if those individuals who selected either the American or Japanese product made statistically different responses to the other questions. These results are reported in Table 3.

The chi square was 35.26 (df=1) when comparing the responses to question two with the responses to question three. The effect was to reject the Ho: There is no difference between the responses on question two and question three at P=.01.

TABLE 3
THE Ho DECISION FOR THE COMPARISON OF CHOICE SET IN QUESTION FOUR AND RESPONSES TO SUBSEQUENT QUESTIONS (P = .01)

QUESTION	AMERICAN PRODUCT Ho DECISION	JAPANESE PRODUCT Ho DECISION
1	reject	reject
2	fail to reject	fail to reject
3	fail to reject	fail to reject

Discussion

When the responses to each question were compared it was determined that, with the exception of question number two, significant differences existed between the answers to all questions. Question number one had an overwhelming response (87%) in favor of selecting the $100 product. This finding is not in accord with Leavett's (1954) findings nor the replication study of Tull, Boring and Gonsior (1964). Both studies indicated that when individuals choose between two differently priced products they tended to select the higher priced brand when price was the only information provided. This was clearly not the case in this study. There was an interesting response set to question number two. Responses were evenly divided as to which, the $100 or $125 selection, was the better product. Contrasting this with the preference in question one for the $100 item, it appears that while individuals may select the less expensive product, it is not necessarily true that they actually believe it to be better. Future inquiries might address this observation in terms of the dollar spread between the product choices and how that might relate to the perception of quality.

An interesting issue of quality is considered in question three. Respondents overwhelmingly (268 vs 112) selected the $100 Japanese product, as opposed to the $125 American product, as the better product. This is again contrary to previous literature and enhances the concept that a "halo effect" is, indeed, effecting choice outcome. When a chi square was conducted comparing questions two and three, the difference was found to be significant (p.01). It appears that if only provided with price information, individuals will select the lower priced good but are then divided as to whether the higher priced or lower priced item is better. However, when information revealing the country where the product was manufactured is provided, individuals often used this information to replace price as an indication of quality. A new higher perception of the product's quality, even at the lower price, appeared to be formulated supporting Narayana's (1981) belief in the importance of consumer perceptions of national versus foreign offerings.

Individuals who selected the $100 product in question one rated (p.01) the $100 product as better in question two and rated the Japanese product as better in question three. However, when the price and quality were perceived to be equal, they selected the American product in question four. Those who initially selected the $100 product and then stated that the $125 American product was better (question three) all (88) chose the American product in question four. If the Japanese product was selected in question three, however, there was no statistical difference in choosing between the American and Japanese products in question four.

If the $125 product was selected in question one, individuals overwhelmingly (55 vs 5) stated that the $125 product was better. They did not significantly state a preference between the Japanese and American product when price was different but did, as in previous cases, select the American product (question four) when items were perceived to be equal.

When price and quality were represented as equal, the American product was overwhelmingly selected (230 vs 150). When foreign goods are in competition with American products a type of territorial pride or nationalism, appears to further influence product choice. This is consistent with the earlier research findings of Schooler (1965).

Individuals did appear to base selections on price when price was the only information available as reported by Jacoby (1971). This is, however, rarely the case as an actual purchasing situation normally has numerous cues. One of the major strategies of marketing is product differentiation. It appears when the consumer is faced with goods from an international marketplace that the relationship between quality and price is confounded by a third variable, origin. This is indicated by the finding that the $100 product was rated superior in quality (p.01) to the $125 product only when national origin was provided. Just as the perception of product quality appears to be influenced by the knowledge of the product's origin, it appears that consumer choices can also be strongly effected by nationalism. The patriotic desire to purchase American goods can, in fact, overshadow foreign competition when products are believed to be equal in quality and price.

These initial findings indicate that a "halo effect" does, in fact, exist and bolsters the pervasive image of Japanese goods. One of the major objectives of marketing communication is promoting product or company image. Regarding the rather rapid change in the consumer perceptions of Japanese quality over little more than three decades, it is worth noting Nagashima's statement, "That aggressive marketing and advanced engineering overcomes many handicaps of poor stereotype image" (p.74). While further exploration is indeed warranted, it seems that it would not be wise to base competitive strategy against Japanese goods predominantly on price. This is important as it appears that Americans expect a superiority of Japanese quality at a lesser price. It might be interesting to explore the consequences of a pricing increase strategy for the U.S. product to determine if an enhanced image of quality could be developed. Nationalism appears to be the dominant factor, when quality and price are constant. As such, it would seem wise to focus American competitive strategies on instilling a belief of equal quality at an equal price and promoting the American made image. It appears that the American public desires to purchase goods produced "at home" but will not do so at the expense of accepting inferior (or perceived inferior) products.

Reference

Advertising Age, "New Harris Consumer Study Causes Few Shocks in Adland", May 30, 1977, p. 74.

Allison, Ralph and Uhl, Kenneth, "Brand Identification and Perception", in Perspectives in Consumer Behavior, Kassarjian, H. and Robertson, T. (Ed), Glenview, IL, 1973, pp. 17-22.

Bedeian, Arthur, "Consumer Perception of Price as an Indicator of Product Quality", Journal of Marketing Research, May 1977, pp. 181-186.

Cateora, Philip, International Marketing, (fifth ed.), Homewood, IL: Irwin Publishing Co., 1983.

Commerce America, "Ecuador's Market Can Absorb Greater Volume of Products; Financing Remains Important", April 25, 1977, p. 30.

Dickinson, Roger, "Consumer Behavior, A Consumer Perspective", in Marketing Theory: Philosophy of Science Perspectives, Bush & Hunt (Eds.), Proceeding Series, American Marketing Assoc., 1982.

Gabor, Andre and Granger, Clive, "Price Sensitivity of the Consumer", Journal of Advertising Research #4, Dec. 1963.

Gardner, David, "An Experimental Investigation of the Price/Quality Relationship", Journal of Retailing, Fall 1970, pp. 25-41.

Hagerty, Michael, "Model Testing Techniques and Price-Quality Relationships", Journal of Consumer Research #4, Dec., pp. 194-205.

Hamel, Gary and Prahalad, C. K., "Do You Really Have a Global Strategy?", Harvard Business Review, vol. 4, 1985, pp. 139-149.

Jacoby, Jacob, "A Model of Multi-Brand Loyalty", Journal of Advertising Research, #11, June 1971, pp. 25-31.

Jacoby, Jacob, Olson, Jerry and Haddock, Rafael. "Price, Brand Name, and Product Composition Characteristics as Determinants of Perceived Quality", Journal of Applied Psychology, vol. 55, No. 6, 1971, pp. 570-579.

Kim, Paul and Yand, Chin, "Pricing Strategy in International Markets", in Developments in Marketing Science, Vol. VIII, 1985.

Leavitt, Harold, "A Note on Some Experimental Findings about the Meaning of Price", Journal of Business, #27, July, 1954, pp.205-210

Mitchell, Ted, "To Choose Y When X is Preferred to Y", in Marketing Theory: Philosophy Science Perspectives, Bush & Hunt (Eds.), Proceeding Series, American Marketing Assoc., 1982.

Monroe, Kent, "Buyers Subjective Perceptions of Price", Journal of Marketing Research, #10, Feb., 1973.

Monroe, Kent and Bitta, Albert, "Models for Pricing Decisions", Journal of Marketing Research #15, 1978.

Nagashima, Akira, "A Comparison of Japanese and U.S. Attitudes Toward Foreign Products", Journal of Marketing, Vol. 34, 1970, pp.68-74.

Narayana, Chem, "Aggregate Images of American and Japanese Products: Implications on International Marketing", The Columbia Journal of World Business, Summer 1981, pp. 31-35.

Rierson, C., "Are Foreign Products Seen as Traditional Stereotypes?", Journal of Retailing, V. 42, 1966, pp. 33-40.

Rierson, C., "Attitude Changes Toward Foreign Products", Journal of Marketing Research, V. 4, 1967, pp. 385-387.

Siegel, Sidney, Nonparametric Statistics for the Behavioral Sciences, McGraw-Hill: New York, 1956.

Schooler, R. D., "Product Bias in the Central American Common Market", Journal of Marketing Research, V. 2, 1965, pp. 394-397.

Tull, Donald, Boring, R. and Gonsior, M., "A Note on the Relationahip of Price and Imputed Quality", Journal of Business, #37, April 1964, pp. 186-191.

White, Phillip, "Attitudes of U.S. Purchasing Managers Toward Industrial Products Manufactured in Selected Western European Nations", Journal of International Business Studies, Spring/Summer 1979, p. 81.

A STUDY OF COUNTRY OF MANUFACTURER IMPACT ON CONSUMER PERCEPTIONS

Paul S. Hugstad, California State University, Fullerton
Michael Durr, California State University, Fullerton

Abstract

This study investigates the importance of country of manufacture (COM) information to U.S. consumers when purchasing a variety of different goods and services. The impact of COM information on consumer perceptions of product quality, price and risk level are also presented. Finally, profiles of consumers sensitive to COM information and predisposed toward expanded trade with the People's Republic of China are presented.

Introduction

Over recent years a number of studies have examined how consumers and business people perceive various attributes of products made in foreign countries. Some of these studies have focused on comparing perceptions of products made in different countries, while others have focused on the differing perceptions of consumers from different countries toward similar products.

In both cases, little attempt has been made to either (1) assess the relative importance attached to country of manufacturer (COM) information in selecting among brand alternatives within various product categories or (2) build a consumer profile of the type(s) of consumer(s) likely to be sensitive to COM information. Obviously, for firms interested in import/export marketing, this later type of information could prove invaluable in targeting their products.

Toward this end, this study investigates the general importance of COM information to American consumers for several categories of U.S. products and imports from the Far East (Japan, South Korea and the People's Republic of China). These countries were selected to include both developed and developing countries, as well as for purposes of comparison with the People's Republic of China (based on expanded interest in developing better trade relations with the People's Republic). In addition, the effects of COM information on consumer perceptions of quality and price are examined. Finally, discriminant profiles of consumers likely to be sensitive to COM information and consumers holding positive attitudes toward expanded trade with the People's Republic of China are developed.

Literature Review

The extent to which products from foreign countries are stereotyped has been investigated by a number of authors. Reierson (1966) studied college students' perceptions of food, fashion and durable goods manufactured in several European countries and Japan. He concluded that significant stereotyping effects were present for each goods category, i.e., Chi square tests showed statistically significant differences in respondent estimates of the quality of products by country of manufacturer.

In a second study, Reierson (1967), again using student subjects, experimentally manipulated various media presentations (film, magazines, display) in an attempt to affect attitudes concerning attributes of products manufactured in Italy and Japan. Significant attitudinal changes were effected for the products of both countries, although attitudes toward Japanese products proved more resilient to change.

Schooler investigated consumer bias toward country of origin in a series of studies. In his original study (1965), he found significant product bias toward Central American Common Market products were exhibited by Guatemalans. In a second study (1968), Schooler and Wildt found that product bias was price elastic, i.e., the effects of bias on product selection could be offset by price concessions. In yet a third study (1969), Schooler and Sunoo investigated the degree of product bias within various "regions of countries" and concluded that "regional labeling (made in Asia, made in Latin America, etc.) might serve to reduce intra-regional product bias.

In the only study using actual consumers, Schooler (1971) found evidence of bias against products of foreign origin and that the intensity of bias varied by product type. Certain demographic variables (age, education and sex) were also found to significantly affect consumer perceptions.

Nagashima (1970), using American and Japanese business people as his subjects, studied the perceptions of each group toward automobiles, appliances and textiles made in the U.S., Japan, and several Western European countries. He found clear preferences for U.S. products within both groups and, in addition, the stereotyping of U.S. products as "high quality" increased for younger Japanese. In a follow-up study (1977), Nagashima reported that while the relative status of U.S. products had declined, stereotyping by country of manufacturer was still prevalent.

Gaedeke (1973) investigated the perceptions of consumers (again using college students) toward products made in various developing countries. In addition, he examined the impact on well known U.S. branded products of divulging their actual country of manufacturer. In both cases, significant COM effects were demonstrated.

Several additional studies have focused on issues indirectly relating to COM effects, including comparisons of information seeking behavior by consumers of different countries (Anderson 1977), determinants of quality perceptions (Olson 1972), perceived risk (Hampton 1977), and advertising and branding strategies for foreign products (Elinder 1965); Miracle 1968; and Wind 1973).

Bilkey and Ness (1982) summarize much of the work done in the area of country of origin effects on buyer evaluation, with special focus on the challenges it presents for lesser developed countries.

A review of the work done on the effects of COM information on consumers reveals several limitations. First, the majority of studies rely on either students as surrogates for consumers (a rather dubious practice), or have a different focus--the perceptions of business people in general, or in the case of White (1979; Chasin 1979) focus on perceptions of industrial products, in which case, the use of purchasing agents is appropriate.

Second, while the studies cited investigate the effects of COM information on perceptions of product quality, limited insight is gained into the actual importance to or use of COM information by consumers when purchasing products, or the effects of such information on purchase intentions. Finally, the key marketing strategy question, of which consumers are sensitive to COM information and, therefore, can be segmented out for special branding and advertising treatment, is largely ignored.

This study attempts to remedy some of these shortcomings by focusing on a more "representative" group of consumers, measuring their sensitivity to COM information and then developing consumer profiles of those sensitive to COM information for different categories of goods.

Methodology

In order to select a representative sample of consumers likely to face purchasing decisions involving COM information, the study was conducted using 27 shopping center locations in Southern California. These sites were selected to allow for the inclusing of approximately equal numbers of high, middle and lower middle income consumers.

Using a shopping center intercept method, interviews were conducted with 341 adults. Of the respondents, 53% were female and 47% male.

The pretested questionnaire administered contained four major sections. The first section gathered information on dependent variables of interest, including sensitivity to COM information (by product and country), consumer risk perceptions relative to COM, and attitudes toward liberalized trade with the People's Republic of China. The remaining three sections gathered information on independent variables of interest including: purchase experience and intent, life style dimensions (such as foreign travel, media awareness and social activities) and traditional demographic variables (age, education, occupation, etc.).

Findings

Interest in COM Information

Table 1 shows that 40% of the consumers interviewed were interested in obtaining COM information before purchasing and that interest in such information increased with age.

When the importance of COM information to consumers was investigated for specific product categories (Table 2), considerable differences in interest were exhibited (from 74% for automobiles down to 20% for sport shirts). Again, interest in such information varied significantly by age (for four of the six product categories). The data in Table 2 provides a useful guide for manufacturers and retailers concerned with the question of whether or not COM is an important brand attribute for their product(s), and one which should receive added attention in developing marketing communication programs.

Product Attribute Perceptions

Table 3 provides an additionally important picture of the relative quality, price and risk perceptions existing toward products made in the U.S., Japan, the People's Republic of China, Taiwan and South Korea. Such information gives specific direction to marketers in terms of product attribute dimensions along which consumer perceptions may need changing if market acceptance is to be increased. For example, the low quality perceptions of products made in South Korea suggest a need to either (1) upgrade actual quality, (2) develop more effective marketing communication programs to change consumers' perceptions, or (3) find ways of minimizing awareness levels of COM information. The strong correlation between price perceptions and quality perceptions should also be noted, and may provide insight(s) into how quality perceptions can be altered.

TABLE 1

Consumer Sensitivity to COM Information

	Age of Respondent		
	18-34	35 or older	All respondents
	(n = 224)	(n = 117)	
always or usually*	30%	57%	40%
not usually or never	70%	43%	60%

*(Question: Before you buy a product do you want to know in what country the product was made?)

Chi square value = 22.1, significant at .01 level.

TABLE 2

Importance of COM Information by Product Category

	Level of COM Importance			
	High	Medium	Low	Significant Age Effect*
Automobiles	74%	14%	12%	N.S.
Cameras	58%	21%	21%	N.S.
Canned Food	57%	26%	17%	.05
Automobile Tires	48%	27%	25%	.01
Shoes	32%	44%	24%	.01
Sport Shirts	20%	54%	26%	.01

*Chi square analysis (importance level in product category by age of respondent)
N = 339.

Finally, it might be noted that in terms of perceived risk levels, the products of the People's Republic of China fair less well than in terms of their perceived quality or cost. While the precise reason for his finding can only be hypothesized, it likely can be in part explained in terms of the uncertainty component of perceived risk--which is typically associated with a lack of consumer information upon which to form subjective estimates of product satisfaction (Hugstad 1979). The marketing challenge posed in such a case is rather straightforward, namely to provide consumers with more information concerning the performance of products manufactured in the People's Republic of China.

Developing Consumer Profiles

While the above data are suggestive of the importance of COM information to American consumers, and can provide valuable insight into both the product categories and product attributes affected by COM information, the question of which specific groups of consumers are maximally impacted by COM information and, therefore, represent the best target market for improved marketing communication programs, remains.

In an attempt to identify specific consumer types sensitive to COM information, discriminant analysis was utilized to construct profiles categorizing consumers into high versus low sensitivity to COM information categories for each of the product groups examined (Table 4). The profiles for each product category vary and are significant (Wilkes lambda) at the .01 level. However, certain key explanatory variables can be highlighted. Reading activity and age are inversely related to consumers' desire for COM information in all but one instance. For automobiles, education and the degree of social network contact with orientals are also important variables inversely related to COM sensitivity, suggesting that greater familiarity with foreign countries apparently moderates

TABLE 3

Quality, Cost and Risk Perceptions by Country of Manufacturer

Quality Rating

(1 = low quality, 5 = high quality)

	$\overline{X}$	Standard Error
U.S.A.	4.14	.049
Japan	3.82	.054
People's Republic of China	2.76	.048
Taiwan	2.55	.054
South Korea	2.48	.043

Cost Rating

(1 = inexpensive, 5 = expensive)

	$\overline{X}$	Standard Error
U.S.A.	4.30	.046
Japan	3.51	.061
People's Republic of China	2.74	.051
Taiwan	2.44	.054
South Korea	2.44	.052

Risk Rating

(1 = low, 5 = high)

	$\overline{X}$	Standard Error
People's Republic of China	3.02	.051
South Korea	2.99	.051
Taiwan	2.97	.053
Japan	2.50	.049
U.S.A.	2.46	.053

the importance of COM brand information. The uniqueness of each discriminant profile also points to the potentially erroneous conclusions which may be reached by studies investigating consumers' general perceptions of country of manufacturer.

A split-half sample test of the classification power of the discriminant functions generated resulted in correct prediction rates varying from 56% to 65% (summarized from the confusion matrices for each product category).

Because of the current interest in trade with the People's Republic of China, specific consumer attitudes concerning the importation of products from the People's Republic of China into the U.S. and consumers' willingness to buy such products in the marketplace were also examined. Table 5 presents discriminant profiles of consumers who favor expanding imports and consumers who would be interested in buying products from the People's Republic. Again, age is one of the key predictor variables, showing willingness to open up trade being inversely related to the age of the consumer. This consistent finding throughout the study (the impact of age on perceptions and purchase intentions) poses an interesting market segmentation strategy dilemma for importers/exporters concerned with developing markets for products from the Far East. Should they court the younger consumers who are more favorably predisposed toward their products, or to try to develop the market segment represented by older, more skeptical (yet high in discretionary income) consumers?

TABLE 4

Discriminant Profiles of Consumers Sensitive to COM Information

When Purchasing Various Products

Predictor Variables	General Importance of COM Information	Importance for Automobiles	Importance for Shoes	Importance for Cameras	Importance for Canned Food	Importance for Sport Shirts	Importance for Automobile Tires
	Standardized Discriminant Coefficients						
Recent Purchase Experience	.172	-.182		-.12502	.291		.133
Awareness of International Politics	.115	-.344	.198	-.660			-.113
Foreign Travel Experience	.112	-.180	.157	.147	-.619	-.199	-.331
International Social Network	-.232	-.697	-.128	-.101		-.113	
Read in International Area	-.546	-.489	-.391	-.673	-.274		-.176
Advertising Awareness Foreign Products	-.133	.145	.276	.374	.134	.128	.370
Age	-.634	.119	-.592	-.263	-.726		-.628
Education		-.347	.450	-.171	-.300	.271	.348
Income	-.097	-.122	-.536	.219	-.167	.110	-.131
Occupation	.139	-.218		.263		.146	
Martial Status		.320		.163	.309	.394	-.105
Spouse's Occupation		-.114	.193		.184	.350	
Sex	.157	.142	.201		-.190	-.254	.121
Race		.323		.151	.258	.249	.322
Overall Classification Power	67%	61%	65%	56%	62%	64%	64%

TABLE 5

Discriminant Profiles of Consumer Attitudes
Toward Trade with the People's Republic of China

Predictor Variables	Standardized Discriminant Coefficients: Approval of Trade with People's Republic	Interested in Buying Their Products
Recent purchase experience	-.022	-.212
International political awareness	-.337	-.181
Foreign travel experience	-.356	-.055
International social network	.148	.190
International reading activity	-.171	-.445
Advertising awareness--Foreign products	.270	.217
Age	-.779	-.612
Education	.149	.396
Income	.001	-.132
Occupation	.130	.191
Marital status	-.021	.016
Spouse's education	.245	-.198
Sex	-.262	-.282
Race	-.372	-.028
Overall Classification Power	65%	73%

Summary and Conclusions

The data examined suggest that COM information is in general sought out by a significant (40%) segment of consumers, and that sensitivity to COM information varies by product category, being highest for durable goods.

COM was also shown to affect perceptions of quality and price for products from different countries. In addition, perceived risk levels varied by COM, with the People's Republic of China, South Korea and Japan being perceived as marketing products entailing greater consumer risk than products from the U.S. and/or Japan.

The discriminant profiles developed were moderately successful in categorizing consumers on the basis of psychographic and demographic characteristics into high versus low COM information need groups. Somewhat greater success was achieved in categorizing consumers holding favorable versus unfavorable attitudes toward trade with the People's Republic, and consumers interested in purchasing their products.

These profiles should prove useful in identifying <u>when</u> COM effects are likely to be important in importing products from the countries studied, and in identifying <u>which</u> consumers will be most affected by COM information. In addition, the resulting predictor variable coefficients should provide insight into the possible underlying <u>causes</u> of consumer perceptions toward products from each of the countries studied.

References

Anderson, Ronald and Jack Engledow. "A Factor Analytic Comparison of U.S. and German Information Seekers," Journal of Consumer Research, Vol. 3 (March 1977).

Bilkey, Warren, and Ness. "Country-of-Origin Effects on Product Evaluations," Journal of International Business Studies, 12 (Spring/Summer), pp. 89-99.

Chasin, Joseph B. and Eugene D. Jaffe. "Industrial Buyer Attitudes Toward Products Made in Eastern Europe," Columbia Journal of World Business (Summer 1979), pp. 74-81.

Elinder, Erik. "How International Can European Advertising Be?", Journal of Marketing, Vol. 29 (April 1965), pp. 7-11.

Foote, Cone, and Belding. "American Trade with Foreign Nations and the Quality of Japanese-Made Products," Executive Briefings/Daily Survey, Chicago: FCB, 1976.

Gaedeke, Ralph. "Consumer Attitudes Toward Products 'Made In' Developing Countries," Journal of Retailing, Vol. 49 (Summer 1973), pp. 13-24.

Hampton, Gerald. "Perceived Risk in Buying Products Made Abroad by American Firms," Baylor Business Studies (October 1977), pp. 53-64.

Hugstad, Paul S. and James W. Taylor. "Risk Theory and the Science of Marketing," Conceptual and Theoretical Developments in Marketing, Chicago: American Marketing Association (1979).

Miracle, Gordon E. "Internationalizing Advertising Principles and Strategies," MSU Business Topics (Autumn 1968), pp. 29-36.

Nagashima, Akira. "A Comparative 'Made In' Product Image Survey Among Japanese Businessmen," Journal of Marketing, Vol. 41 (July 1977), pp. 95-100.

____________. "A Comparison of Japanese and U.S. Attitudes Toward Foreign Products," Journal of Marketing, Vol. 34 (January 1970), pp. 68-74.

Olson, Jerry and Jacob Jacoby. "Cue Utilization in the Quality Perception Process," Proceedings, Third Annual Conference of the Association for Consumer Research, Vol. 2 (1972), pp. 167-179.

Reierson, Curtis. "Are Foreign Products Seen as National Stereotypes?", Journal of Retailing, Vol. 42 (Fall 1966), pp. 33-40.

____________. "Attitude Changes Toward Foreign Products," Journal of Marketing Research, Vol. 4 (November 1967), pp. 385-387.

Schooler, Robert D. "Product Bias in the Central American Common Market," Journal of Marketing Research, Vol. 2 (November 1965), pp. 394-397.

Schooler, Robert D. and Albert R. Wildt. "Elasticity of Product Bias," Journal of Marketing Research, Vol. 5 (February 1968), pp. 78-82.

Schooler, Robert D. and Don H. Sunco. "Consumer Perceptions of International Products: Regional versus National Labeling," Social Science Quarterly (March 1969), pp. 886-890.

Schooler, Robert D. "Bias Phenomena Attendant to the Marketing of Foreign Goods in the U.S.," Journal of International Business Studies, Vol. 2 (Spring 1971), pp. 71-80.

White, Phillip D. "Attitudes of U.S. Purchasing Managers Toward Industrial Products Manufactured in Selected Western European Nations," Journal of International Business Studies (Spring/Summer 1979), pp. 81-90.

Wind, Yoram, Susan P. Douglas and Howard V. Perlmutter. "Guidelines for Developing International Marketing Strategies," Journal of Marketing, Vol. 37 (April 1973), pp. 14-23.

THE IMPORTED EXPORT MARKET: AN INVESTIGATION OF FOREIGN VISITORS' GIFT AND PERSONAL PURCHASES

Margaret Rucker, University of California, Davis
Susan Kaiser, University of California, Davis
Mary Barry, Auburn University
Debra Brummett, Auburn University
Carla Freeman, University of California, Davis
Alice Peters, University of California, Davis

ABSTRACT

This study was designed to investigate the "imported" export market, i.e., visitors from other countries, both as a test market for direct exports and a special sub-market in its own right. A questionnaire covering past and planned purchases, for personal use and gifts, was administered to a sample of foreign students. Comparison of past with projected purchases indicates that timing of gift purchases differs from that of personal purchases and marketing strategies should be planned accordingly. Additional findings suggest that foreign visitors may provide useful information about home markets, e.g., differences in preferences for brand names by sex.

INTRODUCTION

The issues involved in obtaining the appropriate balance between imports and exports are highly complex and emotionally charged. A dramatic illustration of this point can be seen in the divergent and often violent reactions to the protectionistic textiles legislation that has recently come before Congress. Although this trade bill has a sizable group of staunch supporters, opponents on both the national and international level have enumerated a variety of problems associated with use of protectionistic policies to compete in a global economy. There appears to be a need for closer consideration of alternative strategies, such as those proposed by Toyne et al. (1984) in their study of the international competitiveness of the U.S. textile mill products industry.

These and other analysts have noted that one factor related to an unfavorable ratio of exports to imports is lack of an international perspective among managers. Recommendations made by Toyne et al. (1984) for improving international competitiveness include increasing utilization of end-market research and market position techniques, enhancing product features to reduce the need to compete on price, and focusing on specialized sub-markets.

Some obvious impediments to cross-cultural marketing research are the time, money, and expertise needed to conduct studies in other countries. The alternative approach proposed in this paper is to evaluate the "imported" export market, i.e., visitors from other countries, both as a test market for products intended for export and as a specialized sub-market in its own right.

As noted in summaries of data on international travel (World Tourism Trends, 1984; Bolyard, 1985), visitors from other countries have a significant impact on the United States economy. In 1983, 21.7 million people traveled to the United States and added $13.8 billion to our national income. Preliminary data for 1984 suggest that although the number of visitors decreased, receipts from the foreign visitors showed a slight increase. Furthermore, foreign travelers are estimated to have generated more than 600,000 United States jobs and provided one-third of the business service exports.

One important segment of the foreign visitor market is adolescents coming to the United States for educational purposes. Statistics provided by Alfred Julian, Institute of International Education, indicate that for the academic year 1984-85, approximately 400,000 foreign students attended colleges and universities throughout the United States. This group is important not only because of its size but also its demographic characteristics such as relatively high family status, income, and intellectual ability. Because of these characteristics one would expect these people, as a group, to be among the present and future leaders of their home countries. Their incomes, as well as their influence, should be above average. They are, or will become, the taste makers, the innovators, the fashion pioneers of their countries. Given the American products they are exposed to and buy here, for themselves and family and friends, this group constitutes an important sub-market in itself. Furthermore, and perhaps more important, it offers the potential to test and enhance the diffusion of products directed at corresponding foreign markets.

To evaluate the possibilities of increasing exports through study of the foreign student market, it was decided to conduct an initial survey of purchases by Japanese students attending summer language classes at a major western university. Japanese visitors were chosen for study based on Japan's importance as a tourist market for the United States. Of all countries overseas, Japan contributes the most to the United States, in terms of both travel receipts and visitors (Bolyard, 1985). Approximately 1,350,000 visitors from Japan were estimated for 1984, generating $1,190 million in receipts. Furthermore, economic conditions are expected to favor growth in arrivals from this country (World Tourism Trends, 1984).

A decision was made to focus on clothing purchases of the students for several reasons. First, statistics on Japanese clothing consumption indicate that although the sales of clothing have declined somewhat in the 1980s after a phenomenal expansion in the 1970s, this is still an active market with sales in 1983 of over $28 billion (Nakazawa, 1985). In terms of potential for penetration by U.S. manufacturers, there are indications that market share could increase under the right conditions. For example, in a 1981 Nippon HALF survey of female adolescents, 86.7% were "very to somewhat interested" in overseas fashion ("International Girl's Fashion," 1981). Casual clothing and sportswear have been suggested as especially promising targets for exports (U.S. Department of Commerce, 1980, p. 1; Kawabata, 1982).

Another consideration was that tourists frequently buy gifts in addition to items for personal use, and clothing is a major component of the gift market (cf. Jolibert & Fernandez-Moreno, 1983). Therefore, it was thought that an investigation of both types of clothing purchases could provide additional insights into characteristics of these two types of markets. Although a number of studies have been done on gift-giving behavior, as noted in reviews by Belk (1979) and Sherry (1983), the authors are not aware of any that have focused on items acquired by tourists in foreign countries.

An additional reason for considering clothing purchases of Japanese youth in the United States is that studies of the adolescent clothing market in Japan are available for purposes of comparison. These include a recent survey conducted by one of the co-authors (Brummett, 1984).

In summary, the present study was designed to investigate the planned clothing purchases and completed purchases of a sample of Japanese students in the United States. Purchase categories were subdivided into purchases for self, purchases requested by others, and gifts for others.

Similar data were collected on one specific clothing category, the T-shirt with a printed message. This type of garment was chosen for special attention because it is a popular item of casual clothing and it is often marketed as a souvenir of travel to a particular location or attendance at a special event. Although statistics are not available on the United States production of T-shirts per se, it might be noted that the 1980 figures for production of knit shirts in general was close to 260 million units (Priestland, 1982). Another consideration was that printed T-shirts are apt to be less ambiguous with respect to country of origin than are other types of apparel. Not only do they provide cues by the language in which they are printed, but also, at least in some cases, through verbal representations of culture-specific entities such as educational institutions, sports teams, and the like. The T-shirt with a message in the language of another country should be particularly appealing to a foreign visitor as a mnemonic device or reminder of experiences in that country. Furthermore, it can demonstrate to others that one has the resources to engage in foreign travel. In this regard, it serves as a status symbol as it embodies two major requisites of status symbolism in consumer products--social desirability and scarcity (Blumberg, 1974).

METHODOLOGY

Sample

Participants in this study consisted of 49 Japanese students, 17 males and 32 females, enrolled in a university language program during the summer of 1985. The majority of them were college students from universities in Japan; a few were recent college graduates. The students ranged in age from 18 to 28 years with most falling between 19 and 22 years of age. The mean age was 20.7 years. All of the students were living in homes of community residents for the duration of the summer program. For 41 of the students, this was their first trip to the United States. The remaining 8 had been to the United States once before. At the time the questionnaire was completed, the students had already been in the country for about three to four weeks. All except three of the students were planning to remain for an additional one to three weeks.

Questionnaire

The questionnaire was divided into four sections. The first section consisted of background information items, the second covered general clothing purchases, and the third focused on purchases of T-shirts with messages. In these latter two sections, respondents were asked about both acquisitions since arriving in the United States and projected or anticipated purchases. Information on whether purchases were personal or for other people was also requested. In the section on T-shirt purchases, types of messages were provided along with examples (see Table 1), to assist with answering this set of questions.

TABLE 1

EXAMPLES OF WRITTEN MESSAGES ON T-SHIRTS

Name of cartoon character (Mickey Mouse, Donald Duck, etc.)
Name of entertainer (Madonna, Michael Jackson, etc.)
Name of sports team (Dallas Cowboys, Los Angeles Dodgers, etc.)
Clothing trademark (Esprit, Ocean Pacific, etc.)
Other trademark (Coca Cola, Budweiser, etc.)
Name of store or restaurant (Hard Rock Cafe, Bloomingdales, McDonalds, etc.)
Name of a tourist attraction (Disneyland, the Golden Gate Bridge, etc.)
The name of the country (U.S.A., America, etc.)
Made in the country (crafted with pride in U.S.A., etc.)
Location within the country (California, Los Angeles, Yosemite, etc.)
School name (Stanford, UCD, Harvard, etc.)
Social-political issue (save the Statue of Liberty, etc.)
Humorous message or joke
Any other messages or writing

The categories of T-shirts presented in Table 1 were illustrated by examples of actual T-shirts in the classes where the students were not as fluent in English, to assure that they understood each of the categories completely. The fourth section of the questionnaire dealt with clothing preferences. One question asked for an indication of liking, as measured on a 7-point scale, for the different categories of T-shirt messages. The other question was designed to measure the importance of personal contact relative to specific types of messages (e.g., city names, school names, names of entertainers).

Procedure

The questionnaires were completed by the students in each of six classes, with approximately 10 students per class. Although these classes represented different levels of English-speaking ability (beginning, intermediate, and advanced), all of the students were able to read English with little difficulty.

RESULTS AND DISCUSSION

About 25% of the respondents indicated that they had been asked to buy clothing for other people during their visits to the United States. With some respondents reporting multiple requests, the total number of garments in this category came to 20. As expected, the T-shirt was the most popular type of garment with 17 requests. The three other requests included two for sweatsuits and one for "old clothes." Although Brummett (1984) observed that Japanese adolescents are generally biased against old or used merchandise, there has been some interest in following American fashions of the 1950s and the request for old American clothes probably reflects that interest. All but one request came from friends or siblings; the exception was a request from the host family. One might expect most of the requests to come from the adolescents' own generation. This age group is noted for a high interest in clothing. Also, peers are apt to have similar tastes which would facilitate appropriate garment selection.

When asked if they had already bought any other clothing for themselves or other people since arriving in the United States, 31 or 63% of the respondents said they had. The majority of these purchases were for use by the students themselves. Of the thirty responding to this question, 16 said for myself, 7 said for others, and another 7 said for both myself and others.

Responses to a question on additional planned purchases indicated that 23 or 47% of the respondents intended to purchase clothing for themselves and others before they returned to Japan. When broken down by recipient of purchase, one finds a contrasting pattern to the previous purchase data. That is, there were somewhat more planned purchases for others than planned purchases for self, 11 and 8 respectively. Another 3 said for both self and others. Results of a chi square analysis indicated that this difference approached significance ($p = 0.07$). A similar difference was observed for the data dealing with just T-shirts. Twenty or 41% reported already buying T-shirts. Nineteen listed recipients; 9 for self, 6 for others, and 4 for self and others. Twenty also reported planning to purchase T-shirts before they left the United States. In this case, of the 17 listing recipients, only 3 were for self, 10 were for others and 4 were a combination. This difference for recipient by past versus planned purchase was significant ($p = 0.05$).

To summarize, for this group of respondents personal purchases were given priority over gifts for others, at least in terms of timing. Previous research on gift giving (Gronhaug, 1972; Clarke & Belk, 1979; Heeler et al., 1979; Belk, 1982) suggests that, in general, gift purchases are associated with a greater expenditure of time and effort than are purchases for regular use because of higher involvement in the former type of task. While this may provide at least a partial explanation of the present findings, it seems plausible that other factors could affect the timing of gift purchases by tourists. Additional considerations range from difficulty in locating suitable retail outlets in a foreign country to concerns about early depletion of the travel budget through purchase of gifts. Prevalence of different reasons for postponing purchases for others needs to be determined in order to develop successful marketing strategies for the tourist market.

With respect to type of clothing already purchased, aside from requests, T-shirts were again the clear favorite with 48 purchases. The maximum number of purchases for any other type of garment was three for sweatshirts. Similar to the data on requests, friends and siblings accounted for all of the purchase recipients other than self. T-shirts also accounted for the majority of planned purchases. In this case, mother and cousins were added to friends and siblings as potential recipients of the purchase.

Requests for T-shirts with messages were reported by 7 respondents. School name was the most popular of these with 4 requests. This finding might be expected since the sample consisted of participants in a university summer program. Convenience in obtaining a university T-shirt undoubtedly affected its popularity.

Recipients included friends, siblings and, in one case, mother. It is interesting to note that mother was not given in the previous list of people requesting purchases of clothing in general. This may have been a simple oversight or may represent a perception of message T-shirts as souvenirs rather than clothing to be worn.

Completed purchases and planned purchases confirmed the popularity of school name as a T-shirt message with 21 already purchased and 10 planned for purchase. Other frequently mentioned messages included geographical locations, cartoon characters and sports teams. The list of recipients for completed T-shirt purchases was the same as the list for completed general clothing purchases. A comparison of planned T-shirt purchases with planned general clothing purchases showed two cases of father being added to the list for T-shirts with messages. Again, the implication is that these items may have more symbolic than functional value, at least for some people.

To determine the value of T-shirts with American messages apart from a reflection of direct physical contact with this country's culture, the students were asked to indicate how many of these items were purchased in Japan and what the messages were. There was also a direct question on effect of personal contact with different aspects of the culture on preference for various messages. Twenty-one or 43% indicated that they had purchased T-shirts with American messages in Japan. With respect to these purchases, it might

TABLE 2

CROSS-TABULATION OF TYPE OF MESSAGE BY EFFECT OF PERSONAL CONTACT ON PREFERENCE

	I would want a T-shirt with this message only if I had personal contact with the person or place.	I would want a T-shirt with this message only if either I or someone buying the shirt for me had personal contact with the person or place.	Personal contact would not affect my preference.	Combination of responses.
Location within the country	18	9	5	4
School name	22	14	1	5
Name of entertainer	13	11	10	0
Name of store or restaurant	10	7	13	0
Name of a tourist attraction	13	12	6	2
Name of a sports team	8	14	9	1

be noted that none of the listed messages were school names. As shown in Table 2, only one respondent indicated that personal contact with a school, either directly or through a friend, would not affect preference for a T-shirt with a school name. Five other respondents checked a combination of columns, suggesting that whether or not personal contact made a difference would depend on the school. However one interprets the combination data, the findings still suggest that direct export of garments with school names is apt to be less successful than marketing to the tourist trade.

Analysis of variance was used to test the data on preference for various types of messages. Results of this analysis are presented in Table 3. Mean values for each message by sex of respondent are presented in Table 4. The effect of sex was not significant but the effects of messages and the sex by message interaction were significant ($p < 0.001$ and $p < 0.05$).

TABLE 3

ANALYSIS OF VARIANCE OF THE EFFECTS OF SEX AND MESSAGE TYPE ON PREFERENCES FOR PRINTED MESSAGES ON T-SHIRTS

Source	df	MS	F
Respondent sex	1	.15	.01
Error between	38	10.62	
Message type	13	15.99	7.03***
Message by sex	13	4.81	2.12*
Error within	494	2.27	

*p < .05
***p < .001

TABLE 4

MEAN PREFERENCE RATINGS FOR PRINTED MESSAGES ON T-SHIRTS BY SEX OF RESPONDENTS

Message	Males	Females
Name of cartoon character	4.86	3.77
Name of entertainer	3.42	4.85
Name of sports team	3.28	3.85
Clothing trademark	3.50	3.69
Other trademark	3.86	4.23
Name of store or restaurant	5.50	5.38
Name of a tourist attraction	4.64	4.04
Name of the country	3.86	3.58
Made in this country	3.86	3.35
Location within country	3.36	3.58
School name	3.21	2.46
Social-political issue	4.43	4.77
Humorous message	2.43	3.65
No message (plain)	4.00	3.50

[a]Rating scale ranges from 1 (like very much) to 7 (dislike very much).

Not surprisingly, the message rated as most popular overall was school name. Next in popularity was humorous message. A discussion with one of the respondents suggested one possible reason for this high rating. This respondent indicated that she preferred American messages because many of the peers in her home country could not understand the words whereas she could. This fluency in English distinguished her from many of her friends. Appreciating humor in another language is especially difficult and therefore should confer special distinction on those who display and understand this type of message. The least acceptable messages overall were names of stores and restaurants and social/political statements.

In terms of differences in preferences for messages as a function of sex of respondent, the biggest differences between males and females were for entertainers and humorous messages. In both cases, males gave more positive ratings than did females. The third largest difference was for names of cartoon characters with females giving this type of message a more positive mean rating. This finding is consistent with information reported by Brummett (1984) that female college students in Japan have a preference for appearing young and cute. Use of cartoon messages, symbols of childhood, would be congruent with that type of image. Another difference that is similar to findings of Brummett (1984) and results of a survey conducted by the Japanese Small Business Corporation (JETRO, 1982) is that males gave slightly higher ratings to apparel trademark messages and significantly higher ratings to other trademarks. Both Brummett and the Japanese Small Business Corporation found that with respect to clothing selection, brand preference was stronger for adolescent males than for adolescent females. The present study suggests that this difference in internal dependence on brands in selecting apparel carries over into willingness to engage in an outward display of brand names.

IMPLICATIONS

Results of this study suggest that the multi-billion dollar tourist market could expand further if attention were given to some of the unique aspects of this market. For example, the timing of personal purchases versus gift purchases needs to be explored more fully and utilized for purposes of designing advertising appeals, etc. Also, findings suggest that there may be a distinction between clothing as a functional product and clothing as a mnemonic device or souvenir. Sales might be improved by adjusting marketing strategies in keeping with this distinction. In addition, correspondence between some findings of this research and previous studies of clothing practices of Japanese adolescents in their home country suggests that the tourist market could be a useful test market in which to assess the potential success of products intended for direct export.

Future research might include, but is not limited to, different and more extensive samples of foreign students. For example, it might be possible to coordinate a study with the United States Travel and Tourism Administration through their In-Flight Survey program. Alternatively, one might consider airport intercepts in areas where foreign tourists are waiting for their return flights. Another possibility would be to make arrangements with popular tourist attractions to survey selected groups of foreign visitors.

In summary, there are a variety of ways in which information might be collected on the foreign tourist market. Given its potential, as both a specialized sub-market per se and as a direct export market indicator, it appears that tourism is deserving of more attention than it has received to date.

REFERENCES

Belk, R. W. (1979). "Gift-giving Behavior," Research in Marketing, pp. 95-126.

Belk, R. W. (1982). "Effects of Gift-giving Involvement on Gift Selection Strategies," Advances in Consumer Research, pp. 408-412.

Blumberg, P. (1974). "The Decline and Fall of the Status Symbol: Some Thoughts on Status in a Post-industrial Society," Social Problems, pp. 480-497.

Bolyard, J. E. (May 1985). "International Travel and Passenger Fares, 1984," Survey of Current Business, pp. 14-17.

Brummett, D. (1984). "Japanese Retailing Strategy in Fashion Apparel: Marketing to the Young Japanese Consumer," Unpublished Master's Thesis, Auburn University.

Clarke, K., & Belk, R. W. (1979). "The Effects of Product Involvement and Task Definition on Anticipated Consumer Effort," Advances in Consumer Research, pp. 313-318.

Gronhaug, K. (1972). "Buying Situation and Buyer's Information Behavior," European Marketing Research Review, pp. 33-48.

Heeler, R., Francis, J., Okechuku, C., & Reid, S. (1979). "Gift versus Personal Use Brand Selection," Advances in Consumer Research, pp. 325-328.

Holman, R. H. (1981). "Apparel as Communication." In E. C. Hirschman & M. B. Holbrook (Eds.) Symbolic Consumer Behavior. Ann Arbor, Mich.: Association for Consumer Research, pp. 7-15.

"International Girl's Fashion: Nippon HALF Reports." (1981). Japan Textile Trade News, p. 3.

JETRO. (March 1982). "Keys to Success: Japan's 'Clothing Lifestyle': As Told by Foreign and Japanese Executives." Tokyo: Author.

Jolibert, A. J. P., & Fernandez-Moreno, C. (1983). "A Comparison of French and Mexican Gift Giving Practices," Advances in Consumer Research, pp. 191-196.

Kawabata, T. (March 17, 1982). "List of Foreign Products Holding 'High' Market-Share," Japan Times, p. 11.

Nakazawa, M. (March/April 1985). "Japan's Consumer Revolution," Journal of Japanese Trade & Industry, pp. 24-26.

Priestland, C. H. (1982). Focus: Economic Profile of the Apparel Industry. Arlington, VA: American Apparel Manufacturers Association.

Sherry, J. F., Jr. (1983). "Gift Giving in Anthropological Perspective," Journal of Consumer Research, pp. 157-168.

Toyne, B., Arpan, J. S., Barnett, A. H., Ricks, D. A., & Shimp, T. A. (Winter 1984). "The International Competitiveness of the U.S. Textile Mill Products Industry: Corporate Strategies for the Future," Journal of International Business Studies, pp. 145-165.

U.S. Department of Commerce, International Trade Administration. (April 1980). Country Market Survey: Apparel: Japan (International Marketing Information Series CMS 80-808). Washington, D.C.: U.S. Government Printing Office.

World Tourism Trends. (May 28, 1984). Business America, pp. 5-7.

AN OPERATIONAL FRAMEWORK FOR ENTRY STRATEGY IN THE MULTINATIONAL MARKETING SYSTEM[1]

Sejo Oh, University of Cincinnati

Abstract

This paper presents an operational framework for formulating strategies in the multinational marketing system. Using a portfolio perspective, the framework proposed here is a decision sensitive middle ground framework between two polarized approaches: 1) the highly subjective approach, and 2) the highly structured optimization approach. It includes a strategic option model, a decision making model, and a decision support system. In a tutorial fashion, the paper synthesizes past research and outlines directions for future conceptual and empirical progress.

> "No company can afford to stake its future on the assumption that it "owns" its home market. To prosper in the future, every firm will have to become competitive in global terms, whether it remains at home or goes abroad. And to become international, they will need to design foreign entry strategies in the global economy of today and tomorrow." (Root 1982, p. 3)

Indeed, America's unfavorable balance of payments, higher market growth rates in a number of other regions, equivalent standards of living in much of Western Europe and Japan, and greater foreign competition in the domestic market compel attention to the international dimension of marketing thought and theory.

When assessing international opportunities, it is desirable for the enterprise to adopt a geocentric orientation, viewing the world as a set of interrelated markets rather than as separate country or regional markets (Wind, Douglas, and Perlmutter 1973). Adoption of a geocentric perspective implies the need for balancing risk, managing multiple cash and other demands, and identifying synergies. Thus, a portfolio approach which provides guidelines for allocating resources across countries, products, and marketing activities (Wind and Douglas 1981), has inherent appeal.

The current portfolio analyses in international marketing can be classified into five approaches. Thus:

1. Implicit policy heuristics - Foreign markets are selected on the basis of implicit criteria (e.g., geographic proximity, perceived cultural similarity, industry growth). Limited data analysis supports target country selection or entry mode.

2. Standardized models (extended) - Here a firm may depict its worldwide businesses in a share x growth matrix to evaluate its business definition and guide global investment decisions.

3. Analytic Hierarchy Process (AHP) - Outlined in Saaty (1977), the AHP offers a set of portfolio approaches for the nested sequence of decisions which shape global strategies. The sequence includes country, entry mode, target market and product, and mix decisions.

4. Stochastic Dominance Analysis (SDA) - Outlined in Bowa (1975), uses historical and projected data on the interdependence of risks and expected returns by feasible portfolios.

5. The Eclectic Approach - Outlined in Mahajan et al. (1981), evaluates the various portfolios, assesses their priorities, and then utilizes the resulting AHP outcomes in making international resource allocation and scheduling decisions.

The basic focus, the unit of analysis, strengths and weaknesses, and major articles of each approach are summarized at Table 1.

TABLE 1. COMPARISON OF MAJOR PORTFOLIO APPROACHES

Criterion \ Approach	Implicit Approach	An extension of the standardized models	Analytical Hierarchy Process (AHP)	Stochastic Dominance Analysis (SDA)	An Eclectic Approach of AHP & SDA
Basic Focus	consideration of the portfolio components intuitively	internation extension of two dimensions, typically business strength and industry attractiveness	structuring any complex, multi-criterion and multiperiod problem hierarchically and providing their judgment on the relative importance of the elements of each hierarchy	analyzing the interdependencies of risks & expected return in a portfolio model	evaluating the best set of risk/return portfolios more efficiently
Unit of Analysis	typically country-by-country base	typically products by country or each country	all units of analysis	All units of analysis	All units of analysis
Strengths	simple	. following up cash flow or market share . easy understanding of model	. flexible formulation of hierarchy . resolution of conflicts among the participating managers	. similar to AHPs . ability to evaluate a large number of portfolios by a minimum data-risk & return	. encouragement of creativity by generating addition portfolios . allowance for explicit evaluation of the various alternatives
Weaknesses	. no systematic explicit & comprehensive analysis	. no consideration of costs of entry to countries & markets' shared marketing cost, & risk dimension	. judgmental and scaling bias . difficulty to check bias . difficulty to follow up the direction of strategy	. forecasting problem of risk and return . availability problem of data	. similar to AHP & SDA
Major Articles	. Liander (1976) . Litvak & Banting (1968) . Johansson & Moinpour (1977) . Sethi (1971) . Sheth & Lutz (1973)	. Larréché	. Saaty (1977) . Wind & Saaty (1980)	. Mahajan, Wind, & Bradford (1981)	. Wind & Douglas (1981) . Wind & Robertson (1983)

[1]The author thanks Professor F. Robert Dwyer for his comments on previous drafts of this paper.

By itself, each approach, however, has limited value for constructing entry strategies in a multinational marketing system. For example, the first two models cannot clearly specify one entry mode over other alternative modes to country x, because the analysis is steeped in the subjective weighting of vague dimensions. It is highly possible that two groups applying the model would obtain conflicting strategies.

Similarly, the AHP suggests a comprehensive approach, but it requires much judgment from various managers and so it may also elicit some judgmental and scaling biases. Misjudgment by top executives is difficult to check because the AHP does not incorporate a feedback and control system. Such a system evaluates the strategy against standards and signals the need for appraisal of candidate modifications.

Finally, the SDA and the Eclectic approach overemphasize two key variables - risk and return. While these variables may reflect opportunities for competitive advantage (Wensley 1981), the technical attention to their inherent forecasting problems may obfuscate the search for market imperfections, especially as it pertains to the more complicated and diversified global environment.

In sum, the strengths and weaknesses of current portfolio approaches indicate the need for a middle-ground framework which 1) structures judgmental facets of policy making with explicit assumptions and empirical evidence and 2) tempers rigid formula approaches with creative judgment. Thus, we need a more comprehensive data oriented approach.

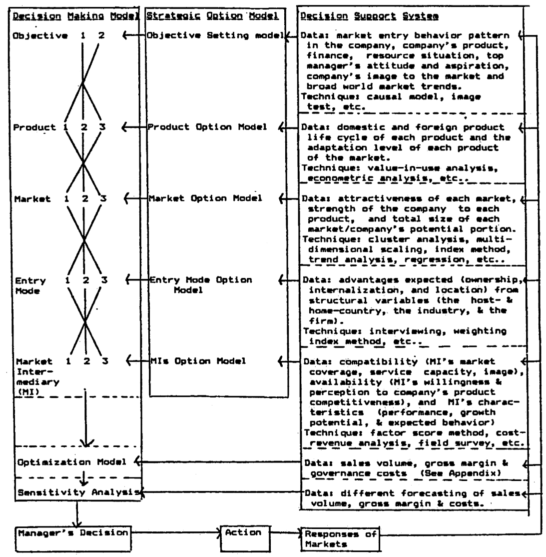
Before introducing the framework, it is important to underscore one more critical departure from past research. All of the approaches in Table 1 consider marketing channel design/selection as one of the 4Ps in the marketing mix decisions. However, among channel design issues, types of middlemen and the number of levels are closely related to entry modes. In addition, the inflexibility and long-term consequences of channels decisions make them a core component of marketing strategy. Thus, the framework presented here includes specification of marketing intermediaries as a key aspect of entry strategy.

Toward a New Conceptual Framework for the Channel Strategy

For solving the problems above, this paper proposes an operational framework which incorporates three essential submodels: (1) a strategic option model for identification of general courses of actions, (2) a decision making model as an algorithm for evaluation of alternatives under relevant contingencies, and (3) a decision support system as an information, evaluation and control structure (see Figure 1.)

Within the overall framework, multinational marketers first identify candidate strategies and evaluate those via the optimization model and consequential sensitivity analysis. Implementation and control of the selected program is then facilitated within a multinational decision support system. The framework serves to highlight the hierarchical decision process envisioned as well as the key interactions and feedback loops of the system.

FIGURE 1: A FRAMEWORK FOR ENTRY STRATEGY



Step 1: A Strategic Option Model

It includes (a) objective setting, (b) product option, (c) market option, (d) entry mode option, and (e) market intermediary option.

FIGURE 2. STRATEGIC OPTION MODELS

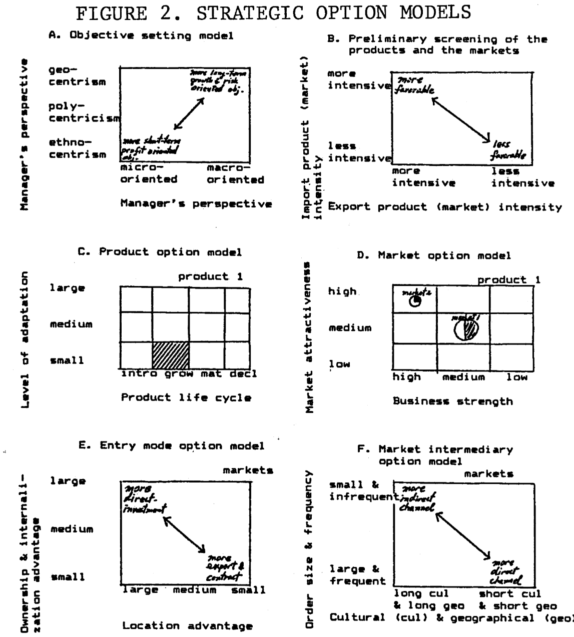


Figure 2 summarizes a number of previously suggested heuristics for the strategy selection. They show mixed levels of congruence with contemporary theories of the firm (Anderson 1982), competitive advantage (Wensley 1981), and institutional economics (Williamson 1975). As an example, in the market option model, we can use the various standardized portfolio models including the growth-share model, the market attractiveness-business position assignment model (GE model), the PIMS model, the A. D. Little model, etc. (Abell and Hammond 1979; Wind, Mahajan, Swine

1983). Among these models, the GE model may be appropriate for target market selection because in many complicated multinational environments, the GE model can consider many variables concerning environment. We can use a modified model from the GE model presented in Figure 2D. In this model, the variables of market attractiveness, business strength of each target product, and the total market size of the product to each market and its focal business portion are germane. By the variables of market attractiveness such as annual market growth rates, competitive intensity, etc., we can classify target countries into three groups - low, medium, and high, and by the variables of business strength such as product quality, brand reputation, etc., we can also classify target countries into three groups - low, medium, high. The total market size (the circle of the Figure 2D) and the focal business portion (dashed lines in the circle) can be estimated by the forecasting methods such as expert opinion, trend extrapolation, dynamic modeling, multiple scenarios, etc. (Kotler 1984, p. 220-221). By the box model presented here, we can select major target markets which incorporate strong market attractiveness and business position, and high market shares.

This model, however, has some drawbacks such as the weighting problem of indicators of market attractiveness and business strength and the forecasting problems of total demand and company demand of each market. Despite these problems, this model is useful for understanding market potential and its dynamic trend in relation to the company's relative competitiveness.

According to space constraints, this paper only briefly presents potential insights to other strategic option models. In objective setting, Root (1982) suggests that objectives can be grouped into three elements--the maximization of profits, the minimization of risk, and other objectives including sales volume and growth control. In the multinational marketing system, the priority and arrangement of these objectives may be connected with the international manager's perspective, attitude, and aspiration. As an example, the objective setting model can be built by two kinds of the manager's perspectives: One is Perlmutter's classification--ethnocentrism, polycentrism, and geocentrism); the other is a macro- vs. a micro-perspective (Figure 2A). Some insightful propositions are as follows. The more geocentric and macro-orientation, the more long-term growth and risk oriented objective. The ethnocentric and micro-orientation, the more short-term profit oriented objective.

For target product selecting and target market selecting, managers need to strive to match products against markets. Root (1982) suggests the simultaneous determination of target products and target markets, but he does not provide a model up to the task. For filling this gap, we can use two indices modified from the "revealed" comparative advantage developed by Balassa (1965). One is an export product (or market) intensity, the other is an import product (or market) intensity. For example, the import product intensity and the export product intensity can be calculated by these formulae:

$$I_i^h = M_i^h / M_i \ / \ X^h / X \qquad (1)$$

where, I_i^h = Import product intensity index,
M_i^h = i country's import of h product from the world,
M_i = i country's total import from the world,
X^h = World's export of h product, and
X = World's total export.

$$I_j^h = X_j^h / X_j \ / \ M^h / M \qquad (2)$$

where, I_j^h = Export product intensity index
X_j^h = j country's export of h product to the world
X_j = j country's total export to the world
M^h = World's import of h product, and
M = World's total import.

It can be used by each country market (or product), regional market (or product category), and world market (or industry). In the model (Figure 2B), the higher the import product (market) intensity of the host country and the higher the export product (market) intensity of the home country, the more the product (market) is favorable for the home country to export to the host country.

After preliminary screening of the target product group and the target market group, we can select them more specifically. In the target product grouping, we can use the life cycle concept and the adaptation concept (Root, 1982 pp. 29-36). The life cycle concept can be used to identify the relative position of a product type in several country markets. The adaptation concept can be used to identify the relative position of a product to the requirements of foreign markets.

There are key inputs for production selection. A model for target product selecting is suggested in Figure 2C. By the model, we can classify the preliminary screened country markets into 12 groups by each product, and if those markets are classified intensely into the cell of the growth stage and the small adaptation level (the dash-lined cell in the Figure 2C), that product may be one of the target products.

In target entry mode selecting, we need to confirm the ownership advantage (the "why" of MNC activity: technology, capital, etc.), the location advantage (the "where of production: material and labor costs, etc.), and the internalization advantage (Williamson 1975) (the "how" of involvement: transaction costs, control, etc.) in the three aspects of the country (home and host), the industry and the firm. A model is illustrated in Figure 2F. In the model, one insightful proposition is that the more the ownership-, location-, and internalization advantage, the more favorable the direct investment.

In potential market intermediary selecting, there are many types of market intermediaries, for example, merchant wholesaler in home country, merchant wholesaler in host country, sales agent in home country, sales agent in host country, company sales branch in host country, and direct exports to customers in host country. Muelenberg (1984) suggests a qualitative model which represents the influence of geographical and cultural distance to markets, order size, and order frequency on export marketing channels. We can suggest a modified model from Meulenberg's model in

Figure 2F. In this model, the longer the geographical and cultural distance, the more preferable the indirect channel. Likewise, the smaller and less frequent order, the more preferable the indirect channel.

Step 2. A Decision Making Model - An Optimization and Sensitivity Analysis Model

After selecting target objectives, products, markets, entry modes, and market intermediaries, we need to use a decision making model to take the simultaneous selection of those options. Regarding an optimization model, DESIGNER (Zoltners et al. 1982) looks promising. DESIGNER evaluates candidate market intermediaries on the basis of market coverage, market intermediary (MI) - market coverage links, sales margin, and governance costs. Its essentials are: (1) the best target markets are determined as well as the appropriate market intermediaries to serve those markets, (2) DESIGNER employs actual performance estimates for sales volume, cost and profit whenever possible, (3) DESIGNER incorporates behavioral and logistical dimensions in addition to financial design criteria. It needs, however, the following modifications to support decision making in multinational entry-channel strategy.

(1) Production capacity. DESIGNER has a constraint of production capacity. In multinational marketing system, managers have more flexibility to arrange production capacity of each country through joint venture, etc.

(2) Discount rate. DESIGNER assumes that the discount rate is under the same risk condition in each market. In a multinational marketing system, the discount rate may be applied differently in each market.

(3) Taxes. DESIGNER assumes that each market has the same tax system. In a multinational marketing system, each country market has a different tax system.

(4) Competitive effects. DESIGNER has ignored competition and synergy effects. In multinational marketing systems, these factors are more important because of the variety of entry modes and the complexity of environments.

To overcome the above problems, especially the first three, we must incorporate new variables and constraints into the DESIGNER model. The modified model is a linear integer programming model like the DESIGNER model with major assumptions of the model being similar to those of DESIGNER. First, a target market is served by a single marketing intermediary (MI). Second, an MI is served by a single production location (PL). Third, each MI and PL employs a single, estimable marketing strategy. Fourth, MI' and PL' cross elasticities and interaction are negligible. By the model, the channel design decision can be viewed in terms of determining the appropriate bundle of production locations, marketing intermediaries, and target markets.

Finally specified in the Appendix, this model is a long-term profit maximization model. The objective function represents the net present value of all expected profits concerning the channel design over a given planning horizon. Constraints 1 and 2 represent operational limitations on the channel decision. Constraint 3 represents initial investment capital limitation on the channel design decision. Constraint 4 represents the limitation of the annual marketing support budget. Constraint 5 represents a control constraint related to the rate of joint venture. Constraint 6 represents a behavioral constraint; each MI can be rated at any point on the cooperation scale. Constraints 7-9 are requisite technical constraints which ensure that the decision variables, for market and intermediary selection, X_{kij} and Z_{ki} have valid and consistent interpretation.

In the optimization model, the optimal entry-channel decision will be affected by forecasting major variables of sales and costs. In addition, MI cooperation may be related to margins and channel leadership style. The modified model presented allows efficient sensitivity analysis for multinational strategy formulation. A critical aspect of which is the robustness of profit performance to the dynamic and interdependent social, political and economic environments in which the firm has chosen to compete.

Step 3: A Decision Support System

Because the quality of census type data from world markets is checkered, our DSS is apt to require special data collection mechanisms or estimation heuristics.

In order to support the strategic option models and the decision making model, we need to develop a decision support system (Little 1979) which incorporates the information monitoring system and the analytic technique system. Although space constraints preclude detailed elaboration, Figure 1 summarizes the required data and the major techniques to support each model. As an example, to support the market option model, the various indicators relevant to attractiveness of each market--buying power of end users, growth rates, number of competitors and their cost structure, etc.--are required. Given an adequate data base cluster analysis, multidimensional scaling, trend analysis, and weighted scoring methods are germane.

Importantly, the decision support system also builds model enhancements from follow-up information on market responses. Thus, model assumptions and response functions are consistently updated to control strategic options, decisions, and actions.

Conclusion

This article has synthesized an operational framework which merges the strategic heuristic approach and the quantitative cost-benefit approach. The framework proposed incorporates three submodels--a strategic option model, a decision making model, and a decision support system.

The framework presented has suggested three important areas for future research. First, the strategic contingency approach demands clear definition of key variables and confirmation of the strategic interdependence in the strategic option models. Second, the decision making model and decision support system should be made more comprehensive by adding competition and synergy variables into the decision model. These efforts should be complemented by refined monitoring and survey methods to allow the use of available techniques for market and marketing mix analysis. Finally, empirical applications of the normative framework are required to show its practical usefulness.

Appendix
A Decision Making Model

DESIGNER MODEL:

$$\text{maximize} \quad \sum_{j=1}^{n} \sum_{i\epsilon I_j} \sum_{t=1}^{I} \alpha^{t-1} (m_{ijt} v_{ijt} - c_{ijt})\, x_{ij} - \sum_{i=1}^{m} d_i z_i$$

A Model Modified from DESIGNER

$$\text{maximize} \quad \sum_{j=1}^{n} \sum_{i\,\epsilon\, I_j} \sum_{k\,\epsilon\, I} \sum_{t=1}^{T} \alpha_k^{t-1} (m_{kijt} v_{kijt} - c_{kijt})(1 - Tx_k^t)\, jv_k\, x_{kij}$$
$$- \sum_{i=1}^{m} \sum_{k\epsilon I_i'} TC_{ki}\, jv_k\, z_{ki}$$

subject to:

1. $\sum_{j=1}^{n} \sum_{i\epsilon I_j} \sum_{k\epsilon I_i'} v_{kijt} x_{kijt} \leq P_{kt}$

   for $t=1,2,\ldots T$

2. $\sum_{j=1}^{n} \sum_{i\epsilon I_j} v_{kijt} x_{kijt} \leq P_{kt}$

   for $k=1,2,\ldots g$
   $t=1,2,\ldots T$

3. $\sum_{i=1}^{m} \sum_{i\epsilon I_j'} TC_{ki}\, jv_k\, z_{ki} \leq b$

4. $\sum_{j=1}^{n} \sum_{i\epsilon I_j} \sum_{k\epsilon I'} c_{kijt}\, jv_k\, x_{kijt} \leq b_t$

   for $t=1,2,\ldots T$

5. $jv_{k\cdot co} \leq jv_k \leq jv_{k\cdot pr}$

6. $\sum_{j=1}^{n} \sum_{i\epsilon I_j} \sum_{k\epsilon I_i'} \sum_{t=1}^{T} v_{kijt} (K_i - \overline{K})(jv_{k\cdot co} - jv_k)\, x_{kij} \leq 0$

7. $x_{kij} - nz_{ki} \leq 0$

   for $i=1,2,\ldots m$
   $k=1,2,\ldots g$

8. $x_{kij} = 0$ or 1 for $j=1,2,\ldots n$, $i\epsilon I_j$, $k\epsilon I_j'$

9. $z_{ki} = 0$ or 1 for $i=1,2,\ldots m$, $k\epsilon I_j'$

Where k: an index for production units, (p) $k = 1,2,\ldots g$
i: an index for market intermediaries, (MI) $i=1,2,\ldots m$
j: an index for market units, $j=1,2,\ldots n$
t: the t-th year
T: the number of years
x_{kij}: a decision variable which is equal to 1 if p_k, MI_i, and market j is chosen, and equal to 0 otherwise
z_{ki}: a decision variable which is equal to 1 if p_k and MI_i is chosen to become a production-channel line, and equal to 0 otherwise
jv_k: the investment rate of joint-venture in production unit k
α_k^{t-1}: the discount rate of k in the year t-1
Tx_k^t: the income tax rate of k in the year t
m_{kijt}: the dollar unit gross margin in the year t in market j
v_{kijt}: the expected unit sales volume in the year t in j
c_{kijt}: the marketing support costs in year t in j
TC_{ki}: the plant set-up costs and the channel set-up costs
P_{kt}: the capacity of production location k in the year t
k_i: a cooperation rating for MI_i
K: the designed average, cooperation rating
b: the invest capital available
b_t: the budgeted funds available in year t

References[2]

Abell, Derel F. and John S. Hammond (1979), Strategic Market Planning, Englewood Cliffs, NJ: Prentice-Hall, Inc.

Anderson, Paul F. (1982), "Marketing Strategic Planning and the Theory of the Firm," Journal of Marketing, 46 (Spring), 15-26.

Balassa, B. (1965), "Trade Liberalization and Revealed Comparative Advantage," The Manchester School and Social Studies, 99-123.

Dunning, J. H. (1981), International Production and the Multinational Enterprise, London: George Allen and Unwin.

Hampton, Gerald M. and Aart Van Gent (1984), eds., Marketing Aspects of International Business, Kluwer Nijhoff Publishing.

Johansson, J. K. and Reza Moinpour (1977), "Objective and Perceived Similarity of Pacific Rim Countries," Columbia Journal of World Business, Winter.

Kotler, Philip (1984), Marketing Management, Prentice-Hall, Inc.

Larreche, Jean-Claude (1978), "The International Product Market Portfolio," in Subbash Jain, ed., Research Frontiers in Marketing: Dialogues and Directions, Chicago: American Marketing Association, 276-281.

Liander, Bertil, ed. (1967), Comparative Analysis for International Marketing, Marketing Science Institute.

Little, John D.C. (1979), "Decision Support System for Marketing Managers," Journal of Marketing, 43 (Summer), 9-26.

Litvak, Isaiah A. & Peter M. Banting (1968), "A Conceptual Framework for International Business Arrangement," in Robert L. King, ed., Marketing and New Science of Planning, American Marketing Assoc.

Mahajan, Vijay, Yoram Wind, & John Bradford (1981), "Stochastic Dominance Rules for Product Portfolio Analysis," Management Science, Special Issue of TIMS Studies on Marketing Planning Models, ed. by Andy Zoltners.

Meulenberg, Matthew (1984), "Export Marketing Channels: Some Theoretical Considerations," in Gerald M. Hampton and Aart Van Gent, ed., Marketing Aspects of International Business, Kluwer-Nijhoff Publishing.

Root, Franklin R. (1982), Foreign Market Entry Strategies, AMACOM.

Saaty, Thomas (1977), "A Scaling Method for Priorities in Hierarchical Structures," Journal of Mathematical Psychology, June, 234-281.

Zoltner, A. Andris, Kasturi V. Rangan, and Robert J. Becker (1982), "DESIGNER: A Decision Model for Distribution Channel Selection," the working paper, The Center for Marketing Sciences, Northwestern University.

[2]For a complete list of all the bibliographic references, please contact the author.

MARKETING EDUCATION

MARKETING IN HIGHER EDUCATION: MYTH OR REALITY

Harold W. Babb, University of Richmond
Susan Giga, University of Maryland-European Division

Abstract

There are recent signs that the marketing of higher education is gaining more formal attention and that an awareness of the phenomenon is broadening. However, most of the effort in marketing has centered on the promotion and selling of programs to potential students. Limited attention has focused on the total process. There has been much controversy surrounding the use of "marketing" techniques in higher education, but the real issues are a lack of understanding - the true definition of marketing. You can't do it if you don't know what it is!

Introduction

There has been a growing interest in marketing higher education during the past fifteen years. Texts have been written, symposiums developed, and entire journal issues devoted to this topic. The amount of literature relevant to this area has been accurately described as "voluminous."

Due to a variety of uncontrollable variables such as inflation, resource shortages, competition, and demographic changes, many higher education institutions have seemingly turned to the use of "marketing" to cope with uncertain future environment. Although many articles have been published the last few years on the relevance of marketing to higher education, most scholarly writers have concentrated on general theoretical principles or have discussed strategic applications of marketing to recruit and retain students.

The real issue, however, is whether marketing, in its holistic sense, is really being applied. Limited attention seems to have been focused on how the total marketing process fits into the college or university's full planning and operation. Most effort in the "marketing" area has centered on the promotion and selling of programs to potential students. The purpose of this paper is to look at how marketing in higher education has developed and to assess how past and current practices fit into the overall marketing framework.

The Hard Sell

The 1970's brought some unpleasant and unprecedented surprises for higher eeucation. Demographic predictions indicated that steep declines in enrollments were ahead. In addition, a current oversupply of college graduates in the job market threatened to decrease the advantages traditionally associated with having a college degree. A variety of additional factors, such as uncertain revenue sources and rising costs, made the picture look even bleaker. Colleges and universities, long accustomed to having an oversupply of applicants, began to worry about survival (Carnegie Council, 1978; Knight & Johnson, 1981; Zemsky, 1980; Zeik, 1980.

By the end of the decade the popular media was having a field day reporting the actions taken by some colleges to deal with the impending enrollment crunch. Colleges began to experiment with novel ways of attracting attention, such as hosting juggling acts and magic shows. Slick advertising brochures appeared, some of which "borrowed" pictures from more attractive campuses. Summer tuition sales, instant admissions, and rebates for students who brought friends were reported. One university was considering releasing scholarships in balloons (Knight & Johnson, 1981; Kotler, 1979; Seligman, Dougherty, Manning & Smith, 1978).

Although the professional literature did not support or suggest such hard sell tactics, there was a flurry of activity designed to share methods of attracting students. Articles disucssed ways to develop advertisements, logos, and slogans (e.g., Munger, Peaching, Coppage, Areyes, & Greene, 1981). Discussions of the variety of ways to recruit students and means to track the results of these methods were published (e.g., Smith, 1980). Recruiting plans which took an obvious number and dollars approach were reported (e.g., De Los Santos, 1980).

Quality

A second trend which occurred in response to the enrollment crunch was a decline in quality. Although quality has never been clearly defined within higher education, there were numerous reports which raised questions regarding the practices and policies which some instutitions had adopted. The Carnegie Council (1978) reported that a concern for survival had replaced a concern for quality on many college campuses. Colleges were reported to be offering easy academic credit, admissions standards were being lowered, and programs were being thrown together on the basis of popular demand.

Reduced quality was associated not only with what was being offered,but also with where it was being offered. In the face of reduced enrollments, many coleges began to develop off-campus centers. While some centers maintained on-campus standards, many were found to be deficient, especially in areas such as faculty credentials, library support, course offerings, and student services (Ashworth & Lindley, 1977; State University of New York, 1978).

The controversy regarding the use of marketing within education becomes clearer when one considers the crisis atmosphere in which marketing was first introduced. Faced with unprecedented enrollment crunches, many educators held on firmly to the product orientation which had so long characterized higher education. They refused to believe the predictions, or at least minimized them, by claiming the problem was only temporary. In either case, they continued to believe that education would be fine because the product was inherently good. Selling continued to be seen as "unprofessional." Other educators, however, took a much different route. This second group jumped into a selling orientation, adopting a focus on promotion and hard-sell tactics. Members of the former group were quick to resist the actions of the latter group and they were quick to label such actions as "marketing."

Reponse

It was not surprising that many educators resisted such changes. There has been a long history of anti-selling sentiment within higher education. Even the ancient Greek philosophers viewed selling as unethical and unprofessional. To many educators, marketing is selling, even selling at any cost. According to a survey conducted by Murphy and McGarrity (1978), over 90% of the admissions officers questioned equated marketing with promotion (i.e., advertising, public relations, selling, or some combination of these three elements). As a result, marketing is often blamed for creating a decline in quality and for encouraging the use of cheap promotional tactics.

The Marketing Orientation

These critics reveal a superficial and misleading definition of marketing. Marketing is neither cheap promotional tactics nor selling at any cost. In fact, the presence of a true marketing orientation would make both these approaches unnecessary. The selling approaches taken by many colleges, whether it be an over-reliance on promotion or product modifications designed to make the product easier to sell, do not constitute a marketing orientation. They belong to a selling orientation. A university must not be so responsive to its various markets that it relinquishes its reponsibility of providing leadership and direction. The simple pursuit of a student clientele cannot be permitted to compromise the systematic functions and standards of higher education. A proper marketing orientation will avoid such risk.

From a marketing orientation, neither hard-sell tactics nor reduced quality would be recommended. Each is likely to bring negative results in the long-run. Hard-sell tactics are likely to alienate more students than they attract. Moreover, the type of student attracted by such methods is likely to become dissatisfied. Either the student will be unable to meet the standards imposed or the student will realize that the promises made (or implied) are not being met.

A marketing orientation would also take a dim view of weakening programs simply to attract students. Society does not need marginal college graduates and students who are ill-trained to meet their professional responsibilities. Moreover, the increasingly competitive job market is likely to result in a public which casts a critical eye on the value of a college education. Marketing is concerned with the long-term gain, not short-term satisfaction.

Institutional Barriers

The use of numerous singular techniques cannot replace a program based on a complete marketing orientation. Institutions must reorganize their attitudes and develop a commitment to support the main premise of the marketing concept. However, at the present time, several barriers exist within higher education which prevent this from happening.

First is the resistance to change. Such resistance is likely to be especially strong if there is a long history of product orientation, if marketing is confused with selling, and if there is the belief that marketing is "unprofessional." Since all of these factors are present within higher education, we can expect a high level of resistance. The implementation of a marketing orientation will bring change. Interest groups who preceive that such changes will work against them are likely to resist. Marketing requires that colleges and universities realign their mission to be responsive to changing environmental and societal conditions. Faculties of all disciplines and at all levels of higher education have not been noted for their willingness to change, especially at the "request" of administrators.

A second barrier to the development of a true marketin orientation within higher education has been the short-term focus which has developed. In many cases, marketing activities are carried out within a crisis atmosphere. Clearly, on many campuses, the focus is next year's freshman class (Barton, 1978). Blackburn (1980) surveyed 446 colleges and found that more than half had no long-range plan. Even when a plan exists, there is some doubt as to the extent that marketing factors were considered in its development. Yet long-range planning is essential to developing a true marketing orientation. Organizations must clarify their mission, set goals, and develop strategies. Although changing conditions may require that these long-range plans be periodically re-evaluated, long-range planning forces colleges to define themselves.

This does not suggest that universities do not plan. Most are involved in planning budgets, curricula, new programs, schedules, fund raising, etc. Only a few, however, have been reported as engaging in strategic planning (Allen and Peters, 1982). This is possibly due to a lack of expertise and experience or the fact that universities are not organized for such planning, as they are made up of highly interdependent units. A model for such strategic marketing planning in higher education has been proposed by other writers (Lamb, 1984).

A third barrier is the lack of a solid, objective, informational base upon which to make decisions. Market planning can only be developed on the basis of research, yet most colleges and universities have been slow to develop information-gathering tools. Without research, decision are likely to be based on intuition and previous experience. Merely to be acquainted with the existence of various market segments is not enough. Many organizations in society have learned that they cannot keep up with rapidly changing environments without some organized research and analytical effort. The same should be true within our sophisticated university structure.

A fourth and final barrier has been the tendency to concentrate marketing activity and responsibility in one small segment of the organization. For the most part, marketing has been associated with admissions offices. There are two problems with this approach. First, although the admissions office has been "assigned" marketing responsibility, many of the decisions regarding enrollments lie outside of its control (e.g., tuition, quality of program, location of classes). Admissions officers are likely to rely too much on one tool within their control - promotion. Since true marketing has been removed from the decision-making arena, it is unlikely that marketing factors are paramount in making decisions.

The total marketing program, with all its component parts, needs to be put together as a harmonious whole to bring about the desired exchange relationships. This does not mean taking control out of faculty hands. Neither should less centralized control come into the picture. University administrative personnel, as guided by committees made up of all constituencies of the institution, can be responsible for developing and implementing the holistic marketing program. If marketing is continually done on a piecemeal basis (as seems to be the situation in most cases), the program will not work and cannot be called marketing in its truest sense.

Conclusion

The need for coordinated marketing programs in institutions of higher learning has been documented by Allen and Peters (1982, 1983). The eighty college and university presidents that responded to the survey indicated that they have not developed a complete marketing plan and little direction is given toward the tactical initiatives that are taken by individual departments within the university. Marketing must not be seen as a series of isolated actions, but as an integrated activity having multiple dimensions. It is unfortunte, however, that so many articles have been written about how marketing has already been applied to higher education. In these attempts, there has been a lack of appreciation for all the tools of marketing, and how they can be combined to create an effective, well-planned, and ethical approach, not only to solving problems but also to enhancing already successful colleges and universities. There is a need for institutions of higher learning to gain a deeper understanding and appreciation for the value and spirit of marketing.

The controversy surrounding the use of marketing in higher education appears, to a large degree, to be one of definition. The title for this article could well have been, "Marketing of Higher Education - You Can't Do It If You Don't know What It Is." The contribution which marketing can make will not be realized until educators develop a clearer understanding of the total marketing process. "We" must stop placing our blame and hopes on a limited and misleading definition.

References

Allen, Bruce H. and Peters, William H. (Series No. 49, 1983). "The Status of Marketing in Higher Education: College Presidents' Viewpoints," AMA Educators Proceedings, pp. 354-359.

Ashworth, K.H. and Lindley, W.C. (1977,February). "The Disgrace of Military Base Programs," Change, pp. 60-61.

Barton, D.W. (53, 1978). "Marketing: A Consultant's Evaluation of What Colleges Are Doing," College and University, pp. 557-562.

Blackburn, J.C. (#116, 1980). "Marketing in Admissions: A Perspective On Its Use," College Board Review, pp. 18-21.

Buchanan, W. and Hoy, F. (VI(5), 1983). "An Application of the Marketing Mix to Adult Education," Lifelong Learner: The Adult Years, pp. 16-17.

Caren, W.L. and Kemerer, F.R. (54, 1979). "The Internal Dimensions of Marketing," College and University, pp. 173-188.

Carnegie Council on Policies Studies in Higher Education (1980). Three Thousand Futures: The Next Twenty Years for Higher Education. San Francisco: Jossey-Bass.

De Los Santos, G. (59, 1984). "Application of Marketing Principles to Recruitment of Students Achieves Phenomental Returns on Low Investment," College and University, pp. 245-250.

Drucker, P.F. (1973). Management: Tasks, Responsibilities, and Practices. New York: Harper and Row.

Gorman, W.P. (49, 1974). "Marketing Approaches for Promoting Student Enrollment in Higher Education." College and University, pp. 242-250.

Hechinger, F.M. (61(1), 1980). "Making Less Become better," Educational Record, pp. 39-42.

Knight, B. and Johnson, D. (62(1), 1981). "Marketing Higher Education," Educational Record, pp. 28-33.

Kotler, P. (1975). Marketing for Nonprofit Organizations. Englewood Cliffs, N.J.: Prentice-Hall.

Kotler, P. (43, 1979). "Strategies for Introducing Marketing Into Nonprofit Organizations," Journal of Marketing, pp. 37-44.

Kotler, P. (1984). Marketing Management: Analysis, Planning, and Control. Englewood Cliffs, N.J.: Prentice-Hall.

Krachenberg, A.R. (XLIII (7), 1972). "Bringing the Concept of Marketing to Higher Education," The Journal of Higher Education, pp. 369-390.

Lamb, C.W., Cravens, D.W., and Johnson, E.A. (1984). "A Strategic Marketing Planning Model for Higher Education," AMA Writer Education Conference: Scientific Method in Marketing, pp. 256-259.

Litten, Larry H. (Vol. 51, No. 1, 1980). "Marketing Higher Education's Benefits and Risk for the American Academic System," Journal of Higher Education, pp. 40-56.

Malaney, G.D (58, 1983). "Graduate Student Recruitment in Professional Public Administration Programs: A Low-Cost Method for Projecting Potential Student Markets," College and University, pp. 260-269.

Munger, P., Peachin, M., Coppage, D., Parayes, D.D., and Greene, N. (4(9), 1981). "Developing a Promotional Campaign for a Statewide Continuing Education System," Lifelong Learner: The Adult Years, pp. 4-15, 26.

Murphy, Patrick E. (1979). "The Need for Consumer Research in Higher Education," Educators Conference Proceedings, series no. 44, pp. 110-115.

Murphy, P.E. and McGarrity, S.J. (53, 1978). "Marketing Universities: A Survey of Student Recruitment Methods," College and University, pp. 249-261.

Nielsen, Richard P. (1983). "University Strategic Market Planning and Socioeconomic Trends," AMA Educators Proceedings, Series no. 49, pp. 360-363.

Phelps, M.O. and Swann, C.C. (59, 1984). "Counseling vs. Marketing," College and University, pp. 285-286.

Riehl, R.J. (57, 1982). "From Gatekeeper to Marketing Consultant: The Admissions Officer's Changing Role," College and University, pp. 327-329.

Seligman, J., Dougherty, L., Manning, R., and Smith, V. (April 3, 1978). "The College Hustle," Newsweek, p. 86.

Shipp, T. (V(1), 1981a). "Building a Better Mousetrap in Adult Education," Lifelong Learner: The Adult Years, pp. 4-6.

Shipp, T. (IV, 1981b). "The Marketing Concept and Adult Education," Lifelong Learner: The Adult Years, pp. 8-9.

Smith, W.C. (IV (3), 1980). "Marketing - A Controllable Tool for Education Administrators," Lifelong Learner: The Adult Years, pp. 8-10.

State University of New York (1979). A Study of Collegiate Off-Campus Center in Westchester County, 1977-1978. Albany: State Education Department.

Vaccaro, J. (No. 113, 1979). "Marketing on the College Campus," The College Board Review, pp. 18-23.

Zeik, W.M. (61 (3), 1980). "Higher Education: Watershed or Watergate?" Educational Record, pp. 40-45.

Zemsky, R. (61 (1), 1980). "Can Colleges Control Enrollments?" Educational Record, pp. 10-15.

A PRACTICAL APPLICATION OF STRATEGIC PLANNING AND POSITIONING FOR A MARKETING DEPARTMENT: START WITH CONSUMERS' EVALUATIONS

Kenneth J. Burger, Univeristy of Virginia
Sandra L. Schmidt, University of Virginia

Abstract

A number of authors have encouraged the use of strategic planning in institutions of higher learning. Strategic planning and positioning strategies are based on consumer information such as the value of and satisfaction with benefits received, as well as, images of and preferences for the institution and its products. This study was designed to gather and evaluate such information and suggest how it might be used to further the planning process in a practical manner. Alumni and industry representatives from firms that hired this school's marketing alumni were included in the sample.

Introduction

While it may be safe to suggest that most marketing departments espouse the importance of strategic planning, choosing target markets, and positioning oneself to better compete in those selected markets, one might be dismayed by the lack of strategic planning that is reportedly taking place in most institutions of higher learning (Bailey 1983). This inconsistency might be explained with an age old argument: "Do as I say, not as I do." While such an excuse might be sufficient under unimportant circumstances, it hardly seems appropriate for or university managers who should be taking the issue quite seriously.

Background

A number of authors (Doyle and Newbould 1980; Kotler and Murphy 1981) have stressed the need for strategic planning in institutions of higher learning. Murphy (1979) has suggested that many of these institutions have an uncertain future due to changes in the marketplace. It appears that many institutions are still maintaining a production or perhaps sales orientation instead of trying, at the very least, to determine what needs and wants are being sought and by whom. In addition, it is clear that competition is increasing in the face of a diminishing market fueled by the decrease in prospective students, as well as the steep increases in the costs of education. For example, according to the U.S. Bureau of Census, the college age population will decline by 25% by 1992. Further, it is estimated that 300 to 500 of the nations 3000 colleges and universities may have to close in the next 10 years (Fiske 1979).

Although many institutions of higher learning would suggest that they are involved in marketing, these institutions, like businesses may in fact be going through the phases of a cycle which includes the production and sales orientation phases. In these phases, marketing takes on a secondary, promotional role, rather than a more complete role which should include strategic planning, target market selection, and the development of a positioning strategy. In the last phase of the cycle, characterized by increased competition and a move toward a marketing orientation, the key to survival will be to develop a strategy that will give the institution some type of advantage over their competitors (Berry and George 1975).

While these introductory assessments could easily be applied to any department or school within the university setting, one should get one's own house in order before prescribing new approaches to a reluctant public. In that light, it seems realistic that the schools of business within the universities and, further, the marketing departments within those schools should be taking the lead in this area. If we can not make use of our own theories and techniques, what basis do we have to convince others?

Extending Bailey's (1983) definition of strategic planning, a marketing department should combine a marketing faculty's strengths and leadership capabilities with an analysis of trends, markets, and competition to come up with an academic strategy for that department. Strategic planning and positioning is a combined effort to understand: what markets your department is serving, what services you are offering to these markets and with what success, and how to position yourself to these markets in a way that will give you a competitive edge.

Increasingly, there is a need to evaluate where we have been and where we should be going. The logical place for the start of this evaluation is with a sound understanding of consumers. In many university settings, professors' and administrators' inputs constitute the majority of curriculum evaluation.

But this inward-orientation is not practicing the marketing concept. Several authors (Kotler 1975; Kotler and Murphy 1981; Litten 1980; Murphy 1979) have suggested that there are many publics (consumers) that need to be included in this evaluation process. For example, Murphy (1979) identifies a classificatory schema for higher education consumers which divides publics into internal consumers such as past students and current students and external consumers such as private industry, graduate schools, and government agencies. Murphy also suggests that several areas of research appear to be particularly important. Two of these focus on a more thorough analysis of alumni and anticipating demands of external consumers such as private industry.

This particular study addresses both of these consumer groups. Marketing alumni can be a great source of information, especially in terms of the benefits received by matriculating through a curriculum. Including information from an external consumer group such as private industry provides appraisals from a different viewpoint. Involving industry in an appraisal of a program benefits everyone. It not only helps give direction for curriculum development and change, but also builds positive relationships with an important public. The results of this study should provide direction not only for this department's planning process but in addition, point to general ways that marketing departments can use planning to better meet the needs of the marketplace.

Objectives of the Study

This study was designed to meet three major objectives. All three of the objectives were related to the on-going strategic planning process which was taking place within this particular department of marketing. The first objective was designed to collect information concerning satisfaction of the alumni with the marketing curriculum in general, the alumni's evaluation of the curriculum in terms as to skill development, and the evaluation by alumni of whether their level of development in those skills provided them a competitive edge compared to peer workers from other schools.

The second objective was to collect similar information from companies who had hired marketing graduates from this business school. Company representatives were questioned about the marketing curriculum as well as their impressions concerning the image of the school and the marketing graduates hired by the company.

The last objective focused on more specific issues of course content, their relevance, and overall value. Marketing core courses, marketing electives, other business courses and non-business courses were included. Also, the question of double majors (to have one and which) was addressed. This information was much more institution specific. Objectives of such a specific nature will depend on the issues being raised during the planning process. In this instance, the school was considering a number of proposals to change the marketing curriculum. What is worth noting at this point is the focus on balanced information gathering. The input from sources outside the academic setting helped to bring into focus consumers' evaluations of potential changes.

Research Method

A dual research project was designed to access both alumni and employers. One questionnaire was designed for marketing alumni from 1975-1983. The second questionnaire was sent to all companies who had recruited marketing majors between 1975 and 1983. Both the information needs determination and actual questionnaire design were based on secondary and primary sources. Secondary sources such as Murphy (1979), and Lindgren, Berry and Kehoe (1981) were used to identify evaluative criteria as well as the job related skills used in the questionnaire. In addition, personal interviews with school administrators, faculty, and alumni provided insights into this school's strategic planning process and identified specific issues to be addressed by this study. Finally, both questionnaires were evaluated with several pre-tests in order to identify weaknesses, inconsistencies, or other problem areas.

Samples

There were 483 marketing degrees awarded from our institution between 1975 and 1983, however not all addresses could be verified. Excluding pretests, 380 alumni were sent questionnaires. Returns totaled 183 for a response rate of 48%. The second questionnaire was sent to companies that had recruited marketing majors during that same time period. Responses from 30 of these companies comprised the private industry sample.

RESULTS

Description of Respondents

Respondents in the alumni sample were equally dispersed among male/female. Closer examination of the sample revealed that alumni from 1981-83 were predominantly female (57%) and the alumni from 1975-1980 were predominantly male (59%). As expected, the alumni from earlier years had higher salaries and had changed jobs more frequently. Job progression was evident with movement from sales to middle management to upper management jobs. As one would suspect, there was also movement among firms and some graduates actually left large firms to start their own businesses.

Industries represented in the sample included retail (27%), financial services (23%), consumer products (13%), telecommunications (11%), beverage (7%), healthcare (7%), computers (7%), and others (5%).

Alumni Responses

Alumni were asked to evaluate the contribution of the marketing curriculum toward the development of 14 job related skills (see Table 1). Recall that the set of skills was developed from the secondary literature review as well as interviews with academic and industry representatives and was pre-tested to help insure that the list was representative of skills sought by industry employers.

The overall results proved to be highly positive. Of the 14 skills, the marketing curriculum provided an above average contribution to the development of 11 of the skills and an average contribution to the other 3 (See Table 1). A five point interval scale was used to measure contribution. The scale was anchored with "no contribution" on one end and "great contribution" on the other end.

This information suggests that the marketing curriculum is contributing in a very positive manner to the development of skills that are considered important by alumni and industry. In addition, the study was designed to determine if the skills development fostered by the curriculum was perceived by alumni to provide an advantage to them in their job environment. This assessment was obtained by asking respondents to compare their level of skills at their first place of employment to their working peers from other institutions.

TABLE 1

Alumni Study

Level of Contribution of Marketing Curriculum Toward Skill Development and Comparison of Skill Level Versus Peers in Job Setting

SKILLS	contribution toward development of these skills	level of skills compared to peers
Professionalism	AA	AA
Oral Communication	AA	AA
Written Communication	AA	AA
Time Management	AA	A
Interpersonal Relations	AA	AA
Leadership	AA	AA
Creativity	A	A
Negotiation	A	A
Persuasion	A	A
Planning	AA	AA
Organization	AA	AA
Problem Recognition	AA	AA
Problem Solving	AA	AA
Analytical Thinking	AA	AA

Key: AA = Above Average
A = Average

Again, the overall results were very positive. The alumni felt that the level of development they achieved in 11 of the 14 skills were above average compared to the level of development of these skills in their counterparts from other universities (See Table 1).

In addition, these alumni reported that the curriculum also provided them with a level of overall business knowledge that was above average compared to their counterparts from other institutions. This information provides evidence that the marketing curriculum helped the alumni prepare for the competitive situations they faced on-the-job and, hopefully, helped them to perform better.

Not only did the alumni give the curriculum good marks in helping them prepare for the competitive arena, but these graduates also seemed pleased with the types and levels of jobs they were able to obtain after graduation. The alumni were asked to rate several facets of their jobs on a five point scale in terms of level of satisfaction. Responses for all factors were positive. Two factors, level of responsibility and opportunity for advancement received mean scores of 4.6 and 4.5, respectively (Factors included level of responsiblity, opportunity for advancement, challenging individual talents, training programs, salary and frindge benefits). Lastly, respondents indicated that the learning experience provided by the marketing curriculum was a highly positive factor in helping them pursue their career goals. The mean value was 4.3 on a five point scale.

Industry Representatives

Company representatives were asked similar questions about the marketing curriculum in terms of skills enhancement. They were also asked questions about performance of graduates as well as their image of the school and their perceptions of the overall quality of the curriculum.

First, industry rep's indicated that the performance of marketing alumni in their respective companies was a very important factor in their decision to continue recruiting at this institution. This information is supported by the fact that over two-thirds of the firms have been recruiting and hiring marketing alumni from this school for five or more years. Other factors which were identified as highly important in the recruiting decision process were curriculum content and academic reputation of the school.

In coordination with the alumni questionnaire, the company rep's were asked to evaluate the curriculum in terms of overall difficulty and in terms of its contribution toward the development of specific skills. Note that the same skills identified in the alumni questionnaire were also used in this questionnaire. Company rep's gave above average scores to nine of the skills in terms of level of development (see Table 2). The other five skills received average scores in terms of development.

Company rep's were also asked to identify the courses that best prepared students for jobs in their company. Excluding the core courses (principles and marketing management), sales management and research were, by far, the most frequently chosen courses.

Curriculum Issues

The third objective of this study focuses on specific course evaluations as well as the value of these courses to alumni in terms of job preparation. Of course, the results of this part of the study are department specific, however, some findings are presented to illustrate issues which should be of interest to all marketing departments.

Information about the courses within the curriculum was gathered to serve several purposes. First, the questionnaire was designed to obtain alumni's overall evaluation of the value of each course toward their career. A five point scale was used to collect this information. Of the courses listed, marketing research received the highest overall evaluation. Sales management, promotions and product management were also given high marks. The results seem to indicate that alumni valued those courses most which provided information about specific areas in marketing rather than the courses that had more of a general focus such as marketing management.

A second focus within this part of the study centered on a content evaluation of several courses. The marketing faculty felt it was necessary to obtain feedback from alumni before any substantive changes were made to these courses. For example, the marketing management and marketing research courses were evaluated in terms of their contribution to the advancement of certain skills specific to each course.

In terms of marketing management, three areas were most valued by the alumni group, those of increasing general business knowledge, improving the recognition of current marketing issues and sharpening communication and presentation skills. The course did not, however, offer much value in the areas of strategic planning and design. In addition, alumni indicated a strong need for computer applications within the course.

A similar analysis was conducted for marketing research. In general, the research course received high marks in advancing research design, client interaction, statistical analysis and interpretation, and conclusion and recommendation development skills. Questionnaire design and data collection and processing skills development were rated much lower.

One can easily see how important this information is during any type of course evaluation and redesign activity. Obtaining the views of alumni brings an important and perhaps, more objective source of information into the evaluation process. Because professors are so engrossed in courses and may have been the "prime developer" in certain instances, their views can certainly take on very real biases. Achieving a balance of evaluative information (especially from a consumer group) is one way to guard against one-sided decision making.

One final focus of the third section of the study was to evaluate the need to support double majors. Alumni records indicated that the trend toward double majors has been on the increase over the last several years. Alumni were asked if, based on hindsight, the double major was useful and if so, what combination, with marketing would be recommended. The two areas of finance and MIS received strong support. Management was the third choice among possible double majors. Industry representatives were also asked if a double major would provide an advantage to the graduating student. Almost 85% of the responses were positive. MIS was the most frequently mentioned double with Finance and Management tied for second place. From a managerial perspective, this information is useful from at least two perspectives. First, this information can be made available to current students to help them to decide if and what combination of a double major would be advantageous for them. Secondly, curriculum designs can then be developed which make double majors a feasible alternative. Departments Proper planning should include the consideration of such changes and their impact upon the publics of the university. In this situation, the school might have based its decisions on this issue without the specific information gained from the marketing alumni. These decisions may have worked out. The point is, let's make the best decision possible. Proper planning identifies the key issues early on and allows for proper data collection to feed into the decision process. Given the latest information, the school and department can forecast the demand for double concentrators, anticipate changes that need to be made and be in control of the situation. That should work together to plan overall course offerings as well

TABLE 2

Industry Representatives Study

Perceptions of Marketing Curriculum's Contribution to Skill Development

SKILLS	CONTRIBUTION
Professionalism	AA
Oral Communication	AA
Written Communication	AA
Time Management	A
Interpersonal Relations	A
Leadership	AA
Creativity	AA
Negotiation	A
Persuasion	A
Planning	AA
Organization	AA
Problem Recognition	A
Problem Solving	AA
Analytical Thinking	AA

Key: AA = Above Average
A = Average

as details such as providing schedules which accommodate these types of students.

CONCLUSIONS AND RECOMMENDATIONS

Before any specific conclusions about this study are provided, one general observation is in order. The purpose of this study was to illustrate that strategic planning and positioning are important and useful concepts for institutions of higher learning. This study is but one input of many which are necessary to provide the information which must be available for the process to successfully take place. Many of the insights gained are institution specific but the importance of obtaining key information from "consumers" of our product should be acknowledged by all of us. As marketing departments begin the process of evaluation, the views of current/past consumers should be sought and taken into consideration.

The first objective focused on alumni and their feedback with respect to the value of the marketing curriculum. The results indicated that the curriculum was valuable to them in preparing them for advancement in their careers. They also were able to document the contribution of the curriculum to skills development as well as providing a measure of how well they were prepared versus peer workers from other institutions. The feedback from alumni suggests that the curriculum is successful in providing them with somewhat of an edge as they compete with others for job advancement and the fulfillment of other goals.

This conclusion was strongly supported by industry representatives who indicated that they valued the graduates of this institution and placed a high value on many of the skills that our curriculum appears to foster. The information from both sources provides important feedback to the marketing department as well as the entire school. The school is learning a good deal about the target markets we are presently serving in terms of what they want and how well we are meeting their needs and wants. If the school chooses to continue targeting this market, the information will be extremely useful in continuing to develop a position for the school and department that will provide a certain distinctiveness and competitive edge. Feedback from industry representatives indicate that the image of the school and the marketing curriculum are consistent with the maintenance of this very desirable position.

In addition, the study provided information which can be used to strengthen the curriculum. This data is institution specific, but the concept of obtaining information on curriculum value, skills development, performance of graduate and image of the school and the department is critical if a valid evaluation of the current position of the school/department is to be accomplished. This information must help form the basis from which changes are developed.

The final conclusion deals with information related to actual curriculum changes. These changes might be seen as tactical rather than strategic, however it should be recognized that strategic planning can incorporate this information.

Trying to evaluate the trend and importance associated with double majors is just one example. Proper planning should include the consideration of such changes and their impact upon the publics of the university. In this situation, the school might have based its decisions on this issue without the specific information gained from the marketing alumni. These decisions may have worked out. The point is, let's make the best decision possible. Proper planning identifies the key issues early on and allows for proper data collection to feed into the decision process. Given the latest information, the school and department can forecast the demand for double concentrators, anticipate changes that need to be made and basically, be in control of the situation. That is one of the primary benefits of proper planning.

In summary, strategic planning is an on-going process which requires full time attention. The pay-off is the legacy that can be built as the decision makers within the institution make better decisions based on relevant information. This, in turn, should help position the institution where it wants to be with the competitive edge that will improve its chances for success.

REFERENCES

Bailey, Anne Lowrey, "The Competitive Edge: A Top Academic Planner Talks About How Strategic Planning Can Keep Your Institution Vital," Case Currents, Nov.-Dec., 1983.

Berry, Leonard and George, William, "Marketing the University Opportunity in an Era of Crisis," Atlantic Economic Review, July-August, 1975.

Doyle, Peter and Newbould, Gerald, "A Strategic Approach to Marketing a University," Journal of Education Administration, Oct., 1980.

Fiske, E.B., "Marketing of the Colleges," Atlantic, Oct., 1979.

Kotler, Phillip, Marketing for Nonprofit Organizations, Englewood Cliffs: Prentice-Hall, 1975.

Kotler, Phillip and Murphy, Patrick, "Strategic Planning for Higher Education," Journal of Higher Education, Vol. 52, No. 5, pp. 470-89, 1981.

Lindgren, John H., Berry, Leonard L., and Kehoe, William J., "Critical Skills Methodology: Development and Implementation," in Bruce J. Walker, et.al. (eds.), An Assessment of Marketing, Thought and Practice, Chicago: American Marketing Association, 1982, pp. 148-151.

Litten, Larry H., "Marketing Higher Education," Journal of Higher Education, Vol. 51, No. 1, pp. 40-59, 1980.

Murphy, Patrick E., "The Need for Consumer Research in Higher Education," American Marketing Association Educators' Conference Proceedings, 1979.

AN EMPIRICAL ANALYSIS OF BUSINESS STUDENTS' ATTITUDES TOWARD MARKETING: IMPLICATIONS FOR MARKETING EDUCATORS

Susan M. Petroshius, Bowling Green State University

ABSTRACT

This research examined business students' attitudes toward marketing. The results revealed that while business students generally had a favorable attitude toward marketing, differences emerged: (1) between marketing and non-marketing majors; (2) by whether a student was exposed to a marketing course or not; and (3) by the sex of the student. Implications for marketing educators are presented.

INTRODUCTION

Faced with declining rates of enrollment growth, many colleges and universities are recognizing the importance of applying the marketing concept to their institutions and educators are stressing the value of taking a marketing perspective to higher education (Berry 1973; Abell 1977; Enis 1977; Weinraugh 1977; Hampton 1983; Hawes and Glison 1983; Taschian and Frieden 1983; McDaniel and Hise 1984). Following this perspective, educators are increasingly viewing students as consumers of educational services. As a result, much of the literature in Marketing Education focuses on student attitudes towards an array of issues including class scheduling (Friedman 1979), alternative course formats (Jolson 1982; Goretsky 1984; Jolson and Dubinsky 1984), faculty advisors (Petroshius 1985), faculty evaluators (Stutts and Thoede 1984) and a variety of other marketing and pedagogical issues (Hancock and Bell 1970; Dubinsky and Redelius 1980; Dudley and Swan 1982; Hasty and Bellizzi 1982; Tyagi 1984). A somewhat neglected area, however, has been students' attitudes towards marketing itself.

While studies have focused on students' attitudes towards advertising (Larkin 1971; Haller 1974; Surlin 1976; Haller 1977; Dubinsky and Hensel 1984), there is a void in the literature with respect to students' attitudes towards marketing. This gap is particularly noteworthy in light of the importance of knowing students' attitudes when developing and presenting the content of marketing courses, as well as the ability to recruit students in the marketing area. The one study (Keown 1982) exploring student attitudes toward marketing was limited in that it: (1) focused on a convenience sample of business students who were enrolled in marketing courses, and (2) focused narrowly on five attributes relating to marketing as a societal force. While the author eloquently pointed out the importance of the issue, no recent reported study has answered the additional questions that need to be addressed. For instance, what are business students' attitudes toward marketing's overall role in our business and societal environment? Do marketing majors have a more positive attitude toward marketing than non-marketing majors? Do students who have been exposed to a marketing course have a more positive attitude than students without this formal exposure to marketing? Are there differences between male and female attitudes? This research attempted to answer these questions.

OBJECTIVES

The purpose of this study is to examine business students' attitudes toward marketing. Specifically, the research objectives are:

1. To determine business students' attitudes toward the role of marketing, its social and economic effects, and the social responsibility of marketing.
2. To compare attitudes of marketing majors with attitudes of non-marketing majors.
3. To compare attitudes of students who have taken a course in marketing with attitudes of students who have not taken a marketing course.
4. To compare attitudes of female students with attitudes of male students.

METHODOLOGY

Sample and Data Collection

The final sample consisted of 230 undergraduate business students enrolled in a large midwestern university. The sample was drawn from a list of all College of Business undergraduate students enrolled during the spring of 1985 and telephone surveys were conducted. To ensure that students from each class rank were included, and that upperclassmen who would have been exposed to a marketing course would be adequately sampled, a disproportionate stratified sample was drawn. While the initial sample consisted of 315 students, the inability to obtain accurate phone numbers for 85 sample elements resulted in the final sample of 230, for a response rate of 73%. Specifically, respondents consisted of 49 freshmen, 49 sophomores, 72 juniors and 60 seniors.

Survey Instrument

Respondents were requested to indicate their degree of agreement to a series of 15, randomly ordered, Likert statements regarding their attitudes towards marketing. A 5-point scale was used, with 1 being strongly agree and 5 being strongly disagree. The statements were developed based on a survey of past literature and four focus group discussions with students. Of the 15 statements regarding attitudes toward marketing, 7 pertained to the overall role of marketing in society, 3 to the social effects of marketing, 3 to the economic effects of marketing, and 2 to the social responsibilities of marketing. Additional information was then obtained with respect to each respondents' major, sex, and marketing courses taken.

FINDINGS

To provide an indicator of scale reliability, Cronbach's coefficient alpha was calculated to determine the internal consistency of the 15-item measure prior to the actual analysis. This procedure resulted in an alpha coefficient of .69, well within the acceptable range (Nunnally 1978). Thus, it was concluded that the variables provided a reliable measure of students' attitudes toward marketing. Further, to lend support to the a priori classification of items conceptualized as tapping different dimensions of attitudes towards marketing, a factor analysis was performed on the 15 items. As shown in Table 1, four factors emerged with eigenvalues greater than one, accounting for 52.7% of the variation in the data. It should be noted that items 7 and 13 did not load heavily on factors 1 and 3, respectively, as originally conceived. However, since, overall, the factor analysis supported the a priori conceptualization, this classification of items is used in the presentation of the remainder of the analysis.

TABLE 1

FACTOR ANALYSIS OF DEPENDENT MEASURES: VARIMAX ROTATION

Statements[a]	Factor 1	Factor 2	Factor 3	Factor 4
1. Marketing benefits the consumer.	(.5703)b	.1172	.1931	.2266
2. Overall, marketing is important to business.	(.7746)	.0441	.2708	-.1083
3. Overall, marketing helps people find and acquire the products they want.	(.5379)	-.0327	.2563	.4038
4. Marketing middlemen, such as retailers and wholesalers, provide a useful service.	(.7263)	-.0159	-.0344	.1042
5. Marketing is a waste of society's resources.	(-.7538)	.2271	-.2056	.1565
6. Marketing is necessary to conduct business.	(.6508)	-.0769	.0694	.1816
7. Demand for goods and services is stimulated by marketing.	.4506	.3353	.0128	.3986
8. In general, marketing results in people being more materialistic.	.0733	(.6668)	-.0762	-.3377
9. Marketing attempts to get people to buy unnecessary goods.	-.2378	(.7082)	-.0321	.0795
10. Marketers try to create consumer needs.	.1186	(.5255)	.3503	.0151
11. Marketing provides for a more competitive economic system.	.3212	.1311	(.6865)	.0240
12. Marketing leads to a greater variety of products.	.0789	.0150	(.7124)	.2616
13. Higher prices are not the end result of marketing.	.0761	-.3976	.4653	-.0205
14. Most marketing practitioners are socially responsible.	-.0233	-.1377	.0026	(.7644)
15. One of the responsibilities of marketing is to inform and educate the consumer.	.2410	.0228	.2304	(.5344)

aStatements are grouped here to facilitate the presentation of results. Statements were randomly ordered on the data collection instrument.

bNote: All figures rounded to four decimal places. Factor loadings over .5000 are in parentheses.

Business Student Attitudes

Table 2 presents the mean response to the statements by marketing and non-marketing majors. A portrayal of business students' attitudes toward marketing is provided by an examination of the mean scores of both groups. As shown, business students, overall, had a positive attitude toward marketing's role in society, agreeing that marketing benefits the consumer (statement 1), is important and necessary to business (statements 2 and 6), helps people acquire products (statement 3) and stimulates demand (statement 7). Further, they agreed that middlemen provide a useful service (statement 4) and disagreed that marketing is a waste of society's resources (statement 5). With respect to the social effects of marketing, students again held a rather favorable view. Inspection of the mean scores of both groups reveals that students disagreed that marketing attempts to get people to buy unnecessary goods (statement 9) and results in people being more materialistic (statement 8). However, students moderately agreed that marketing does try to create consumer needs (statement 10).

Similar findings emerged with respect to the economic effects and social responsibility of marketing. While students agreed that marketing provides for a more competitive economic system (statement 4), leads to a greater variety of products (statement 12), and is responsible for informing and educating the consumer, they moderately disagreed that higher prices are not the end result of marketing (statement 13) and that most marketing practitioners are socially responsible (statement 14).

Thus, it appears that students, overall, hold a rather favorable view of the importance of marketing and its role in our societal and business environment. While not as strongly held, students also had a positive attitude toward the effects of marketing, both social and economic. However, it is interesting to note that while students believed marketing has consumer responsibilities, they did not feel that marketing practitioners are socially responsible.

Marketing and Non-Marketing Student Attitudes

With respect to the differences in attitudes between marketing and non-marketing majors, a t-test was performed on each of the attitudinal statements. An examination of these results and the mean responses in Table 2 reveals that while the direction of response to the statements regarding the role of marketing suggests both groups have a favorable attitude, the marketing majors level of intensity was greater. Further, the mean responses to three of the seven attitude statements (statements 2,3,5) in this classification were significantly different between marketing and non-

TABLE 2

Attitudes Toward Marketing By Major

	Marketing Majors (n = 49)	Non Marketing Majors (n = 181)	
ROLE OF MARKETING	Mean[a]	Mean[a]	t-value
1. Marketing benefits the consumer.	1.76	1.87	-0.75
2. Overall, marketing is important to business.	1.37	1.59	-1.75[b]
3. Overall, marketing helps people find and acquire the products they want.	1.86	2.16	-2.26[c]
4. Marketing middlemen, such as retailers and wholesalers, provide a useful service.	1.92	2.03	-0.91
5. Marketing is a waste of society's resources.	4.45	4.12	2.85[d]
6. Marketing is necessary to conduct business.	1.84	1.98	-1.00
7. Demand for goods and services is stimulated by marketing.	2.21	2.19	0.06
SOCIAL EFFECTS OF MARKETING			
8. In general, marketing results in people being more materialistic	2.74	2.99	-0.33
9. Marketing attempts to get people to buy unnecessary goods.	3.63	3.18	2.63[d]
10. Marketers try to create consumer needs.	2.43	2.43	0.02
ECONOMIC EFFECTS OF MARKETING			
11. Marketing provides for a more competitive economic system.	1.69	1.66	0.23
12. Marketing leads to a greater variety of products.	1.96	1.94	-0.19
13. Higher prices are not the end result of marketing.	2.61	2.77	-0.94
SOCIAL RESPONSIBILITIES OF MARKETING			
14. Most marketing practitioners are socially responsible.	2.59	2.69	-0.76
15. One of the responsibilities of marketing is to inform and educate the consumer.	1.92	2.08	-1.34

[a]Mean scores are calculated on the basis of 1="Strongly Agree" and 5="Strongly Disagree"

[b]$p < .10$

[c]$p < .05$

[d]$p < .01$

marketing majors. Of the remaining eight statements, the only other statement that generated a statistically significant difference between the two groups was statement 9, that marketing attempts to get people to buy unnecessary goods, with marketing majors more strongly disagreeing. Moreover, while the difference is not statistically significant at the .10 level, marketing majors more strongly agreed that it is a responsibility of marketing to inform and educate the consumer (statement 15).

Overall, while the differences in attitudes between marketing and non-marketing majors is not substantial, the results of the study do suggest that marketing majors have more favorable attitudes toward marketing than do their non-marketing counterparts. As pointed out by Keown (1982), this finding is consistent with role congruency theory (Gross et al 1965) which suggests that marketing students responding negatively to statements about marketing would result in role dissonance.

Differences in Attitudes by Courses Taken

To determine if a formal exposure to marketing in a course context had any impact on students' attitudes, the mean responses to the 15 statements were calculated for students who had taken the principles of marketing course vs. those who had not taken the course.

TABLE 3

Student Attitudes Toward Marketing By Whether Principles of Marketing Course Taken

	Students With Courses (n = 23)	Students Without Courses (n = 105)	
	Mean[a]	Mean[a]	t-value
ROLE OF MARKETING			
1. Marketing benefits the consumer.	1.85	1.81	0.42
2. Overall, marketing is important to business.	1.55	1.50	0.49
3. Overall, marketing helps people find and acquire the products they want.	2.08	2.10	-0.12
4. Marketing middlemen, such as retailers and wholesalers, provide a useful service.	1.94	2.06	-0.96
5. Marketing is a waste of society's resources.	4.25	4.15	0.80
6. Marketing is necessary to conduct business.	2.00	1.87	1.17
7. Demand for goods and services is stimulated by marketing.	2.30	2.04	2.09[c]
SOCIAL EFFECTS OF MARKETING			
8. In general, marketing results in people being more materialistic	3.14	2.81	2.43[c]
9. Marketing attempts to get people to buy unnecessary goods.	3.54	2.96	3.86[d]
10. Marketers try to create consumer needs.	2.60	2.18	2.99[d]
ECONOMIC EFFECTS OF MARKETING			
11. Marketing provides for a more competitive economic system.	1.74	1.55	1.78[b]
12. Marketing leads to a greater variety of products.	1.94	1.90	0.45
13. Higher prices are not the end result of marketing.	2.68	2.78	-0.72
SOCIAL RESPONSIBILITIES OF MARKETING			
14. Most marketing practitioners are socially responsible.	2.66	2.67	-0.07
15. One of the responsibilities of marketing is to inform and educate the consumer.	1.89	2.19	2.61[d]

[a]Mean scores are calculated on the basis of 1="Strongly Agree" and 5="Strongly Disagree"

[b]$p < .10$

[c]$p < .05$

[d]$p < .01$

Subsequently, a t-test was performed to determine if there were any significant attitudinal differences between the two groups. The results of this analysis are presented in Table 3. As shown, significant differences emerged with respect to six of the fifteen statements. Interestingly, students who had taken a course in marketing significantly differed from students who had not taken a marketing course on all three statements relating to the social effects of marketing (statements 8, 9,10), expressing a consistently more positive attitude toward marketing on this dimension than their counterparts who had never been exposed to a marketing course. Further, students having taken a marketing course more strongly agreed that informing and educating the consumer is a marketing responsibility (statement 15). While these differences suggest that those who have completed a course in marketing express a more favorable attitude toward marketing, these students also less strongly agreed that marketing stimulates demand for goods and services (statement 7) relative to students who have not taken the course.

Differences in Male and Female Attitudes

The mean response of both male and female attitudes toward marketing are presented in Table 4. As shown, there was little difference with respect to male and female attitudes toward the social effects of marketing. With respect to the role of marketing and its economic effects, significant differences emerged on

TABLE 4

Attitudes Toward Marketing By Sex

	Males (n = 102)	Females (n = 128)	
	Mean[a]	Mean[a]	t-value
ROLE OF MARKETING			
1. Marketing benefits the consumer.	1.92	1.80	1.13
2. Overall, marketing is important to business.	1.61	1.48	1.04
3. Overall, marketing helps people find and acquire the products they want.	2.25	1.97	2.45[c]
4. Marketing middlemen, such as retailers and wholesalers, provide a useful service.	2.00	2.02	-0.13
5. Marketing is a waste of society's resources.	4.21	4.18	0.23
6. Marketing is necessary to conduct business.	1.97	1.93	0.35
7. Demand for goods and services is stimulated by marketing.	2.32	2.10	1.59
SOCIAL EFFECTS OF MARKETING			
8. In general, marketing results in people being more materialistic	2.92	3.03	-0.79
9. Marketing attempts to get people to buy unnecessary goods.	3.33	3.23	0.58
10. Marketers try to create consumer needs.	2.44	2.41	0.19
ECONOMIC EFFECTS OF MARKETING			
11. Marketing provides for a more competitive economic system.	1.74	1.62	1.08
12. Marketing leads to a greater variety of products.	2.07	1.84	2.07[b]
13. Higher prices are not the end result of marketing.	2.72	2.75	-0.26
SOCIAL RESPONSIBILITIES OF MARKETING			
14. Most marketing practitioners are socially responsible.	2.87	2.51	3.33[c]
15. One of the responsibilities of marketing is to inform and educate the consumer.	2.21	1.91	2.46[c]

[a]Mean scores are calculated on the basis of 1="Strongly Agree" and 5="Strongly Disagree

[b]$p < .05$

[c]$p < .01$

only two of the 10 statements measuring these dimensions. In both cases, female students expressed a more favorable attitude toward marketing than male students. Specifically, female students more strongly agreed that marketing leads to a greater variety of products (statement 12) and helps people find the products they want (statement 3). Further, female students not only more strongly agreed that it was the responsibility of marketing to inform and educate the consumer (statement 15), but that most marketing practitioners are socially responsible (statement 14). Thus, it appears that, overall, female students held a more positive attitude toward marketing. This finding is particularly noteworthy in light of past research regarding the difference between male and female attitudes specifically toward advertising which suggests that female students' perceptions of advertising are less favorable than male students (Dubinsky and Hensel 1984).

CONCLUSIONS AND IMPLICATIONS

The results of this study suggest that, overall, business majors have a favorable attitude toward the importance of marketing and its functions, as well as its social and economic effects. This finding generally held true regardless of whether the student was a marketing major or majoring in some other area in business, although marketing majors held more favorable attitudes than their non-marketing counterparts. With respect to the social responsibility of marketing, both marketing and non-marketing majors expressed the belief that marketing practitioners are not socially responsible. Further, whether or not a student had taken a course in marketing appears to have influenced attitudes toward marketing. Significant differences emerged between those students who had taken the principles of marketing course compared to students not having taken the course. In particular, students having taken a marketing course held more favorable views toward the social effects of marketing and, overall, the direction of the differences suggest that students emerge from a marketing course with a more favorable attitude. Finally, male and female students differed in their attitude with female students expressing a more favorable attitude.

While the generalizability of the results is limited since the study population represents students from only one public university, this study nevertheless has important implications for the marketing educator. First, the results of this research suggest that students having taken a course in marketing tend to have a more favorable attitude toward marketing and, in particular, the social effects of marketing. Thus, if marketing educators are concerned with attracting top quality students, requiring a principles of marketing course for all business majors, and encouraging students in other disciplines to take the course, may be beneficial.

A second implication pertains to the nature of the discussion in the marketing principles course. Despite the fact that differences emerged between subgroups of students examined, overall, all students surveyed had a favorable attitude toward the role of marketing and its importance to society and business. The primary areas of concern, however, are those factors relating to the social and economic effects of marketing, as well as the social responsibility of marketing practitioners, particularly among those students not yet exposed to a principles of marketing course. Marketing educators, cognizant of this fact, should devote a greater portion of class time discussing these issues and less class time justifying the importance of marketing. Since students already have a positive attitude toward this dimension of marketing, limited class time may be wasted on this issue. Rather, marketing educators can make better use of their time by focusing on those areas that may have a greater impact on students' overall attitudes toward marketing.

Finally, marketing educators and textbook authors need to stress the more positive aspects of marketing which may be important in encouraging students to pursue a career in the area. For instance, emphasizing the trend toward increased social responsibility, and providing examples of this, will indicate to students that while perhaps there are still justifiable criticisms with respect to the social responsibility of marketing practitioners, progress has, and will continue, to be made. This positive approach may have a significant impact on student attitudes toward marketing and possible careers in the area.

REFERENCES

Abell, Derek F. (1977), "Applying the Marketing Concept to Marketing Education," Educators' Proceedings,

Barnett A. Greenberg and Danny N. Bellenger, eds., Chicago: American Marketing Association, 141-144.

Berry, Leonard L. (1973), "Marketing Continuing Education Programs," Business Education Forum, 27 (April) 8-10.

Dubinsky, Alan and William Redelius (1980), "Ethical Beliefs: How Students Compare with Industrial Salespeople," Educators' Proceedings, et al., eds., Chicago: American Marketing Association, 73.

___________ and Paul J. Hensel (1984), "Marketing Students' Attitudes Towards Advertising: Implications for Marketing Education," Journal of Marketing Education, (Summer) 22-26.

Dudley, Sid C. and John E. Swan (1982), "What Do Students Know About Sales Management?" Proceedings: Southwestern Marketing Association Conference, (Spring) 223.

Enis, Ben M. (1977), "Marketing Education in the 1980s: Strategy Considerations For a Mature Product Line," Educators' Proceedings, Barnett A. Greenberg and Danny N. Bellenger, eds., Chicago, American Marketing Association, 78-81.

Friedman, William M. (1979), "Class Scheduling: Full-Time Students and Faculty-An Exploratory Study," College Student Journal, 13 (Fall) 232-237.

Goretsky, M. Edward (1984), "Class Projects as a Form of Instruction," Journal of Marketing Education, 6 (Fall) 33-37.

Gross, Neal, Alexander W. McEachern and Ward S. Mason (1965), "Role Conflict and Its Resolution," in Basic Studies in Social Psychology, H. Proshansky and B. Seidenberg, eds., New York: Holt, Rinehart and Winston, 494-505.

Haller, T. F. (1974), "What Students Think of Advertising," Journal of Advertising Research, 14 (February) 33-38.

__________ (1977), "A Factor Analysis of College Students' Attitudes Toward Advertising," Journal of Advertising, 6 (Spring) 42-46.

Hampton, George M. (1983), "College Student Satisfaction: Marketings' Approach for Evaluating Higher Education," Educators' Proceedings, Patrick E. Murphy, et al., eds., Chicago: American Marketing Association, 169-173.

Hancock, William O. and James E. Bell, Jr. (1970), "An Effective Model for Changing Curriculum," Collegiate News and Views, 23 (March) 7-9.

Hasty, Ronald W. and Joseph A. Bellizzi (1982), "Student Reactions to Mass Lecture Sections of Introductory Marketing," Proceedings: Southwestern Marketing Association Conference, (Spring) 205.

Hawes, Jon M. and George Glison (1983), "A Marketing Approach to Student Evaluation of a Department of Marketing," Educators' Proceedings, Patrick E. Murphy, et al., eds., Chicago: American Marketing Association, 169-173.

Jolson, Marvin A. (1982), "The Take-Home/In Class Exam Combo: An Evaluation," Educators' Proceedings, American Marketing Association, 113-116.

__________ and Alan J. Dubinsky (1984), "A Student Comparison of Sales Course Modules," Educators' Proceedings, American Marketing Association, 139-143.

Keown, Charles (1982), "Attitudes of Practitioners and Students Toward Marketing," Journal of Marketing Education, (Fall) 14-20.

Larkin, E. F. (1971), "A Q-Analysis of College Student Attitudes Toward Advertising," Journalism Quarterly, 48 (Spring) 42-46.

McDaniel, Stephen W. and Richard R. Hise (1984), "The Marketing Curriculum: A Decade of Change," Journal of Marketing Education, 6 (Fall) 2-8.

Nunnally, Jum C. (1978), Psychometric Theory, McGraw-Hill, Inc.

Petroshius, Susan M. (1985), "An Exploratory Study of Students' Use of Faculty Advisors: Implications for Marketing Educators," Proceedings: Atlantic Marketing Association Conference.

Stutts, Mary Ann and Steven W. Thoede (1984), "Students Perceptions of Faculty Evaluations," Developments in Marketing Science, 7, 225-228.

Surlin, S. H. (1976), "Fatalism and Authoritarianism: Predictors of Professional Attitudes in Journalism," Journalism Quarterly, 53 (Spring), 68-73.

Tyagi, Pradeep K. (1984), "Marketing Students' Attitudes Toward Mandatory Microcomputer Purchase Policy," Educators' Proceedings, American Marketing Association, 131.

Tashchian, Roobina O. and Jon B. Frieden (1983), "Student Preferences for Class Scheduling: A Conjoint Analysis," Journal of Marketing Education, 5 (Fall) 42-48.

Uhr, Ernest B. and W. Daniel Roundtree (1972, "Who Likes Marketing: Educational Differences Between Students with Favorable and Unfavorable Images of Marketing," Educators' Proceedings, American Marketing Association, 153-157.

Weinrauch, J. Donald (1977), "Meeting the Needs of the Part-Time MBA Marketing Student: A Feedback System," in Contemporary Marketing Thought, Barnett A. Greenberg and Danny N. Bellenger, eds., Chicago: American Marketing Association, 145-148.

INFORMATION OF USE TO NEW DOCTORATES INTERESTED IN PUBLISHING IN MARKETING JOURNALS

Gary L. Clark, Northern Illinois University

Abstract

A total of 359 articles from eight marketing journals were surveyed to determine authorship of articles and the employment affiliation of the articles' author(s). The results suggest that some institutions have faculty who favor publishing in certain journals used in the present study.

Introduction

Publication in refereed journals is a primary criterion for promotion, tenure, and monetary rewards for individuals in the academic system (Marquardt and Murdock 1983). A major objective of the present research was to provide information about marketing journals that might be used by recent doctorates to improve their chances of being published in these journals.

The primary purpose of the present research was to answer two questions: (1) Which institutions have faculty who are actively engaged in publishing in refereed journals; and (2) are certain journals dominated by authors from certain schools?

Method

The following journals were analyzed: (1) Industrial Marketing Management; (2) Journal of Advertising; (3) Journal of Advertising Research; (4) Journal of Consumer Research; (5) Journal of Marketing; (6) Journal of Marketing Education; (7) Journal of Marketing Research; and (8) Journal of Retailing. Main section articles from six recent issues of each journal were coded as to author's academic rank, occupation, employment affiliation, and the number of individuals listed as an author or co-author.

Results

Faculty at 35 institutions produced four or more different articles in the journals analyzed. The faculty from these 35 schools authored or co-authored nearly seven out of 10 articles appearing in the eight journals analyzed. The 10 schools whose faculty produced the most different articles were: NYU (14); Texas, Columbia and Illinois (all with 13); Ohio State (11); Wharton (10); Texas A&M, Northwestern, Wisconsin, and Baruch (all with 9). In some instances, certain journals were dominated by faculty at a few institutions. In the JMR, nearly 30% of the authors were from five schools. For the JCR, with 101 authors listed, one-third were affiliated with six schools. The JR listed 63 authors and nearly 40% were from seven schools. Eleven schools accounted for 40% of the authors listed in the JM.

The data in Table 1 show that for four of the journals, JM, JMR, JCR, and the JR, over half of the authors were from one of the top 35 schools. The JA contained the smallest percentage (21%) of authors from the top 35 schools.

TABLE 1
THE PERCENTAGE OF AUTHORS FROM THE TOP 35 SCHOOLS

JOURNAL (Six Issues)	NUMBER OF AUTHORS LISTED	AUTHORS FROM TOP 35 SCHOOLS	PERCENTAGE FROM TOP 35 SCHOOLS
JM	101	64	63%
JR	63	38	60%
JMR	101	60	59%
JCR	101	53	52%
JAR	66	26	39%
JME	72	21	29%
IMM	92	24	26%
JA	62	29	21%

Summary and Conclusions

The results suggest that new doctorates face the stiffest competition when they submit articles to four of the journals analyzed: JM, JMR, JCR, and JR. These journals are dominated by authors from a few institutions. At second and third tier schools, administrators' expectations that new doctorates should be publishing in marketing's top journals may be unrealistic. New doctorates should be encouraged to write articles for journals where there is a realistic expectation the article will be accepted. Having an article rejected for publication may build character, but having an article accepted builds confidence that other acceptable articles can also be produced.

References

Marquardt, R. A. and G. W. Murdock (1983), "Analysis of Authorship in the Journal of Marketing, 1960-1981," Journal of Marketing Education, (Fall), pp. 53-57.

IN SEARCH OF AN INTERNATIONAL MARKETING CURRICULUM

Gerald M. Hampton, Seattle University

Abstract

Exploring the future is an essential aspect of any long range planning effort. In this paper, planning for an appropriate international marketing education curriculum is the objective. The author uses the Delphi Method to identify the probable future needs in international marketing education. The predictions are divided into four broad categories and related to one possible curriculum.

Introduction

Today, we live in an international-oriented society. All of us are constantly being subjected to the pressures of international political, technological, cultural, social and economic change. This experience, effecting each of us, is often referred to as the "great transformation of Western Civilization." In such times, where the old ways of doing things seem to be dysfunctional and where many developments are still in the formative stages, our images of educational futures we seek become critical.

Toffler suggested that all education comes from the images we have about the future (Toffler 1974). This seems reasonable and if we lack knowledge about a probable future, we most certainly will lack any guidelines to assist us in reaching it. Once we do make predictions about a future, we are in fact presenting a plan for action. If accepted, this plan will initiate processes which will offer alternatives on how to adapt to the changing conditions.

As internationally oriented marketing scholars and teachers, the future images we develop for our discipline are likely to determine its fate for decades to come. The future images of international marketing are in the early stages of development and are unclear. Consequently, it is time for us to develop a probable future for international marketing education, for after all, we are the ones who will have to work, teach and research in it.

Study Objectives

From the academic and business school perspective, the image projected by international marketing is one of an "area of low interest" (Hampton and Van Gent 1984). There appear to be two reasons for this perception. First, when compared to other areas of marketing, there is clearly a lack of published research in the area. Secondly, the number of business schools offering international marketing courses is relatively low. In addition, there appears to be a paucity of teaching materials developed for international marketing courses, as well as a general lack of an international orientation in basic marketing management textbooks.

This contrast between the growing importance of international marketing activity and the lack of business school emphasis is one indication of an unclear image of the future for international marketing education. The purpose of this research is to determine and examine the major future dimensions of international marketing education. This paper presents some of the early findings from this research. This concern for long range changes and directions is to assure that the international marketing concepts, analytical tools and organizational procedures being developed, researched and taught today, will be relevant tomorrow.

To accomplish this objective, two areas were addressed. They were:

1. <u>International Marketing Environmental Futures</u>. What are the characteristics of the most probable world by the year 2000! How will these characteristics impact on international marketing activities?

2. <u>Educational Futures</u>. Given the images of the future, what concepts and skills should international marketing education seek to develop? What instructional methods will be most appropriate?

Methodology

In order to forecast the future environment of international marketing and its educational needs, the Delphi technique was used. Basically, the Delphi Method attempts to bring together a group of experts in a conference call or "seminar" setting. Anonymity of the panel prevents the power of some members of the panel from unduly influencing or swaying the opinion of the other panel members. The Delphi Method summarizes the responses to one round of questions and provides this information to the survey panel with the next successive round of questions. This procedure allows the experts to remain anonymous but still communicate with each other in a limited fashion. Delphi has been successful in determining where genuine agreement about changes does exist. In addition, its accuracy and reliability as a forecasting tool has been established (North and Pyke, 1969).

Because Delphi offers decision makers a systematic approach for predicting change that is too little understood or too nebulous for more objective forecasting approaches, we use it as the method to forecast changes and educational needs facing international marketing in the remainder of the 20th Century.

Questioning Procedure

In Round I, the study was introduced to each respondent who was asked to answer in detail two questions. These questions were:

<u>Question One</u>: To operationalize the environmental

futures objective outlined previously, each individual was asked to list five aspects of the international environment that will change most during the next twenty years. In addition, the respondents were asked to indicate in what significant ways each of these changes will impact on international marketing activities.

Question Two: International marketing educational futures was operationalized as follows. Respondents were asked to list five aspects of international marketing education that will be most needed in the next twenty years. It was suggested that these include, but not be limited to, concepts, topics, and/or skills that educators should seek to develop in students.

The Round II questionnaire consisted of responses from Round I. These responses were reduced, eliminating duplications, and consolidated, making Round II. For question one, respondents were asked to evaluate the impact of change if it occurs and what is the likelihood of the change occurring. For question two, respondents were asked to evaluate each education statement in terms of an importance scale.

Panel Members

The current panel of international marketing scholars and business people consists of 93 individuals. The initial panel set was made up of those individuals invited to the March 1983 International Marketing Conference at the Marketing Science Institute and individuals who responded to an "interested in international marketing" inquiry in the Marketing News. On the current panel there are 34 practitioners and 45 academics. During Round I, each panel member was asked for his/her recommendation of scholars and practitioners to be included in the study. It is through this process that we will attempt to identify a widening circle of scholars and business people who are interested in and are working in the field of international marketing.

Analyzing the Delphi Survey Data

The Delphi technique consists of a basic set of steps to follow in collecting data; however, there are not standard methods of analyzing the data once collected. The analysis depends primarily upon the objectives of the study and the perspective of the researcher conducting the study. A professor of marketing, a marketing manager, and a government staff economist would probably use different viewpoints and follow different procedures in interpreting the data. Therefore, it should be remembered that the criteria used to group statements, assess consistency and judge agreement are not the only criteria which could have been used.

The Preliminary Findings

This section contains Round I and II data, received from 35 members of the current panel. (Round III will be conducted later.) Furthermore, it is limited to the second question of the study. This question concerns the educational futures of international marketing. Therefore, it should be considered as illustrative of possible outcomes. The respondents' 39 predictions regarding international marketing futures were grouped into four broad categories. The categories are presented in Tables 1-4, and are discussed below.

Non-Business Areas of Study: Table 1

This first category, generated and evaluated by the panel, contains five knowledge areas generally not considered to be topics or subjects taught in marketing or other business courses. The first two areas, deemed quite important (1.8 on a 1 to 7 scale with one being very important) are cultural studies and communication skills (See Table 1). One panel member said, regarding culture, this area is "obvious, but often neglected in international business education, especially in any depth." One panel member pointed out, "To a large extent world trade depends upon trust and mutual understanding, and to achieve it, you must recognize your partners' as well as your own background." Another said, "This subject has been stressed in negative, not positive, terms." Regarding communications skills, most comments stressed that this is a central item in all business education, and especially inadequate today in the U.S. educational system, but extremely important when dealing with people from other cultures.

The other three areas of knowledge seen as important are foreign language skills, knowledge of political systems and area studies. Most of the comments focused on language skills. One panel member said, "Most important and a key factor for developing cultural sensitivity." Another said, "It is very much underplayed in the U.S., but we too must join the rest of the multi-lingual world."

These findings are similar to other views (Mulvihill 1981 and Dymsza 1982). While the recommendations here, like others, are general, they do suggest certain fundamental changes in the direction of present business education. For example, these five knowledge or subject areas are not now being offered or required by business schools. It is interesting to note that these areas lie outside, not only the marketing discipline, but the whole field of business. From the panel members' comments, one can conclude that these five areas are considered minimum background requirements for study in any area of international business. In this context, we might suggest it is time to do away with the term "international marketing" and replace it with something like "marketing aspects of international business." This is further supported by the results presented in Table 2. Here we see ten knowledge areas of business that lie outside of the marketing discipline, but viewed as important for the international marketing student. These might be classified as the basic or core subjects required of all international business and marketing students.

One final note regarding this non-business subject area. When these five areas are compared in terms of ranking with the others, they are deemed most important. In Table 5, which lists the ten most important areas of study, these five non-business areas are included. In fact, cultural studies and communication skills are ranked numbers one and two. Foreign language is ranked number five while political systems and area studies are ranked numbers nine and ten. The implication here is that these five areas are essential background subjects for all students studying an area in international business.

Business: Non-Marketing Areas of Study - Table 2

In this category, ten of the 39 recommendations were placed. These ten consisted of subjects generally offered in a variety of business school courses, but not marketing. The area deemed most important was negotiating and bargaining skills followed by management skills to deal with people involved in international operations. The comments across these areas indicate several things. First, international courses in several business areas would probably be necessary. For example, one respondent commenting on management skills needed to deal with people who are involved with international operations said, "An international management course should take care of this concern." Courses in international finance and economics might also be desirable. Second, many of the subjects suggested here can, and are, covered in the introduction to international business courses. One comment appropriate here is, "This is a general motherhood category and can be covered in any introduction to international business class." Third, the subject areas recommended here tend to be broad general knowledge areas. As such, they seem to be seen as the necessary international business background for the study of marketing aspects of international business. Overall, the implication here seems clear. Before one seriously studies the subject of international marketing, one needs an elementary understanding of international business.

Business: Marketing Areas of Study - Table 3

This category contains twenty subject or knowledge areas. All areas were judged to be important for the student of international marketing, except perhaps the last three, international franchising, import/export regulations which were judged as neutral, and rules, regulations and operations for international transportation. Based on the comments in these areas, it was decided to sub-divide this category into four groups.

The first two are called traditional and neglected groups. They are as follows:

Traditional Group

#1 Global stragetic marketing planning
#8 Marketing framework
#9 Evaluation methods
#11 Consumer adoption process
#12 Government's influence

Neglected Group

#3 Competitive analysis
#5 International services
#13 Marketing to governments
#17 Social impact of marketing

The traditional group is made up of subjects generally covered in the international marketing course. Such a course, as well as the popular texts of Keegan, Terpstra and Catora, are structured around area number eight, the analytical framework of marketing - target marketing, marketing mix and marketing research. In addition, the course usually includes a section on culture, planning and governments' role and impact on international operations.

While the panel judge these traditional subjects as important, they see four additional areas that need more emphasis. This neglected group has four topics - #3 competitive analysis, #5 international services, #13 marketing to governments and multinational agencies, and #17 the impact of marketing on social systems. The findings suggest that while the first international marketing course should continue to be structured according to the analytical framework of marketing, more emphasis needs to be placed on global strategic planning, global competitive analysis and the marketing of services internationally.

The remaining two groups are shown below. They have been called the new course and how-to groups.

New Course Group

#2 Comparative market studies
#6 Export marketing planning
#7 Marketing research aspects
#10 Marketing research aspects
#14 Marketing research aspects
#19 Regulation for export/import
#20 Rules for international transport

How-to Group

#4 Trans-national promotion
#15 International sales skills
#16 Role of intermediaries
#18 International franchising

The new course group offers the possibility of three courses in addition to the first international marketing course, as part of the international marketing curriculum. One would be international marketing research, another would be a comparative marketing course, and the third would be a course in exporting. The comments in this area indicate that the marketing research and exporting course should be highly practical. One panel member said that knowledge of exporting would be more valuable to more students than anything else offered in an international marketing curriculum. The comparative marketing course was seen as more conceptual in nature; panel members said it should be designed to help students understand the differences and similarities in behavior across markets. One panel member said that this area or course might be the proper place to emphasize the cultural aspects of international operations.

The how-to group contains subjects many panel members felt could best be learned on the job. One, referring to international sales skills said, "While certain principles can be presented in a class, the how-to is more important and is best learned on the job." The same applies to trans-national promotion (especially advertising), role of intermediaries and international franchising.

Overall, the panel judged most of the subjects in the category to be important to the student of international marketing. While many of the subjects were presently part of most international marketing courses, and should remain so, some panel members see certain areas as neglected, and therefore in need of more emphasis. Some subject areas offer the opportunity for additional courses, while certain knowledge is perceived as best learned on the job.

Other Aspects of Internationa Education - Table 4

In this category we have placed four areas that suggest how one might acquire international business knowledge and experience. These areas are quite familiar, used in many business school programs, and as such, require no explanation.

Implications

Several observations are made based on these preliminary results. First, it is interesting to note that many of the subjects or knowledge areas panel members felt important for students lie outside of the marketing discipline - 15 out of 39. In addition, the subject areas deemed most important of all lie outside of the business discipline-cultural studies, communication skills and foreign language ability. Secondly, many of the areas judged most important are not now required of business majors. Thirdly, in the marketing category, there is a call for a more practical application of marketing concepts to international markets, such as export marketing.

Based on these results, the marketing curriculum for the future business executive might look like the following:

Background Knowledge: Culture study, communication skills, foreign language, political systems and area studies. These would provide the necessary background to begin the study of the environment of international business.

International Business Core Subjects: A broad general course in international business covering such topics as the international monetary system, the new international economic order and risk analysis. In addition, there would be an international management course that included such topics as negotiating and bargaining skills, and management skills to deal with people involved in international operations. Ideally, there would also be a course on the management of change and an international business ethics course.

Marketing Aspects of International Business Subjects: Courses might include international marketing, international marketing research, export market planning, and comparative market systems. In addition, one would encourage students to take part in international exchanges and internships.

Such a curriculum would be broader, be practical as well as conceptual and be more in depth than presently offered to students in marketing. It would require not only marketing courses, but a broad general international background course of study.

References

Dymsza, William A. (1982), "The Education and Development of Managers For the Future," Journal of International Business (Winter), 9-18.

Hampton, Gerald M. and Aart Van Gent (1984), "International Marketing in the 1980's and Beyond: Research Frontiers," in Marketing Aspects of International Business, Gerald M. Hampton and Aart Van Gent eds., Boston: Hluwer Nijoff Publishing, 195-241.

Mulvihill, Donald F., ed., (1982), Marketing and The Future. American Marketing Association.

North, Harper O. and Donald Pyke (1969), "Probes of the Technological Future," Harvard Business Review, 47 (May-June), 68-76.

Toffler, Alvin (1974). Learning for Tomorrow. New York: Random House.

TABLE 1

NON-BUSINESS AREAS OF STUDY

		MEAN	S.D.
1.	Culture and culture differences in human affairs and behavior	1.8	1.1
2.	Written and oral communication skills	1.8	1.3
3.	Education in at least one foreign language	2.3	1.9
4.	Political systems and the workings of foreign governments	2.5	1.2
5.	Area studies that outline the world context for business, government and society	2.5	1.5

TABLE 2

BUSINESS: NON-MARKETING AREAS OF STUDY

		MEAN	S.D.
1.	Negotiating and bargaining skills	2.4	1.1
2.	Management skills to deal with people involved in international operations	2.5	1.5
3.	Political skills needed for risk, trade-off analysis and forecasting international operations	2.6	1.2
4.	Study the management of and planning for change	2.6	1.4
5.	Familiarity with the new international economic order	2.8	1.3
6.	Legal environments of international and foreign marketing	2.9	1.4
7.	Familiarity with the structure of the current international monetary system	3.0	1.3
8.	International business ethics	3.2	1.5
9.	The teamwork approach to management	3.2	1.5
10.	The benefits and advantages of the free enterprise system	4.1	1.7

TABLE 3

BUSINESS: MARKETING AREAS OF STUDY

		MEAN	S.D.
1.	Global strategic market planning with multiple scenario analysis and related techniques	1.9	.8
2.	More emphasis on comparative market studies	2.1	1.1
3.	International competitive analysis	2.1	1.2
4.	Trans-national promotion, especially when crossing different cultures and languages	2.3	1.3
5.	The marketing internationally of services	2.4	1.2
6.	Export marketing planning	2.6	1.2
7.	Research methodology with emphasis on conducting and analyzing data from different markets	2.6	1.4
8.	In-depth emphasis on the fundamentals - target marketing, and marketing mix variables	2.6	1.6
9.	Evaluation methods for the performance of international marketing activities	2.6	1.1
10.	Use of non-traditional sources for market research	2.7	1.2
11.	Consumer adoption process internationally	2.8	1.4
12.	Government's influence over trade-exports and imports	2.9	1.3
13.	Marketing to governments and multinational agencies	2.9	1.3
14.	Marketing research in developing nations	2.9	1.6
15.	International sales and sales promotion techniques/skills	2.9	1.5
16.	The role and function of international marketing intermediaries (export houses, freight forwarders etc.)	3.0	1.5
17.	Impact marketing has on the social system	3.2	1.4
18.	Aspects of international franchising	3.6	1.4
19.	Rules, regulations, and procedures (letters of credit, etc) concerned with exporting and importing	3.7	1.8
20.	Rules, regulations, and operations for international transportation.	3.9	

TABLE 4

OTHER ASPECTS OF INTERNATIONAL EDUCATION

		MEAN	S.D.
1.	The use of case scenarios permitting a hands on recognition of marketing opportunities/threats in a cross-cultural setting	2.7	1.1
2.	Guest speakers from the international business community	2.7	1.4
3.	Use of student internships and exchanges	2.8	1.3
4.	Require all faculty to join international organizations and associations	4.2	1.9

TABLE 5

TOP TEN AREAS

		MEAN	S.D.
**1.	Culture studies	1.8	1.1
**2.	Communication skills	1.8	1.3
*3.	Global marketing planning	1.9	.8
*4.	Global competitive analysis	2.1	1.2
**5.	Foreign language	2.3	1.[illegible]
*6.	Trans-national promotion	2.3	1.1
***7.	Negotiating/bargaining skills	2.4	1.1
*8.	Marketing services internationally	2.4	1.2
**9.	Political systems	2.5	1.5
**10.	Area studies	2.5	1.5

* Marketing areas of study (4 areas)
** Non-Business areas of study (5 areas)
*** Business: Non-marketing areas of study

ASSESSING THE TOPICS TO BE COVERED IN RETAIL COURSES AND THE VALUE OF SELECTED CLASSES IN RETAIL EDUCATION: THE OPINIONS OF RETAIL MANAGERS

J. Joseph Cronin, Jr., University of Kentucky

ABSTRACT

Retail managers' attitudes should influence the design of the retail course and the designation of specific classes to be taken in preparation for a retail career. This article reports the results of a study of retail operating managers that (1) assesses their perceptions of the value of specific college courses in preparing them for a career in retailing, (2) identifies the attention which they believe specific topics deserve in the college retail course, and (3) investigates the managers general feelings about the conduct and pedagogical style of retailing courses.

Introduction

The personnel needs of retailers are huge and they are expected to increase. The U. S. Department of Labor has estimated that in the decade between 1980 and 1990 total wholesale and retail employment will grow from 20.6 million employees to between 25.1 and 26.8 million (Occupational Outlook Handbook 1983, p. 16). This places a tremendous demand on colleges and universities to prepare students for these positions. Because most retailers are now aggressively recruiting ... well trained college people ... (Mason and Mayer 1984, p. 907) it is incumbent upon college educators to assist by identifying the most effective set of courses and the most appropriate topics for retailing courses to prepare their students. Empirical research has also confirmed the importance of retailers having effective and productive employees. Ingene (1982) investigated the importance of labor productivity in the retail sector, and found it to be significantly related to profit performance.

The purpose of this study was to assess the attitudes and opinions of retail managers relative to (1) which of their college courses have been helpful in their retail careers, (2) how much attention various retail topics deserve in college retailing courses, (3) what they perceive as being the strengths and weaknesses of the college retailing course(s) they had taken, and (4) the level of satisfaction they have with their career in retailing and with the training program they experienced with their initial retail employer. The overriding objectives of this research were threefold: first, to aid in the identification of the topical subject areas which if added to college retail classes might better prepare students for a retail career; second to identify the set of courses which students planning a career in retailing might be advised to take; and third, to examine pedagogical issues concerning how retailing courses should be presented.

Background

A primary reason for undertaking this study was the notion that curricular patterns to some extent should reflect the perceptions of practitioners (Vincent and Berens 1981). Since academics are not actively involved in the day-to-day operations of retail management, the tasks of advising students pursuing a retail career as to the optimal set of classes to take and then identifying the appropriate topics to be covered in the retailing class are difficult. In addition, very little help is available in the literature. Vincent and Berens (1981) did investigate the usefulness retail managers attributed to various courses, unfortunately, many of the courses they found most useful are very specialized and not commonly offered in four-year state institutions; for example, Applied Retail Mathematics, Retail Buying, and Case Problems in Retailing.

The Journal of Retailing devoted a special issue to the topic of retail education in 1978. Unfortunately, none of the articles addressed the issue of the specific courses which offered the best background for a retail career or the topics which should be covered in a retail course. Other studies have also investigated such issues as the information sources used in making retail employment decisions (Hollon and Gable 1978), the difference between full-time retail salespeople on such dimensions as individual attributes, organizational commitment, and work attitudes (Still 1978) and the relative appeal of a retail career (Swinyeard 1978). Again none of the studies examined how retail classes should be taught or what classes best prepared one for a retail career. However, one of the articles (Swinyard 1978) does address some issues relevant to this study.

Swinyard (1978) findings lead him to conclude the following:

1. Retailing may be incompletely represented in the classroom.
2. Students should be encouraged to take advantage of retail internships.
3. Visits by retail executives should be encouraged.

In order to address these questions and others and to alleviate the gap in the existing knowledge about the design of the retail marketing course, this study was designed to assess the perceptions of career employees in five retail organizations who were major employers of the graduates of the three large state universities located in close proximity to the stores.

Sample

The sample consisted of 62 individuals employed in career positions with one of the five department stores located within a midsouth metropolitan area with a population in excess of 300,000. Two of the five retail firms were national organizations, two were regional department stores, and one was a local organization. Of the 62 respondents, 43

(69 percent) carried the title of manager or supervisor, with an additional 10 (16 percent) reporting that they were assistant managers or supervisors. The remaining respondents were either buyers (5 persons--8 percent of sample) or salespeople (4 persons--6 percent of the sample). Because only one of the five department stores in the city had local buying operations, this distribution was as expected.

The average age of the respondents was 25.3 years, 77 percent were female, the mean time with the company was 43.5 months, and the average time they had been in their position was 17.2 months. Of the respondents, 68 percent were college graduates, 3 percent had graduate degrees, 24 percent had some college, and 5 percent were high school graduates. Home economics was the most frequent major (43 percent) with marketing second at 19 percent. Business majors (Marketing, Finance, Management, and General Business) accounted for 31 percent of the sample. The remainder were split among education, liberal arts and technical degrees. Eleven colleges were represented with the major state university in the city accounting for 44 percent of the respondents. Those individuals responding reported a mean overall grade point of 2.97 and a major grade point of 3.46.

The Questionnaire

A self-administered questionnaire was completed by respondents. The questionnaire contained items which asked the respondents for their perceptions as to the usefulness of ten classes typically offered as part of the business school curriculum in preparing them for their retail career, their opinion as to what topics should be covered in a retailing course based upon their own career experiences, and their opinions about nine statements concerning the conduct and coverage of a retail course. The respondents level of satisfaction with their career and with their own retail training experience was also assessed. Finally, selected demographic information was requested.

The construction of the final questionnaire was based upon a focus group interview with six retail managers and a pretest of the instrument. After the pretest, two questions were added and extensive clarification was added to the existing questions. The questions utilized were Likert-type responses to a series of statements which are summarized in the four tables presented in the results section.

Results

First, the respondents were asked "based upon your on-the-job experience in retailing, how helpful were each of the following college courses in preparing you for a career in the retail field? Table 1 summarizes the responses. Not surprisingly Retailing was found to be the most helpful course, followed closely by Basic Mathematics. Other courses which the respondents considered helpful were Principles of Marketing, Sales Management, and Principles of Management. Principles of Accounting, Principles of Finance, Basic Economics, Basis Statistics, and Computer Science were not considered to be particularly helpful.

TABLE 1
HELPFULLNESS OF COLLEGE COURSES IN PREPARING FOR RETAIL CAREER

COURSE	MEAN RESPONSE	PERCENTAGE OF RESPONSES (1) OF NO HELP AT ALL	(2) NOT VERY HELPFUL	(3) SOMEWHAT HELPFUL	(4) HELPFUL	(5) VERY HELPFUL
PRINCIPLES OF MANAGEMENT	3.44	0	14	40	35	12
PRINCIPLES OF ACCOUNTING	2.71	18	18	42	20	2
PRINCIPLES OF MARKETING	3.73	5	0	32	45	18
PRINCIPLES OF FINANCE	2.50	20	37	23	13	7
BASIC ECONOMICS	2.62	26	26	17	26	6
BASIC STATISTICS	2.50	29	25	25	11	11
RETAILING	3.97	0	8	16	47	29
SALES MANAGEMENT	3.63	3	6	43	24	26
COMPUTER SCIENCE	2.54	38	8	23	23	8
BASIC MATHEMATICS	3.88	7	2	22	32	37

The second question asked of the respondents was "based upon your career experience in retailing, how much attention should be paid to each of the following topics in a college retailing class?" Responses to the question are presented in Table 2. If one ranks the mean responses, three distinct groups emerged. Four topics were deemed deserving of the most attention; promotional methods (4.19), merchandise layout (3.92), advertising methods, (3.92), and pricing methodology (3.87). A second group of three topics was considered deserving of slightly less attention. This group consisted of buyer-vendor relationship management (3.61), store design (3.84), and human resource management (3.47). The third group which respondents considered even slightly less deserving of attention was comprised of information systems management (3.31), financial management (3.26), and locational analysis (3.16).

TABLE 2
ATTENTION DESERVED BY TOPICS IN RETAILING CLASS

TOPIC	MEAN RESPONSE	PERCENTAGE OF RESPONSES (0) NONE	(1) MINIMAL ATTENTION	(2) SOME ATTENTION	(3) MODERATE ATTENTION	(4) SUBSTANTIAL ATTENTION	(5) MAXIMUM ATTENTION
MERCHANDISE LAYOUT	3.92	3	0	15	11	26	45
STORE DESIGN	3.48	3	2	16	27	26	26
ADVERTISING METHODS [a]	3.92	2	0	10	19	32	37
PROMOTIONAL METHODS [b]	4.19	2	0	0	16	40	42
PRICING METHODOLOGY [c]	3.87	2	0	6	27	31	34
FINANCIAL MANAGEMENT [d]	3.26	2	3	19	29	23	6
LOCATIONAL ANALYSIS	3.16	2	6	23	31	13	11
BUYER-VENDOR RELATIONSHIP MANAGEMENT	3.61	2	0	13	31	31	24
INFORMATION SYSTEMS MANAGEMENT [e]	3.31	3	2	15	39	26	16
HUMAN RESOURCE MANAGEMENT	3.47	6	0	11	21	45	16

[a] Radio, television, newspapers, catalogs, etc.
[b] Point of purchase, premiums, sales events planning, etc.
[c] How to calculate prices, margins etc.
[d] Return on investment planning etc.
[e] e.g., how to design the reports generated for managers to use

The third question was stated as follows: "based upon your retail experience, indicate your level of agreement with the following statements..." Table 3 summarizes the opinions voiced in response to the nine statements. Summarizing, the respondents were neutral (2.98) as to whether their college retailing class gave them a realisitic portrayal of the retail industry. They only slightly agreed (3.22) that their retailing classes presented up-to-date information. There was fairly strong agreement (3.88) that their initial interest in a retail career was sparked bv a part-time or summer job in retailing, and slightly less strong agreement with the opinion that they could use more training in understanding and utilizing managerial reports (3.90) and in the management of vendor relationships (3.69). The respondents strongest opinions were, however, reserved for the pedagogical issues. A high level of support (3.93) was registered for the value added to retailing classes by outside speakers. However, the respondents were even stronger (4.26) in their agreement with the opinion that "well chosen" speakers should be an important part of a college retailing course. Finally, the respondents reserved their strongest support (4.33) for the opinion that participation in a project in their retailing class aided their understanding of retailing.

TABLE 3

LEVEL OF AGREEMENT WITH STATEMENT OF OPINIONS

		PERCENTAGE OF RESPONSES				
STATEMENT	MEAN RESPONSE	(1) TOTALLY DISAGREE	(2) DISAGREE SOMEWHAT	(3) NEITHER AGREE NOR DISAGREE	(4) AGREE SOMEWHAT	(5) TOTALLY AGREE
1. My college retailing class gave me a realistic portrayal of the retailing industry.	2.98	7	32	22	34	5
2. My college retailing class presented up-to-date information about retailing.	3.22	5	24	20	46	5
3. My initial interest in a career resulted from a part-time or summer job in the retail field.	3.88	16	0	10	29	45
4. Upon graduating from college, retailing was my first choice for a career.	3.55	17	11	9	25	38
5. Understanding and utilizing the reports provided by management is an area I feel college retailing courses should provide training	3.90	0	16	10	43	31
6. The management felationships is one area where college retailing courses could aid retailers by providing students with a better background.	3.69	2	15	15	28	18
7. Speakers from retail firms added a significant dimension to my understanding of retailing.	3.93	0	7	22	40	30
8. I feel that properly chosen speakers from the retail sector should be an important part of a college retailing course.	4.26	4	2	11	33	51
9. Participation in a project in my undergraduate retailing class aided my understanding of retailing.	4.33	0	5	5	41	49

The final questions that were asked of the respondents were concerned with their level of satisfaction with their retail training experience and career. As can be seen in Table 4, the respondents were somewhat strongly supportive (3.55) of the retail training experience they received. The respondents also indicated that they are fairly satisfied with their retail careers (3.82) and would somewhat strongly recommend (3.52) a career in retailing to a typical recent college graduate.

TABLE 4

SATISFACTION WITH RETAIL CAREER

		PERCENTAGE OF RESPONSES					
STATEMENT	MEAN RESPONSE	(0) NOT SATISFIED AT ALL	(1)	(2)	(3)	(4)	(5) VERY SATISFIED
1. How satisfied are you with your career in retailing to date.	3.82	2	0	3	27	45	23

	MEAN RESPONSE	(1) NOT AT ALL	(2) WEAKLY	(3) NEITHER RECOMMEND NOR NOT RECOMMEND	(4) SOMEWHAT STRONGLY	(5) VERY STRONGLY
2. How strongly would you recommend the training program you experienced to someone now entering the retail field.	3.55	4	16	22	35	22
3. How strongly would you recommend a career in retailing to a typical recent college graduate.	3.52	2	12	36	33	17

Limitations

The results of this study should be considered in light of some important limitations. First, the sample was composed primarily of operations managers (85 percent). These individuals are more likely to be concerned with display and point-of-purchase promotion than are merchandise managers. Even though the respondents were asked to respond relative to how retail managers in general would perceive the individual courses and topics, their own bias is likely to emerge. Academics would therefore be wise to consider that bias in their interpretation of the findings of this research.

Second, not all the courses available to potential retail employees were considered. This study limited itself to those courses taught at the universitities in the immediate area of the research location. Other schools are likely to have additional courses and/or pedogogical methods which were not examined.

Third, the sample was drawn from a single city and 44 percent of the respondents came from a single university. The experience of these individuals is not necessarily the same as that experienced by students in other locations. Perhaps other universities and professors might teach the lower rated courses in such a way that they would be more meaningful to retail employees. Or perhaps the reverse might also be true; the higher rated courses might not be as relevant elsewhere.

Fourth, 43 percent of the respondents were Home Economics majors. Traditionally, this college prepares retailing students very differently than the Business College, with a major emphasis on textile issues as opposed to management questions. Students from this major may have developed biases which have carried over into their management careers which might have affected the ratings of the business classes and management oriented topics investigated by this study. Nevertheless, the findings of this study appear interesting and useful to those preparing students for careers in the retail field, especially in light of the level of satisfaction the respondents exhibited with their training and career experiences.

Discussion and Implications

This study revealed several interesting conclusions. First, retail operation managers found Retailing to be a helpful class. A full 76 percent found it either helpful or very helpful. Likewise 69 percent found Basic Mathematics to be of help in their career. Obviously, this reflects their need to be able to calculate prices, margins, discounts, and the like. This is particularly interesting in light of the fact that Basic Statics and Accounting were not considered very helpful. Only 22 percent found each of these courses of help in preparing them for a retail career. The only other course that half the respondents found helpful was Sales Management, although Principles of Management was close (47 percent). Academic advisors thus should stress these higher rated classes to students desiring a career in retail operations management.

On a more specific level, the respondents suggest that promotional methods such as point of purchase promotions, premiums, and sales event planning should receive a great deal of attention. A full 82 percent believed that this topic should receive substantial or maximum attention in the retail course. In addition, 71 percent felt merchandise layout deserved the same attention while 69 percent suggested advertising methods get equal attention. This contrasts with the 42 percent who want to see information system management receive greater attention, the 29 percent who stress financial management, and the 24 percent favoring locational analyses. Obviously, the respondents felt that the day-to-day tactical topics deserve a great deal of attention while the more long-run strategic issues, while important, probably deserve less attention. To some extent this implication is a result of the nature of the sample respondents who on average had less than four years of retail experience. However, there is an important implication for those teaching retail courses--make sure we prepare them to do their job well in the short-run, so they will have the opportunity to apply the more long-run strategic tools they have been exposed to.

A third set of implications also emerge from the opinions varied by the respondents. First, the sample was equally divided between those who thought their retail instructor had presented a realistic portrayal of the industry and those who did not. When this is combined with the importance the respondents attached to having speakers from the industry as a part of the course, it implies that the respondents might believe these individuals could give them a more realistic appraisal of life in the "retail world."

Second, the study indicates, in direct contrast to Swinyard's (1981) findings, that most retailing classes do a fair job of presenting up-to-date information. In addition, it is suggested that part-time or summer employment sparked the initial interest in a retail career in 74 percent of the respondents. Retail educators might be well advised to follow Swinyard's (1978) suggestion and counsel those interested in retailing to take a part-time job in the industry early-on to minimize the risk of a poor career choice. The survey also suggests that retailing is not necessarily a fall-back career as 72 percent indicate agreement with the statement that it was their preferred initial career choice.

In the area of course content, a strong opinion was voiced in support (74 percent agreement) of stressing the understanding and utilization of managerial reports in retail classes. However, only marginal support (46 percent agreement) exists for more coverage of the management of vendor relationships. The second finding is not surprising due to the lack of merchandising management personnel among the respondents. The former conclusion suggests that the information generating capabilities of retailers is now creating the need for retail managers to know how to read, understand, and utilize the reports they are given. Thus, retail educators have a responsibility to identify these reports and incorporate into their classes a discussion of their use and value.

Pedagogically, this study strongly supports previous research (Swinyard 1978) and implies that retail courses should incorporate quality guest speakers and projects. Of the sample, 70 percent thought any industry speaker was good and 86 percent strongly supported the use of "properly chosen" speakers. Obviously, industry spokespeople add creditability and believability to the retail course. The respondents were even stronger in their support of projects as an important dimension of the retail class. Retail instructors should, therefore, strive to incorporate guest speakers and well-designed projects into their course structure.

Conclusions

The study reported concludes that in general:

1. Other than retailing, students preparing for a retail career should be advised to take the Basic Marketing and Management courses along with Sales Management and Basic Mathematics.

2. The tactical topics such as promotional methods, advertising methods, merchandise layout, and pricing methodology should be well-covered in the retailing courses.

3. That most retail classes are up-to-date.

4. That most retail employees initially develop their interest in the industry from a part-time or summer job.

5. That guest speakers are an important dimension of the college retailing class.

6. That participation in a project in the retailing course is an important dimension of the preparation for a retail career.

References

Holton, Charles J. and Myron Gable (1979), "Information Sources in Retail Employment Decision -Making Process," Journal of Retailing, 55 (Fall), 58-74.

Ingene, Charles A. (1982), "Labor Productivity in Retailing," Journal of Marketing, 46 (Fall), 75-90.

Journal of Retailing (1978), 54 (Fall).

Mason, J. Barry and Morris L. Mayer (1984), Modern Retailing, Plano, Texas: Business Publications, Inc.

Occupational Outlook Handbook (1983), Washington, D.C.: U.S. Department of Labor, Bureau of Labor Statistics.

Still, Leonie V. (1983), "Part-Time Versus Full-Time Salespeople: Individual Attributes, Organizational Commitment, and Work Attitudes," Journal of Retailing, 59 (Summer), 55-79.

Swinyard, William R. (1981), "The Appeal of Retailing As A Career," Journal of Retailing, 57 (Winter), 86-97.

Vincent, Chalrence E. and John S. Berens (1981), "Changes in Department Store Organization: Implications for Curriculum Requirements for Management Trainees," Journal of Marketing Education, Spring, 20-23.

IN SEARCH OF EXCELLENCE: A TOOL FOR TEACHING MARKETING MANAGEMENT?

Michael Parent, Utah State University
and
Mark Slama, Utah State University

Abstract

An experiment is presented in which a failing corporation is described by executive MBA students as performing well on all of Peters and Watermans' eight principles of excellence. Implications for using In Search of Excellence as a teaching tool are discussed.

In Search of Excellence: A Tool For Teaching Marketing Management?

In Search of Excellence has become more than just the bestselling book on management ever published. For many practitioners and educators the work of Peters and Waterman has been elevated to a level of principle usually reserved for religion. An important tenet of this new faith is the idea that quality sells and success requires an orientation to one's consumer. Or to quote directly, "They (the excellent companies) insisted on quality. They fawned on their customers."

The religious analogy may be carried a bit further. Peters (no relation to the Saint) and Waterman and their disciples may be described as "born again marketers." Many of their examples and their basic points are remarkably similar to the discussion of a "production" vs "consumer orientation" common to most basic marketing texts since 1960. As a tenet of the marketers' faith, it is called the "marketing concept."

Peters and Waterman begin their pilgrimage by identifying those firms in an obvious state of grace, that is sixty-two companies which shared a common excellent record of performance on six measures of long-term financial superiority.[1] For various reasons the original sixty-two became forty-three and of these only twenty-one survived to become the apostles of the new faith.

And, what would this new American business religion be without commandments? In Search of Excellence posits eight.

One: A bias for action: a preference for doing something-anything-rather than sending a question through cycles and cycles of analyses and committee reports.

Two: Staying close to the customer-learning his preferences and catering to them.

Three: Autonomy and entrepreneurship-breaking the corporation into small companies and encouraging them to think independently and competitively.

Four: Productivity through people-creating in **all** employees the awareness that their best efforts are essential and that they will share in the rewards of the company's success.

Five: Hands-on, value driven-insisting that executives keep in touch with the firm's essential business.

Six: Stick to the knitting-remaining with the business the company knows best.

Seven: Simple form, lean staff-few administrative layers, few people at the upper levels.

Eight: Simultaneous loose-tight properties-fostering a climate where there is dedication to the central values of the company combined with tolerance for all employees who accept those values.

For those who would doubt this new faith, a question arises: Are these eight principles a prerequisite for excellence? And, if one were to pose such a question, a second issue would quickly surface: Are these eight principles sufficient for excellence?

Robert V. Samuelson (1984) is among those who are unconvinced and remain unconverted. Writing in Newsweek, he presents his view as "In Search of Simplicity." In Search of Excellence he argues is "not only a publishing sensation, but also a management cult. As the book says, we all want to be winners and feel good about ourselves." This is the appeal of Excellence. But, is the book a false, albeit, well intentioned prophecy? Are there other, more important causes of success and failure?

The Danger in Excellence

The diffusion of Peters and Waterman's eight principles has occurred at an unprecedented rate in both industry and academe. Members of our university's institutional council and our college's dean's advisory council have recommended it as reading for faculty, administrators and students. They need not have done so as the book had already made its way into several course syllabi. With so much attention and so little critical evaluation, the danger in Excellence is that students in particular may attribute more to the eight principles than was ever intended by the book's authors.

As Samuelson noted several of the excellent firms have recently experienced some difficulty (often involving labor or consumer acceptance of products--unthinkable problems given the Excellence thesis). But, more important than the excellent firms which at least on typical performance measures are now exceptions are the thousands of firms which have moderate or low

1. The original list was 75 but 13 of that number were European and therefore excluded.

performance. Those who teach and conduct research in marketing management neither wish to underestimate the ingredients proposed by Peters and Waterman (importance of the consumer, product quality, a productive labor force, and the role of management style) nor ignore the influence of other equally important factors such as diverse industry structures, changing economic markets, competitive conditions, or timing and luck as ingredients in the formula for success.

To illustrate the factors involved in strategic management a series of case studies is commonly used in graduate marketing, management, finance and/or policy classes. The cases demonstrate good decisions, bad decisions and certain no win situations. A recent phenomenon has been the increasing frequency with which the eight Excellence principles are used as a standard against which the actions of a firm or more precisely management are evaluated. Unfortunately, there is a danger that the Excellence principles will become a standard and then a problem in much the same way Hayes and Abernathy (1980) believe that attention to short-run, financial ratios has become a factor in productivity decline. Furthermore, by concentrating on these principles the focus becomes how something is done rather than what is done and why it is done. This is an unique irony juxtaposed to the message in Excellence that "not all good firms are Japanese." Many researchers have attributed productivity declines, United States vs Japan, (not-to-mention the decline of the British Empire) on precisely this issue: a focus on how something is done not what is done and why it is done.

An Experiment

At this point, we report on a brief experiment conducted in a graduate marketing management class. The 29 students/respondents participate in an off campus MBA program. Each has met the entry standards of an accredited MBA program and is in their second year of the program. Each student is employed in a supervisory to upper-middle management position. Additionally, each student has read and discussed In Search of Excellence in prior classes and most report reading Excellence in conjunction with their professional ambitions at work.

One of the cases used in the Marketing Management course is the Braniff case. In an effort to anticipate the incorporation of the Excellence principles in the discussion, we developed a 7 point semantic differential scale anchored by "agree" and "disagree" for each of the eight principles. Prior to showing the Braniff case (a video taped presentation prepared by the program "Enterprise") or even indicating to the class which case we were going to discuss, we reviewed the eight principles and descriptions and examples presented by Peters and Waterman. Students took notes during the viewing of the case. Prior to discussion of the case the questionnaires were completed and returned. Braniff was a company recognized by each student as the first bankruptcy ever in the airline industry. Further, the content of the case focuses on the problems encountered by the airline in its final year of operation. (Prior of course to its purchase and operational reorganization under the auspecis of Hyatt Corporation). It is not a success story! The expectation was that these experienced graduate students would rate the performance of Braniff quite low on the Excellence principles (a downward bias caused by their knowledge of the Braniff failure and facts presented in the case).

Findings

The results were quite unexpected. On each of the eight Excellence principles, students rated Braniff management on the agree (positive) side of the scale. In particular students rated Braniff very good on its Bias for Action, Closeness to the Customer, Focusing on the Business They Know Best, and having a Simple Form and Lean Staff (Figure 1). Even Peters and Waterman raise the caveat that all "excellent" firms do not necessarily perform well on every trait. Braniff seems to, however. And, one could argue that the students' true feelings were more strongly positive than actually reported.

The case presentation by "Enterprise" could have influenced the results. If anything the presentation was a negative influence focusing as it did for thirty minutes on the company's failure.

Conclusion

This simple experiment cannot provide conclusive evidence against the use of the eight attributes of excellence as teaching tools. There may be error in the measurement of the attributes as they were determined from a video tape rather than extensive study of the company and there is also the possibility of experimentor induced bias, although, we tried to avoid this. However, the results of the experiment do serve as a counter-anecdote to the anecdotes supporting the eight principles of Excellence. The real danger of our preoccupation with these principles is not that they are poor principles, but, that we ignore those factors truely correlated with success. Barniff failed for a variety of reasons; none of which, as it turns out the students correctly understood, was related to the principles of Excellence.

This experiment as well as many of the critical reviews of In Search of Excellence imply that professors employing the eight attributes of excellence as teaching tools should not present them as though they are principles but use them to create discussion regarding the factors which may lead to excellence. For example Carrol (1983) states in reference to In Search of Excellence that, "more serious inquiry into management effectiveness and corporate excellence must involve interdisciplinary efforts that go beyond the level of anecdotes, secondary sources, and unexplained research."

More positively, Van de Han (1983) states that "The data presented to develop and support the eight characteristics would, by most scientific standards, not be admissible evidence of valid knowledge. But this is not a theory testing effort; it is a rich display of idea generation and synthesis that may lead to the creation of a new theory." Similarly Dalton (1983) comments that "While the eight principles may be fundamentally sound there is evidence of some variability. Apparently there is more than one way to be excellent."

Since the publishing of Excellence fourteen of the original forty-three excellent firms have "lost their luster." (Business Week, 1984). Of these fourteen, twelve are described as being inept in adapting to fundamental market changes. Again it must be emphasized that the eight attributes of excellence are apparently neither necessary nor sufficient for success in business and that other factors such as government policy and the competitive structure of the industry may be equally important. The attributes presented in Excellence are a good catalyst for a discussion of marketing management but, should not be presented as principles or to the exclusion of equally important factors. In fact, a replication of the experiment performed here would provide a good starting point for a class discussion of In Search of Excellence.

References

"Who's Excellent Now," (1984) Business Week, November, 5, 76-88.

Carrol, Daniel T. (1983) "A Disappointing Search for Excellence," Harvard Business Review, (November-December) 78-88.

Dalton, Dan R. (1983) "In Search of Excellence," (Book Review), Business Horizons, (May-June) 83-84.

Hayes, Robert and William Abarnathy (1980) "Managing Our Way to Economic Decline," Harvard Business Review, vol. 58 (July-August) 67-77.

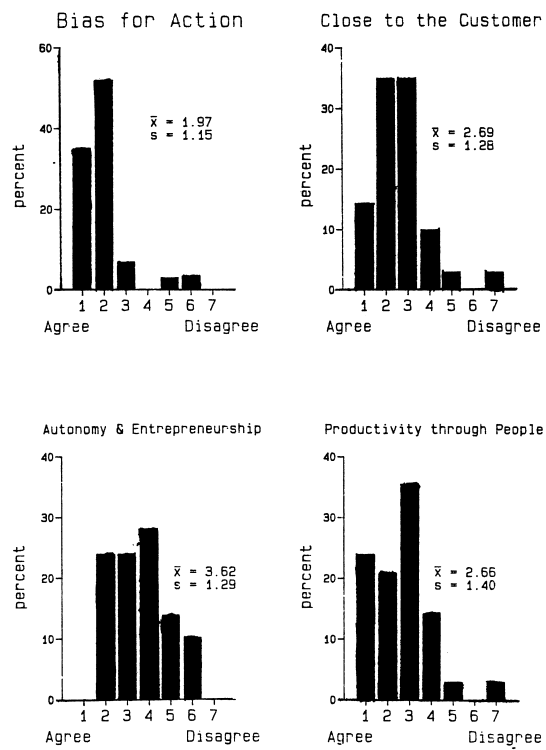
Peters, Tom and Waterman, Robert H. Jr., (1982) In Search of Excellence, Harper and Row, New York.

Samuelson, Robert J. (1984) "In Search of Simplicity," Newsweek (April 30) 70.

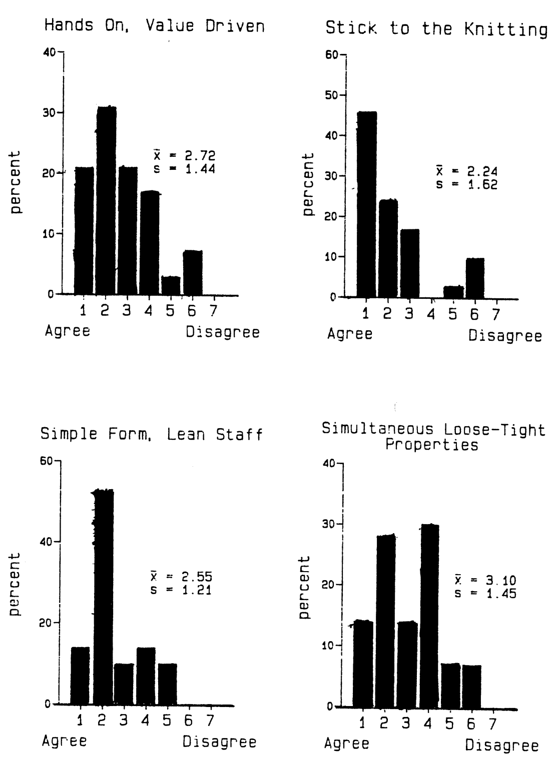
Van de Ven, Andrew H. (1983) "In Search of Excellence: Lessons Learned from America's Best Run Companies," (Book Review) Administrative Science Quarterly, (December) 621-624.

FIGURE 1

How Executive MBA's Rated Braniff's Performance on the Eight Principles of Excellence



How Executive MBA's Rated Braniff's Performance on the Eight Principles of Excellence



EXPERIENTIAL LEARNING: TRAVEL CONTESTS FOR SALES MANAGEMENT COURSES

Steven A. Ascroft, Mount Saint Vincent University

Abstract

Marketing educators are facing increased pressure to create a classroom atmosphere resembling that of the workplace. Sales courses are in particular need of experiential teaching methods which will enable students to determine if they are aptitudinally and attitudinally suited to careers in professional selling. This paper reports on two attempts to answer this challenge by introduction of an incentive travel contest to undergraduate courses in Sales Management. Theoretical background for such contests, problem areas, method of implementation, and recommendations for improvement are included.

Marketing educators have long recognized the need to utilize a variety of pedagogical methods. Generally the approach has been eclectic. Vicarious learning has been facilitated through lecture, discussion, the socratic method, and case study approaches. Experiential learning has been enhanced by workshops, projects, simulations, and co-op programs.

Development on the experiential side has been fueled by an increased awareness that students require an opportunity to employ the theory and skills they have acquired. With the traditional ability of undergraduate business programs to secure jobs for their graduates, has come even greater pressure to develop experiential teaching methods. Recent economic reality has resulted in the influx of students whose orientation would have previously seen them pursue a study of liberal arts or the pure science. This influx requires that marketing educators develop means for students to determine if they are aptitudinally and attitudinally suited to careers in business. Students need early opportunity to make this determination before much time and effort have been expended in unproductive endeavour.

Courses in Sales and Sales Management are in particular need of a pedagogy which enables students to examine the orientation(s) required of those who select this field for a career. Colleagues often lament, that students enter their courses, perform well academically, and receive few signals which suggest they ought not consider a career path in professional selling.

This preamble is intended to give the reader a view of the nature of the problem the author has addressed. The solution-immerse students in a sales contest of a magnitude such that they will have a real taste of what a competitive selling environment is all about-is partially satisfying. The remainder of the paper will present the background information for conducting such a contest, problems, benefits, and recommendations for further improvements.

Industry Use of Travel Incentives

Scanlon cautions that "there is no one incentive strategy that is right for all companies (1978, p. 36)." Incentive Marketing (1984) reports that total incentive outlays are expected to reach $2.5 billion for 1984. There are a multitude of incentive programs currently in application, surveys by Sales and Marketing Management (1980, 1983) indicate travel incentives ranked third in frequency of use as awards for these programs.

Table 1

TYPES OF INCENTIVE AWARDS USED BY 168 FIRMS

Type of Award	Percentage of firms using 1980	1983*
Cash	62	73
Merchandise	53	69
Travel	42	49
Cash plus non-cash	not reported	55

Sources: Sales and Marketing Management, April 7, 1980, p. 58. Sales and Marketing Management, April 4, 1983, p. 65. *Dalrymple, 1985, p. 407.

While travel as an incentive is ranked third in use due to costs, it is considered a most effective motivator. The popularity of travel as an award has been documented by Maher (1981) who reports an 11.8% increase to $1.25 billion for 1982. The growth of travel incentives in the 70's (69%) exceed the growth of the incentive category in aggregate (48%) (Haugh, 1981). Maher accounts for the growth in the 70's stating:

It seems that in a recession, many companies need their sales force to sell even harder, and travel is the best motivator (1981, p. 10).

Walters and Tepper (1982) favour travel over cash since the former is 1) more memorable 2) promotable 3) economical and 4) flexible. The popularity of travel incentives among top sales performers is documented in a study by Schwartz (1978). Parker (1978) supports this view claiming travel is the most effective reward for stimulating exceptional performance. The insurance industry, regular recruiters of college graduates, have apparently supported this view. They spend 54% of their incentive budget on travel rewards (Incentive Marketing, 1984). Dalrymple (1985) suggests the cost of travel awards coupled with current tax law has slowed the growth of travel as a prize and sparked the use of incentive sales meetings in exotic locations to sidestep the IRS.

Ingredients for Success

Shapiro asserts that successful contests require:

1. A clear set of reasonable objectives
2. An exciting theme
3. Reasonable probability of reward for all

salespeople
4. Reasonably attractive rewards.

"It is essential that average performers get involved, since the stars are already clearly motivated and poor performers cannot generally contribute significantly" (1977, p. 309).

Educators recognize that many average performers possess the ability to achieve excellence but are not motivated by grades. They are satisfied with "B" or "C" grades. The sales manager similarly faces the problem of employees who are content with average levels of income. Contests are an effective tool to motivate both groups to achieve their true potential.

Stevens (1983) has identified common mistakes made in designing incentive programs for industry, which are most relevant in a classroom setting.

1) Trying to keep everyone happy
2) Lack of input from the salesforce
3) Lack of input from top management
4) Inflexibility on rules and prizes
5) Losing sight of good salespeoples' prime directive-self interest
6) Spending too much time on poor performers.

Educators who choose to employ travel contests in the classroom must recognize that malcontents will find fault with the program. Active polling of students for concerns will help to ensure the idea is a success. Students schedules may not permit them to take advantage of the main prize. Educators should be as flexible as possible to allow for special cases which may arise.

Peterson (1982) categorizes problem areas as follows:

1) unrealistic expectations of sponsor
2) inadequate investment of sponsor
3) overly complex rules for participants to understand
4) failure to consider legalities, loopholes and exceptions such as shared sales credit, repeat winner, cheating, rules exceptions.

On average educators can expect between a ten to twenty percent increase in students' performance. This increase however is not evenly distributed. Adequate investment should be in place in the event that the level of effort by an individual is so high that he/she should be rewarded even if they fall short of winning the contest. While rules must be kept simple heed must be paid to ways to get around the spirit of the contest. Educators must make clear what is acceptable in terms of work sharing and provide safeguards to ensure the competition is a fair one.

Obermayer (1984) has devised rules for merchandise and travel programs which also have applicability for the classroom:

1) Decide between a motivation incentive program (many winners, small prizes) and a sales contest (few winners, big prizes)

2) Don't throw the normal compensation plan out of balance

While the author favours sales contests consideration should also be given to incentive programs. Educators may choose to experiment with the prizes. It is advisable to have performance criteria outside of the usual classroom work included in the contest. This will permit a nearly normal grade distribution and average grade.

Firms engaging in sales contests must recognize that there is a downside or potential demotivational component.

Contests may have a negative impact on the cohesiveness and morale of the company's salespeople. This is particularly true when plans force individual salespeople to compete with one another for rewards and when the number of rewards is limited. (Churchill, Ford and Walker 1985, p. 480)

In addition there may be a letdown in performance after the contest, non winners may suffer from demoralization. Sales peoples' aggressiveness during the contest may cost future sales, and the winners may rest on their laurels. Wotruba and Schoel's (1983) study indicated that the most negative side effects from sales contests occured in contests that received the best evaluations from sales managers.

Smith (1983) indirectly raises the additional issue of the ethics of such incentives. Smith embraces B. F. Skinners argument that the visibility or lack thereof of a reward, ought not be related to the dignity of the individual. The fact that a salesperson is perceived as chasing a very visible carrot (such as a trip to Australia) makes him no less dignified than an individual who chases far less visible carrots, (such as the respect of their peers). The dignity issue is still raging however and sales managers should be aware that some employees may resent what they perceive to be manipulation.

Educators who decide to employ travel contest in the curriculum will most likely be confronted by students who lay the manipulation charge. The authors answer is twofold. 1) They may be right. 2) They are not suited to most careers in sales.

The "Win a Trip to Jamaica" Contest

This contest was conducted at a small rurally located eastern Canadian University. The class was a senior level sales management course with 57 students. The students were experiencing graduation fever just three weeks in to the winter term half credit course. The idea for the contest and the assembling of funds resulted in a six week lag between the contest's official announcement and the start of the course. A student was selected to poll the students on the criteria to decide the winner. Many students were skeptical regarding the contest's validity (they had never heard of such a thing and the prize was a trifle unbelievable) but concensus was achieved on three criteria

1) Grades (not including the final exam)
2) Peer evaluation
3) Special paper of any length (worth no grade) Topic: effectiveness of travel as an incentive motivator

The course instructor was to score items one and three and tabulate item two. The special project was due two weeks prior to the final class date.

The response was mixed initially with skepticism diminishing as class periods were started with songs about Jamaica, reminders about the paper, current standings for the contest, posters of Jamaica (a major allure in the dead of Canadian Winter) and most significantly the increased competitiveness of their peers. Near the end of the contest period, the atmosphere in class and out was intense. Friends were no longer talking, students came to the office to blatantly ingratiate or to backstab competitors. Students from other classes and faculties were picking the favorites to win.

It became evident that the paltry prize of a trip for two for one week in Jamaica was inadequate for the level of effort being expended. The author scrambled for more sponsors and with the resources donated from firms and personal resources, subsidiary prizes of a trip to Ottawa and a trip to Montreal plus minor cash awards were arranged. Twenty-eight of the fifty-seven students submitted the special project required to enter the contest. The range ran from two to thirty page reports, complete with art work and high levels of creativity.

The nonparticipants opted out to time constraints from other courses, lack of a realistic chance of winning due to grades or lethargy. A number of students doubled their chances of winning by reciprocal agreements. Those reciprocal agreements in fact caused much strife where three close friends could not find a way to split a trip for two.

A class period was spent employing expectancy theory to predict who would enter the contest and how hard they would work to win.

The final day of class began with motivational recordings, followed by a guest speaker who served as the presenter of the prizes. The regional Sales Manager for Xerox of Canada, who was instrumental in the contest's launch, served in this function.

The contest participants were asked to stand and were roundly applauded by classmates. Names were called in no particular order to indicate these participants had not won leaving eight participants standing. Nervous energy was expended clapping and cheering as another four participants' names were called in no particular order. These participants were asked to come to the front and accept a small cash award.

The fourth placed participant's name was called and was presented with a fifty dollar cash prize. Of the three remaining contestants two had a reciprocal arrangement and one of these individuals was heavily favoured to win from day one. This individual placed third and received a trip to Montreal. With the announcement of the third placed winner, rythmic clapping and cheering began such that it was necessary to make hard gestures to communicate with the audience.

The two finalists were diametrically opposite each other in a horseshoe shaped classroom and could not look at each other. The words "The second placed winner is" brought dead silence to the room and the announcement of the participant's name resulted in a scream of euphoria from the winner who leaped into the air, tears of joy streaming down his face. He was caught in mid air by his classmate with whom he had a reciprocal arrangement. Their euphoria was paired with the second placed winner's dejection. She sank down into her chair, for a moment unable to rise, and accept the subsidiary prize. The winner, a student who had received a "C" average in his first three years, was enthusiastically applauded as the last class of the term ended.

The dramatic account of the contest was presented to qualitatively demonstrate the positive effects of conducting the contest:

1) Students learned about competition by competing
2) Students were able to see the positive and negative motivational effects of incentive contests
3) Students experienced the morale building influence of this endeavour.
4) Many students saw aspects of their character which had been supressed (Self Discovery)
5) Students left the course with a clearer understanding of what many careers in selling are like from a psychological perspective. (i.e.) winning and losing, going the extra mile, handling rejection.

Despite the success and popularity of a sales contest as a pedagogical device, problems arose. The following suggestions are made.

1) Announce the contest two weeks into the course. You will avoid enrollment swelling. Make the work load heavy.
2) Do not assign any activities prior to formal announcement of the rules.
3) Discuss the concept at your departmental meeting. You will without doubt raise the ire of those who climb a high academic horse. This is disconcerting but to be expected.
4) Be prepared to take some heat from the administration over fund raising.
5) Be prepared to parry jibes from faculty in other disciplines.
6) Obtain liability releases from the contest winners.
7) Log your discoveries and impressions so you can modify the contest in future years.
8) Make sure students understand the nature of their squabbles; root causes and solutions.
9) Remember the endeavour is a learning experience.

The "Win a Trip to DisneyLand" Contest

(in progress at time of writing)

Modifications were made to the original contest and an improved version was run at an Eastern School in a metropolitan area. Twenty-eight students reached concensus on three slightly modified criteria. 1) Grades (not including final exam) 2) Peer evaluation of classroom performance 3) Annotated bibliographies of academic articles.

Each criteria had an equal weighting. Students could complete as many annotated bibliographies as they wished and received scores based on their rank order finish.

Rationale for inclusion of the three performance areas is being presented to the students at the beginning, midpoint and end of the contest. Grades provide a surrogate measure of the daily activities of a salesperson outside of the selling function. Peer evaluation represents a surrogate measure of empathy, which is one of the two traits most often stated as essential in top salespeople. The critique score is a surrogate for ego drive the other trait most often stated as essential for top salespeople. The objectives of the contest were the same as mentioned previously. Many students have described the contest to friends and colleagues, as one of most exciting and rewarding experiences of their lives.

The president of the university will make the awards to the class, in the presence of all the department faculty. The development office will provide tax receipts to sponsors who were cleared by the administration prior to an approach for funds. The initial departmental support of the contest concept was 7 in favour, 4 opposed, 1 abstention. As an additional incentive Xerox of Canada, Inc., promised an interview and serious consideration of employment to the contest winner.

The interest has been intense among students and the winner will be attending a session of the education track at this conference. Inclusion of the conference satisfied some concerns of a faculty member. This results in the prize taking on the guise of an incentive sales meeting. Plans are underway for next year's contest.

The prize ... a trip to Hawaii.

References

Churchill, Gilbert A., Jr., Ford, Neil M. and Walker, Orville C. Jr. (1985), Sales Force Management: Planning, Implementation and Control. Homewood, Illinois: Richard D. Irwin, Inc.

Dalrymple, Douglas J. (1985), Sales Management: Concepts and Cases. New York: John Wiley & Sons, Inc.

Haugh, Louis J. (1981), "Incentive Travel Up", Advertising Age, (October 12).

Incentive Marketing, "Battling the Blahs", VI58N10 (Oct), (1984), 57-66.

Mayer, Philip (1981), "Incentive Travel Increases", Industrial Marketing, V66N12 (Dec), 10.

Obermayer, James (1984), "Eleven Simple Rules for Non-Cash Incentives", Business Marketing, (April), 44-48.

Parker, Ann (1978), "Solve Sales Problems with Travel Incentives", Marketing (UK), (Nov), 91-92, 94, 96.

Peterson, Ken (1982), "Keeping the Bugs out of your Incentive Program", Sales and Marketing Management, (Sept) 94-104.

Sales and Marketing Management (1980) Apr 7, p. 58.

Sales and Marketing Management (1983), (Apr 4), p. 65

Scanlon, Sally (1973), "Big Bucks & High Hopes", Sales and Marketing Management, (Apr 3), 35-39.

Schwartz, Eleanor B. (1978), "Motivating Superior Outside Sales Personnel", Journal of Small Business Management, V16N1 (Jan), 19-26.

Shapiro, Benson P. (1977), Sales Program Management: Formulation and Implementation. New York: McGraw-Hill Book Company.

Smith, Stewart A. (1973), "Motivation and Manipulation: Is there a Difference?" Sales Management, (Apr), 64-68.

Stevens, Sally (1983), "Ten Incentive Mistakes to Avoid at All Costs", Sales & Marketing Management, V130N5 (Apr), 78-86/

Walters, Roy W. and Tepper, Bruce (1982), "Do Salesforce Incentive Programs Boost Sales?" Marketing Times, V29N2 (Mar/Apr), 18-20, 22.

Wotruba, Thomas R. and Schoel, Donald J., "Evaluation of Salesforce Contest Performance", Personal Selling & Sales Management, V3N1 (May), 1-10.

ETHICAL STANDARDS OF MARKETING STUDENTS

Vicky L. Crittenden, Harvard University
William F. Crittenden, Northeastern University
Jon M. Hawes, University of Akron

Abstract

This paper reports the results of an empirical examination of the ethical standards of marketing students attending a large Southeastern university. The results indicate that in many cases situational ethics do exist. In one of four tested cases, the students with more exposure to the business curriculum were more tolerant of unethical behavior. Few differences in the ethical views of male and female students were found. Some evidence did exist, however, to suggest that the ethical posture of women does change as their education level increases. These and other results are analyzed and compared to previous research findings.

Introduction

Marketers constantly face ethical dilemmas. On almost a daily basis marketers are faced with the necessity of balancing responsibility to the public (or some other external and/or internal constituency) against the risk of losing one's job. Questionable marketing practices such as the "slightly shady" behavior of some entrepreneurs, deceptive advertising, rolling back of odometers by some used-car dealers, and kickbacks, fraud, and bribery of foreign officials have attracted considerable concern about business ethics (Burr 1976; Carroll 1978). Some people always seem to have a rationale, however, for what others would consider unethical behavior.

Questionable activities are frequently justified by some marketers as a necessary aspect of business conduct. Furthermore, top business (and political) officials confronted with questionable practices often deny doing any wrong. Consequently, it is apparent that various people have differing standards of ethical or moral behavior within our society.

It would seem particularly relevant to gauge marketing students' perceptions of deceptively ambiguous business and marketing practices. This paper represents an attempt to determine possible differences in the ethical standards of students in different level marketing courses at a large Southeastern university. In addition, the research examines what types of practices are seen as ethical or unethical, and to what extent conditions surrounding the use of certain practices affects student attitudes.

Background

Moral Perplexity

Human behavior is frequently assessed in the context of its rightness or wrongness. Definitions of right and wrong are deeply rooted in cultural and philosophical beliefs which may vary considerably among individuals. Standards of appropriate business behavior also vary.

One standard (or mode) of ethical behavior, aptly titled moral idealism (Kotler 1983), or absolute ethics (Walker 1973), is a set of rigid ethics which postulates certain acts are bad under all circumstances. This concept is comparable to that inherent in the Ten Commandments.

The antithesis of this absoluteness is "profit maximization" where the individual is only concerned with the effect of the activity on corporate profits. Given the profit goals of corporations, marketers who follow this approach can be called realists. Unfortunately, many business situations pose dilemmas that occur in a gray area where the law is not clear, where there is a fine line between right and wrong, and where the profit impact is unclear (*Business Week* 1974). Consequently, another mode of behavior has been identified as utilitarianism or rationalism. This approach establishes the moral locus not in the act, but in the consequences of the act (Kotler 1983). If the individual and society receive a net benefit from the good and bad consequences of the act, it is considered to be right. While moral idealism and realism theories represent the polar extremes of ethical posture, rationalism falls somewhere between these two approaches to decision-making.

Education and Ethics

There has been considerable interest and concern among marketing educators about ethics in marketing and the impact of the educational process upon students' ethical viewpoints. Numerous researchers have called for the pursuit of empirical research to clarify conditions inherent for different business behaviors and various means for judging that behavior (Ferrell and Weaver 1978; Hawkins and Cocanougher 1977; Mitroff and Kilmann 1977; Schein 1980). Furthermore, Schein (1980) stated that courses in marketing tended to focus on technical issues rather than moral ones and Chandler (1984) agreed by stating that the emphasis in marketing courses is on identifying and analyzing activities that provide customer satisfaction. Course content seldom includes consideration of the moral implications of the activities, however. To this end, Schein called for an inquiry among students to examine the impact of the educational process.

Research Design

Development of Hypotheses

Hawkins and Cocanougher (1977) found that the longer a student had majored in business, the more inclined he or she would be to consider questionable business practices as being ethical. A similar study by Mitroff and Kilmann (1977) supported this finding:

> As one moves across the table from the EMBAs (Executive MBA program) to the women undergraduates, one finds that the EMBAs are more

approving, or at least less condemning of bribery than the MBAs, who in turn are less condemning than the Minnesota undergraduates, who are in turn less condemning than the women.

Reinforcing the Mitroff and Kilmann (1977) findings, a Gallup poll found that women consistently report having higher levels of ethical behavior than men (Ricklefs 1983a). Therefore, differences in ethical standards between males and females also were examined in the current study.

The following null hypotheses were developed based upon a review of the literature.

H1: There is no difference in the ethical view of students in Junior, Senior, and Masters level marketing courses (Chandler 1984; Hawkins and Cocanougher 1977; Mitroff and Kilmann 1977).
H2: There is no difference in the ethical views of female and male students (Mitroff and Kilmann 1977; Ricklefs 1983a).
H3: There is no difference in female students' ethical views across educational levels (Harragan 1984).
H4: Students will not indicate different ethical standards when the situational results appear to directly affect him or her personally versus those situations with indirect effects (Blott 1978; Schneider 1984; Walker 1973).

Research Procedures

Scenarios illustrating four marketing practices (see the Appendix) were developed from previous research in marketing ethics (Alder 1980; Boone and Kurtz 1979; Goodman and Crawford 1974; Ricklefs 1983c). The respondents were asked to decide which of three alternative responses would best represent what they would do in each of the instances. A typology consistent with the three aforementioned standards or modes of ethical behavior was developed. The categories developed were: Moralist (moral idealism), Realist (profit maximizer), and Rationalist (utilitarianism). It was felt that a more accurate response would result if the respondent did not approach the situation from a "right" or "wrong" viewpoint. Therefore, there was no mention either in the questionnaire or in the verbal introduction that alluded to the rightness or wrongness of any of the scenarios.

The sample design consisted of 136 students in three different levels of marketing courses (junior, senior, masters) at a large Southeastern university. The surveys were administered during class so as to avoid any outside discussions. Ethics was not mentioned at any time as this might have placed the term at the forefront of the respondent's thinking process and may have caused "ethical" responses to be given rather than "real-life" responses.

Results of the Research

For descriptive purposes, Table 1 represents the responses to each scenario, broken down by class and by sex. This section describes the results for each scenario.

Protecting Own Livelihood

In a previous survey using a case situation very similar to the first ethical scenario, roughly half of the respondents thought the manager should disregard the discovery of a corporate tax violation in order to protect his or her family's source of income (Ricklefs 1983c). That particular survey, however, did not provide for the "middle ground" as was done in the current research--it was an either/or situation.

A crosstabulation of the ethical categories by education level yielded a Chi-square value of 18.0 which is statistically significant at the 0.0012 level. Closer examination of Table 1 shows that junior level (69.2%) and senior level (48.8%) students primarily supported the rationalist approach, while the masters students (46.7%) primarily supported the realist approach. Overall the percentage of rationalists decreased and the percentage of realists increased as educational levels increased. A clear trend was not evident in the moralist category as a higher proportion of seniors (31.7%) were in this category than were juniors or graduate students.

An analysis of the ethical categories by sex did not indicate a statistically significant association. Chi-square analysis of the ethical categories by educational levels for males and females was not possible due to inadequate cell size for female students at the masters levels. However, some interesting trends were evident. The percentage of rationalists for males and for females decreased as educational levels increased. Among male students, the percentage of realists increased as educational levels increased. For female students, juniors were primarily rationalists (73.0%), seniors were primarily moralists (47.6%), and masters students were primarily realists (45.5%).

Selling the Product

The second case incident dealt with selling a product. This particular situation had not been tested in previous studies, yet similar scenarios were mentioned in an article by the vice-president of a large food manufacturing concern (Blott 1978).

No statistically significant association was found in the analysis of ethical categories by educational level. However, once again the percentage of rationalists decreased as educational levels increased. No clear trend was evident for the moralist or realist categories. Contrary to the first situation, a high proportion of seniors were classified as realists for this situation. In fact, the two most common responses among the three groups of students were similar to strategies taught in most marketing courses. About 49 percent of the students rated that the store should first check competitors' prices (Rationalist) with 34.6 percent suggesting that the store set up a special display for the products. As there was no mention of ethical considerations during the administration of the questionnaire, it is possible that some of the students failed to consider the price

TABLE 1

PERCENTAGE DISTRIBUTION OF RESPONSES FOR EACH SITUATION

Situation	Juniors			Seniors			Masters		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
1. Protecting own livelihood:									
Moralist	17.9%	10.8%	13.8%	16.7%	47.6%	31.7%	21.1%	27.3%	23.3%
Rationalist	64.3%	73.0%	69.2%	50.0%	42.9%	48.8%	31.6%	27.3%	30.0%
Realist	17.0%	16.2%	16.9%	33.3%	9.5%	19.5%	47.4%	45.5%	46.7%
2. Selling the product:									
Moralist	32.1%	5.4%	16.9%	0.0%	9.5%	7.3%	21.1%	36.4%	26.7%
Rationalist	39.3%	62.2%	52.3%	61.1%	47.6%	51.2%	36.8%	45.5%	40.0%
Realist	28.5%	32.4%	30.8%	38.9%	42.9%	41.5%	42.1%	18.2%	33.3%
3. Overuse of product:									
Moralist	17.9%	13.5%	15.4%	27.8%	42.9%	34.1%	21.1%	27.3%	23.3%
Rationalist	35.7%	32.4%	33.8%	22.2%	19.0%	22.0%	15.8%	18.2%	16.7%
Realist	46.4%	54.1%	50.8%	50.0%	38.1%	43.9%	63.2%	54.5%	60.0%
4. Faked anonymity									
Moralist	57.1%	59.5%	58.5%	66.7%	57.1%	63.4%	78.9%	45.5%	66.7%
Rationalist	21.4%	13.5%	16.9%	11.1%	19.0%	14.6%	5.3%	18.2%	10.0%
Realist	21.4%	27.0%	24.6%	22.2%	23.8%	22.0%	15.8%	36.4%	23.3%

manipulation in an ethical way and instead concentrated on effective marketing strategy development.

Again, there was no statistically significant association between sex and the responses to this situation. Most males (44.6%) and most females (55.1%) were classified as rationalists. However, at the 0.015 level of significance, there was a difference between the male and female students within the Junior level. About 32 percent of the males responded "Moralist," 39.3 percent responded "Rationalist," and 28.6 percent responded "Realist." The females tended to avoid the "Moralist" response as 62.2 percent indicating "Rationalist" and 32.4 percent responding to the "Realist" alternative. Neither of the other two educational levels, however, showed a significant difference between the sexes.

Further Chi-square analysis of other educational levels or of ethical categories by educational levels for males and females again was not possible due to inadequate cell sizes in some categories. A review of the responses, however, indicates that the junior (39.5%) and senior (61.1%) level males were primarily rationalists while graduate level males (42.1%) were primarily realists. Female students at all educational levels were more likely to be rationalists although the percentage decreased as education level increased.

Overusing the Product

The third situation dealt with ethics from a marketing research standpoint. The question dealt specifically with how to handle results obtained through marketing research. Other versions of this question have been examined in previous research efforts and very high disapproval rates were found for this situation (Adler 1980; Goodman and Crawford 1974). In earlier surveys, the scenario was worded such that the respondent had to approve or disapprove of a company letting the results slip by quietly. Yet, by asking the respondents what he or she would do in the present study, 50.7 percent indicated that they would let the results slip by quietly (Realist) while only 22.8 percent taking the Moralist approach. Furthermore, the realist view was the primary response at each educational level for both males and females. Differences across educational levels were found at the 0.111 level of significance. Once again, the percentage of rationalists decreased as educational levels increased.

No statistically significant differences were found (where analysis was possible) between the male and female respondents either taken as a whole or when broken down by class sections. Contrary to other class levels, however, senior level females tended to endorse the moralist view.

Faked Anonymity

This situation also dealt with marketing research, but this time the situation dealt with collecting the data rather than using it. The results in this instance clearly coincided with previous studies. Previously, about 70 percent of the respondents (Marketing Research Directors, Marketing Executives, and business students) disapproved of the use of ultraviolet ink (Adler 1980; Goodman and Crawford 1974). The current findings show a 61.8 percent "disapproval" rate (i.e., Moralist). Having a middle ground category in this instance did not seem to make a difference. Only 14.7 percent of the respondents selected the middle ground with the remainder (23.5%) going for "approval" (Realist).

Interestingly, the percentage of realists was very similar at each educational level while the percentage of rationalists declined as educational levels increased. This led to an increase in the percentage of moralists as educational levels increased which is contrary to results in the earlier scenarios. However, no statistically significant association was found in ethical values across educational levels. In addition, an analysis of the ethical categories by sex and by sex and educational levels found no significant differences. However, the percentage of moralists increased over educational levels for males and decreased for females.

Discussion

Hypothesis 1 was formulated to test the contention that increased exposure to a business curriculum would have a positive effect upon the tolerance level toward questionable marketing practices. Mitroff and Kilmann (1977) and Hawkins and Cocanougher (1977) found that with increased exposure to the business curriculum, the student was more likely to view ethically ambiguous situations as ethical. This is consistent with Schein's (1980) and Chandler's (1984) beliefs that marketing courses place greater emphasis upon the technical aspect of marketing than on the moral consequences of marketing.

The analysis shows that rejection of the null hypothesis of no association depends upon the situations. It appears that the more the situation directly impacts upon the student, the more likely the student is to view ethically ambiguous situations as ethical. Only in the first situation was the association statistically significant. In this instance it may be that the masters students are older, currently hold marketing jobs and realize the difficulty in obtaining good positions, or have families and know the concern inherent with supporting the family.

Although a significant association between ethical response and educational levels was only determined for the first incident, some definite trends were identified overall. In each instance the percentage of rationalists decreased as educational levels increased. In most instances, senior level students tended to have more moralist views or more realist views than the other groups. This is, instead of a trend across educational levels for the moralist and realist categories, senior level students tended to have higher or lower proportions than both junior level and masters level students. This may reflect the impact of course content (a section on social issues is frequently covered in the particular senior level class surveyed) and the business law "core" courses that is a prerequisite for this capstone policy course. The junior and masters level courses surveyed may not have taken the business law prerequisite.

Hypothesis 2 was designed to test the thesis that females report more ethical behavior than men. A Gallop poll conducted by Ricklefs (1983a) for The Wall Street Journal found women to consistently report more ethical behavior than men. The Mitroff and Kilmann (1977) study also found that women undergraduates were more concerned with the basic rightness and wrongness of the action than with whether the action was profitable or not.

The percentage of males indicating the realist approach exceeded the percentage of females taking this view in three of the four scenarios. Trends were not so clear between males and females for the rationalist and moralist views. Furthermore, a statistically significant association was not found between sex and ethical values for any of the four situations. Thus, the evidence will not allow rejection of the second null hypothesis.

Hypothesis 3 was formulated in order to measure the adage that a woman must change her ways to be successful in the business world. Some believe that females are perhaps naive to survival tactics in business at first, but learn the game over time. In her response to a female sales associate's complaints about the "unethical" behavior of the woman's boss, Harragan (1984) stated that women with limited exposure to life and business are often stuck in a "clerical mentality" and are inclined to focus on nitty-gritty details and ignore the large manifestations of company rules and procedures. Therefore, it would appear that increased exposure to the business school curriculum would have an impact upon a female's ethical views and ultimately lead to greater tolerance to double-edged situations.

Unfortunately, inadequate cell size, particularly at the masters level, did not allow an adequate statistical test of this hypothesis. However, an examination of the trends across educational levels does tend to support the premise that females' ethical postures change over time. Typically, the percentage of rationalists declined as educational levels increased. In addition, in the first situation, the percentage of moralists declined as educational levels increased with a greater percentage of realist responses at the masters level. Given the type of situation described in the first incident, it may be that females do learn to discern between personal survival and indirect effects. That is, the company probably would not close down because the green beans did not sell, because the product was overused, or because ultraviolet ink was used. Directly endangering one's career, however, had personal repercussions. Therefore, females may adhere to situational ethics more as they become older, have families, or have held or are holding jobs.

A surprising finding was that senior level females were primarily moralists in three of four incidents while junior-level females were primarily moralists only once. Again, this may reflect the course background of students taking the "capstone" course (i.e., social issues section and the business law course).

Hypothesis 4 was formulated to determine if situational ethics do actually exist and if so, what types of situations cause variation. In situational ethics there are no right or wrong answers, the solution depends upon the situation. In addition, the right or wrong of a particular situation can change with the time, the place, the society, and the individual (Walker 1973). Situations can be determined ethically proper or improper depending upon the circumstances inherent in a particular situation.

Although this hypothesis was not statistically tested, it appeared that type of situation did have an impact upon attitudes. In looking for consistency in responses, it was found that only 7.3 percent of the students responded consistently either as a "Moralist" or as a "Realist." Almost 93 percent of the students fell into the "Rationalist" response for one or more of the given situations.

Respondents approached the first situation more from a "Rationalist" or "Realist" point of view, whereas the fourth situation appeared to be more a "Moralist" situation. The first situation is one that clearly has an effect upon the individual's personal life, while the last situation is one that the respondent can look at without personal impact. Given the differences in the responses, it appears that students do adhere to situational ethics, and that the personal impact upon the individual may guide the decision-making process.

This observation concurs with previous findings which have surmised that the circumstances of a given act have an effect upon whether or not the act is perceived as ethical. Blott referred to this as a trend away from traditional, absolute virtues to a newer theory of relativity (Blott 1978). Further support for this is found in the results of a study that discovered that 75 percent of the general public disapproved of an executive omitting $2,500 in interest income from his tax return, while only 50 percent disapproved of a waitress who declared only $2,500 of her $5,000 annual tip income on her tax return (Ricklefs 1983b). Ferrell and Weaver (1978) also found a situational viewpoint in their reserach, concluding that respondents believed that behavior was more ethical in some situations than in others.

Summary

This study attempted to determine if any difference existed in students' ethical attitudes at three levels of education, between males and females, and at the three educational levels of females. The findings do not entirely support previous research findings in that the results were inconclusive between and among the educational levels of students. The lack of corroboration with previous studies may result from the nature of the situations and the response categories. Most previous reported research appeared to highlight a consideration of ethical behavior from the respondents. In addition, previous studies often utilized the "have you" or "would you condemn" approach rather than the "what would you do" approach that was used in the current study. It might be easy to respond yes/no to the "have you" question or to give the socially acceptable response to the "would you condemn" question. Yet, the type of responses used in the current research did not really draw attention to socially acceptable responses nor did any of the situations question what had been done by the individual.

The results do appear to indicate the existence of situational ethics as suggested in the literature. Apparently, students in making courses have propriety and impropriety. However, the research results do suggest that exposure to certain course content (i.e., legal and social issues) may shape the ethical awareness/behavior mode of students.

Appendix

Please contact Jon Hawes, Department of Marketing, University of Akron, Akron, OH 44325 for a copy of the survey instrument.

References

Adler, Lee (1980), "The Privacy Issue Arouses Concern About Ethics in Marketing Research," Sales and Marketing Management, 125 (8 December), 88-89.

Blott, Richard A. (1978), "FF Industry Must Still Face Ethics After All Legality Has Been Met," Quick Frozen Foods, 41 (September), 26-33.

Boone, Louis E. and David L. Kurtz, (1979), Test Bank to Accompany Contemporary Business, 2nd Edition, (Hinsdale, Illinois: The Dryden Press).

Burr, Pat L. (1976), "A Test for Morals," Business and Society Review, 19 (Fall), 77.

Business Week, (1974), "Stiffer Rules for Business Ethics," (March 30), 87-89.

Carroll, Archie B. (1978), "Linking Business Ethics to Behavior in Organizations," S.A.M. Advanced Management Journal, 43 (Summer), 4-11.

Chandler, E. Wayne (1984), "Future Managers Need Training in Ethical Decision Making," Marketing Educator, 3 (Winter), 5.

Ferrell, O.C. and K. Mark Weaver (1978), "Ethical Beliefs of Marketing Managers," Journal of Marketing, 42 (July), 69-73.

Goodman, Charles and C. Merle Crawford (1974), "Young Executives: A Source of New Ethics?" Personal Journal, 53 (March), 180-187.

Harragan, Betty Lehan (1984), "Getting Ahead," Working Woman, (April), 32.

Hawkins, Del I. and A. Benton Cocanougher (1977), "Student Evaluations of the Ethics of Marketing Practices: The Role of Marketing Education," Journal of Marketing, 41 (April), 61-63.

Kotler, Phillip (1983), Principles of Marketing, (Englewood Cliffs, NJ: Prentice-Hall).

Mitroff, Ian I. and Ralph H. Kilmann (1977), "Teaching Managers to Do Policy Analysis," California Management Review, 20 (Fall), 47-54.

Ricklefs, Roger (1983a), "Executives and General Public Say Ethical Behavior is Declining in U.S.," The Wall Street Journal, (October 31), 33.

Ricklefs, Roger (1983b), "On Many Ethical Issues, Executives Apply Stiffer Standard Than Public," The Wall Street Journal, (November 1), 33.

Remaining references are available from Jon Hawes.

STUDENT EVALUATIONS IN A BUSINESS ADMINISTRATION CURRICULUM - A MARKETING VIEWPOINT

Lorman L. Lundsten, College of St. Thomas

Abstract

There are two opposing viewpoints, both well supported in the literature, concerning student evaluations of teaching performance. The first view holds that students can and should evaluate teaching performance and that the evaluation will correlate well with learning outcomes. The second viewpoint is that, while the students may be measuring something, probably satisfaction, their evaluations may differ markedly from the level of true learning taking place.

The discipline of marketing offers a useful perspective from which to view the value of student evaluations. Marketers would argue that students, as one relevant market of the education process, deserve to be satisfied by the process and that this is a relevant goal. Obviously, learning is another, possibly different outcome that also needs to be monitored. This study presents a detailed analysis of a large sample of student ratings.

The Problem

In any single educational institution, there seem to be two major groups of influences that come together in a classroom. First are those influences under control of the instructor. These include classroom delivery style, the structure of the delivery, the level of support offered to the student, the textbook chosen and other factors that stem from choices made by the instructor. Another set of influences stems from the student. Students are motivated or not, they like or dislike the subject, they are enrolled by choice or not, they like the instructor and the teaching style used or they do not.

The quality of the educational experience can best be judged by understanding the combination of these two sets of influences. If the set of variables under control of the instructor has the predominant effect, then rating the quality of the experience and judging the quality of instruction is relatively straightforward. Behaviors can be scored, and the scores accumulated. The instructor can be rated based on these scores. There is justice in assigning an instructor a score based on these ratings, since the scores reflect his/her actions. Negative scores point out where he/she needs to "mend his ways."

That is, the luck of the draw may result in a disproportionate number of motivated students and/or a disproportionate number of students with learning styles which are consonant with the instructors teaching style. These factors may be more important in determining instructors scores than any particular teaching behavior.

If student factors are important in moderating the educational outcomes, and if these factors have at least moderate variability over the student population, then the measurement error in determining outcomes for any given instructor behavior increases greatly. If significant interactions exist, the measurement error of the measure of teaching effectiveness is also increased. In this case, behaviors that produces adequate learning with one class become inadequate in another.

This study will attempt to give a measure of the importance of each of the domains of influence, (i.e, the instructors behavior and the student factors) and will infer from this the adequacy of present evaluation strategy.

The Dimensions of Teaching

In a pioneer study of student evaluation of faculty performance, McKeachie (1960) studied the moderators of learning in an undergraduate general psychology course. He evaluated teaching behaviors, student characteristics and objective measures of learning and found that while intellectual ability was the strongest single factor in determining learning, instructor and student behaviors were significant moderators.

The Center for Research on Learning and Teaching at the University of Michigan, in a June 1976 summary of the many factor analytic studies of student ratings notes that four main factors tend to emerge in these studies. Here are the four factors, along with sample items that load on each factor.

Factor	Sample Item
Skill	The instructor gives clear explanations
Rapport	The instructor treats students with respect
Organization	The instructor uses class time well
Overload/difficulty	The instructor made the course sufficiently difficult to be stimulating.

The Relationship Between Evaluations and Learning

Negative Studies

Rodin and Rodin (1972) concluded that, since students who learned the most rated their instructors lowest, student evaluation of instruction is invalid.

Elwin Marg (1979) found that concentration on morale building instead of content in a highly technical course area (optometry) raised student ratings of effectiveness, while learning was reduced.

Positive Results on Student Evaluation

McKeachie's early (1964) results found that student evaluations were valid. Frey (1976) showed that student evaluations were not sensitive to timing and that they correlate well with exam performance in calculus classes. Gillmore (1977) shows that the course effect (the portion of the rating score that is course dependent, not instructor dependent) is quite small. Scott showed that order effect and item context had no significant effect on average appraisal of instruction in the Department of Psychology at the University of Georgia. Hofman and Kremer show that students at the University of Haifa formed their evaluative opinions early in the semester and they suggest that the timing of the evaluation is not critical.

Doyle and Crichton (1978) present mixed results in an interesting cross-validity study of student, peer and self evaluations. In this study, 263 students in a required introductory communications course rated their learning experience. The 12 instructors, mostly graduate students, provided peer and self ratings. The common final examinations supplied a measure of learning. They found that the three sets of ratings were usefully related, that peer ratings were the most favorable and student ratings the least favorable, and that "student and self ratings and rankings were quite good in terms of convergent and discriminant validity, but no student, peer, or self rating was significantly related to residualized student achievement." Residualized student achievement here refers to the final exam performance not explained by PSAT verbal scores.

Two possible problems in generalizing this study are apparent. First, that the final examination as a measure of learning in this single course may be suspect. If it were too easy or too difficult, no measurement would have taken place. Second, the use of a faculty population primarily consisting of graduate students may, in some way, have effected the outcomes.

An Empirical Test

In the spring semester of 1985, every student in the business administration department of the College of St. Thomas in St. Paul, MN was asked to complete an evaluation questionnaire. 2,069 completed questionnaires were received. About half of the students completed more than one questionnaire because they were taking more than one course in the business administration department.

Included in the questionnaire were questions on the perceived outcomes of the course (e.g., learning, satisfaction), the perceived behavior of the instructor (e.g., instructor treated students with respect) and the characteristics of the student (e.g., class year, this class was required for my major).

Missing items were tabulated for each questionnaire and those with more than 10 items missing were eliminated from the study (only 149 fell into this category). This eliminated nearly all of the item non-response. The missing items in the remaining cases were replaced by the mean response for the item. No item was missing in more than 1% of the cases.

There were 16 items in the student questionnaire that were designed to measure instructor behavior. Typical items in this category were ". . . was well prepared," ". . . presented the subject matter clearly." There were nine items that referred to items not under the instructor's control. Typical items here involved the students' personal motivation to do work or own prior ability, etc. Finally, there were seven items that measured educational outcome. They asked students to rate the course, the teaching, the instructor and asked for other measures of outcome.

Data Reduction

Since prior research on instructor effectiveness showed indicated approximately four underlying factors in instructor behavior and since it was desired to reduce the many measures to a more interperatable number, each major group of variables was submitted to principal components factor analysis and a varimax rotation of the factors. Three separate analyses were performed because it was felt that there were three separate domains of interest, Outcome, Faculty Controlled Items and Items Not Under Faculty Control.

The outcome measure resulted in one factor with an eigenvalue greater than one, explaining 55.2% of the variance in the measure. The factor loadings are shown in Exhibit A.

The instructor behavior set of items resulted in four factors with eigenvalues greater than one. The factor loadings are presented as Exhibit B, along with a tentative label for each axis. Three of the factors seem to relate directly to the expected factors of SKILL, RAPPORT and OVERLOAD, with the final factor tenatively related to the ORGANIZATION factor (Qualitative vs. Quantitative) found in prior studies.

The domain of items not under the control of the instructor showed four factors also. They are shown as Exhibit C. They summarize some intuitively acceptable features of the student populations. Students seem to vary in the amount that they like the instructor, in the amount of motivation that they have and in the prior ability they bring to a given class. Finally they vary in the amount of choice they have in taking a given course, with fewer choices available in their senior year.

Use of these factors allows the dimensionality of the relationship between descriptive variables and final outcome to be reduced from the original 32 variables to the final 9 factor scores. The factor scores are convenient for describing the learning experience for two reasons 1) Each score summarizes several variables efficiently and 2) the factor scores are uncorrelated with each other, making interpretation more reliable.

Actually, only the four factor scores in each separate domain, instructor determined and non-instructor determined variables, have zero correlation. As we will see, there appear to be useful relationships between elements of the two domains.

The correlations between these nine elements are shown in Exhibit D.

Path Analysis of Results

Path analysis is "concerned with linear, additive, asymetric relationships among a set of variables which are conceived as being measurable on an interval scale" (Duncan, 1966, Van de Geer, 1971). Path analysis implies a causal relationship between the variables and allows the assessment of the relative importance of the variables in such a structure. It uses the technique of least-squares regression analysis to specify coefficients.

The instructor evaluation variables are suited to analysis by this technique. The factor scores may be considered to be interval scaled data and we certainly hypothesize that instructor behavior and other factors present in the teaching situation interact in some causal way with educational outcome.

The final model is shown as Exhibit E.

The E_n variables are uncorrelated, exogenous effect variables required to balance the model. That is, when the postulated variables fail to explain all of the variance in a subsequent variable, an uncorrelated hypothetical exogenous variable is introduced. If the variance can't be explained by the observed variables, we assume an unobserved variable to explain it.

The factors labeled SKILL, RAPPORT, OVERLOAD and ORGANIZATION (instructor controlled factors) all have an effect on the outcome factor directly that ranges from a path coefficient (analagous to a regression beta-weight) of .446 down to a path coefficient of .066. The factors that are under student control, LIKING, MOTIVATION, SUBJECT MASTERY and LACK OF OPTIONS have direct effect resulting in path coefficients ranging from .302 down to .044. The negative coefficient (-.126) between SUBJECT MASTERY and OUTCOME indicates that more positive outcomes are associated with subjects that are initially unfamiliar.

The model also shows some interactions between the two sets of variables. Overload, associated with heavy work-loads, has a positive effect on MOTIVATION. Instructor SKILL and RAPPORT both impact strongly on LIKING. That is, although LIKING and MOTIVATION are under the control of the student, the instructor can exhibit behavior that seems to increase the liklihood of these factors. This is encouraging.

Conclusions

Are student evaluations valid? This study allows a qualified "yes" to that question. Student perceptions of their learning outcome are usefully related to measures of teaching skill and rapport building activities by the instructor. From a marketing viewpoint, this is a significant finding. The student represents an important target market of the educational process and he or she should be satisfied by the process as it is happening. Whether, in addition to satisfaction, learning is happening and whether the long term goals of other key target markets (employers, society) are being met cannot be determined from the data at hand and have not been subjects of much study. They deserve further consideration.

References

Center for Research on Learning and Teaching. "Student Evaluation of Teaching. Criteria for the Evaluation, Support and Recognition of College Teachers. Number 2" National Project III, The University of Michigan, Ann Arbor, Michigan. 1976

Crooks, Terence J., and Michael T. Kane. "The Generalizibility of Student Ratings of Instructors: Item Specificity and Section Effects." Research in Higher Education 15B (1981) p. 305-13.

Doyle, Kenneth O., Jr. and Leslie I. Crichton. "Student, Peer, and Self Evaluations of College Instructors." Journal of Educational Psychology. (70) (October 1978) pp. 815-26.

Duncan, Otis D. "Path Analysis: Sociological Examples" The American Journal of Sociology Vol. 72, No. 1 (July 1966) pp. 1-16.

Gillmore, Gerald M. "How Large is the Course Effect? A Note on Romeny's Course Effect vs. Teacher Effect on Students Rating of Teacher Competence." Research in Higher Education. (7) 1977. pp. 187-9.

Hofman, John E. and Liya Kremer. "Course Evaluation and Attitude Toward College Teaching." Higher Education Vol. 12, No. 6, (Dec. 1983) p. 681-90.

Marg, Elwin. "How to Sacrifice Academic Quality." Improving College and University Teaching. 27 (Spring 1979) p. 54-56.

McKeachie, et. al. Research on the Characteristics of Effective College Teaching. The University of Michigan, Ann Arbor, 1964 (ED002948).

Rodin, Miriam, and Burton Rodin. "Student Evaluation of Teachers." Science; 177 (September 1972) pp. 1164-1166.

Scott, Owen. "The Effect of Item Content on Students' Global Appraisals of College Instructions." Paper presented at the annual meeting of the Eastern Educational Research Association, Philadelphia, PA (March 1981).

Van de Geer, John P. Introduction to Multivariate Analysis for the Social Science. San Francisco: W.H. Freeman and Company, 1971.

EXHIBIT A
OUTCOME FACTOR ANALYSIS

INITIAL STATISTICS:

FACTOR	EIGENVALUE	PCT OF VAR
1	3.86668	55.2
2	.79792	11.4
3	.68628	9.8
4	.54736	7.8
5	.48454	6.9
6	.36231	5.2
7	.25492	3.6

FACTOR MATRIX:

	FACTOR 1
M3	.85665
M1	.80870
M2	.79321
B7	.72012
B2	.68864
B1	.66960
D7	.63913

FINAL STATISTICS:

FACTOR	EIGENVALUE	PCT OF VAR
1	.386668	55.2

VARIABLE	COMMUNALITY	*
M1	.6540	*
M2	.6291	*
M3	.7338	*
B1	.44837	
B2	.47422	
B7	.51858	
D7	.40849	

VARIABLES USED

M1	'HOW MUCH LEARNED'
M2	'HOW RATE TEACHING'
M3	'HOW RATE COURSE'
B1	'READ MORE EFFECTIVELY'
B2	'CAN USE CONCEPTS'
B3	'KNOW SUBJECT WELL'
B4	'WELL PREPARED'
B5	'PRESENTED CLEARLY'
B6	'GAVE GOOD EXAMPLES'
B7	'STIMULATED THINKING'
B8	'ENCOURAGED QUESTIONS'
B9	'RESPECTS STUDENTS'
B10	'PROVIDED HELP'
B11	'WAS ACCESSABLE'
B12	'STATED OBJECTIVES'
B13	'RELEVANT ASSIGNMENTS'
B14	'EXAMS ACCURATELY ASSESSED'
B15	'GRADING WAS OBJECTIVE'
D3	'REQUIRED
D4	'CLASS YEAR'
D6	'PRIOR ABILITY'
D7	'BENEFICIAL'
D8	'WORK OUT OF CLASS'
D9	'WORK REQUIRED'
D10	'HOW DIFFICULT'
D11	'INSTRUCTOR FAIR'
D12	'HOW GRADE'
D13	'LIKE INSTRUCTOR'
D14	'LIKE STYLE OF TEACHING'
D15	'LIKE SUBJECT MATTER'
D16	'PERSONAL MOTIVATION'
D17	'PREFER QUANT/QUAL'
D18	'WAS QUANT/QUAL'
D19	'UTILIZE OPPORTUNITIES'

EXHIBIT B
INSTRUCTOR BEHAVIOR FACTOR ANALYSIS

INITIAL STATISTICS:

FACTOR	EIGENVALUE	PCT OF VAR
1	5.53808	34.6
2	1.61740	10.1
3	1.27464	8.0
4	1.00491	6.3
5	.88686	5.5
6	.78945	4.9
7	.70206	4.4
8	.62466	3.9
9	.57696	3.6
10	.52742	3.3
11	.48162	3.0
12	.46136	2.9
13	.44426	2.8
14	.39938	2.5
15	.35164	2.2
16	.31930	2.0

FINAL STATISTICS:

FACTOR	EIGENVALUE	PCT OF VAR
1	5.53808	34.6
2	1.61740	10.1
3	1.27464	8.0
4	1.00491	6.3

VARIABLE	COMMUNALITY	*
B3	.50896	*
B4	.56776	*
B5	.66318	*
B6	.58674	*
B12	.50672	*
B13	.54680	*
B14	.62502	*
B15	.60689	*
B8	.53149	*
B9	.59504	*
B10	.72104	*
B11	.63368	*
D11	.36795	*
D9	.70793	*
D10	.75730	*
D18	.50853	*

ROTATED FACTOR MATRIX:

	FACTOR 1	FACTOR 2	FACTOR 3	FACTOR 4
B5	.72423	.35235		
B4	.71762			
B6	.69158		.31642	
B3	.68595			
B12	.63648			
B13	.59423			.41165
B11		.76862		
B10		.76632		
B9		.34957	.66770	
B8	.37283			
D11		.43156		.35317
D10			.86994	
D9			.83886	
D18			.66341	
B15	.37881		.35913	.56484
B14	.51058			.54138

EXHIBIT C
NON-INSTRUCTOR DETERMINED FACTOR ANALYSIS

INITIAL STATISTICS:

FACTOR	EIGENVALUE	PCT OF VAR
1	1.92022	21.3
2	1.39903	15.5
3	1.16144	12.9
4	1.15237	12.8
5	.83755	9.3
6	.76530	8.5
7	.68301	7.6
8	.64931	7.2
9	.43176	4.8

FINAL STATISTICS:

FACTOR	EIGENVALUE	PCT OF VAR	CUM PCT
1	1.92022	21.3	21.3
2	1.39903	15.5	36.9
3	1.16144	12.9	49.8
4	1.15237	12.8	62.6

VARIABLE	COMMUNALITY	*
D13	.73830	*
D14	.74812	*
D6	.65628	*
D15	.55209	*
D8	.57472	*
D16	.55995	*
D19	.54112	*
D3	.60991	*
D4	.65258	*

ROTATED FACTOR MATRIX:

	FACTOR 1	FACTOR 2	FACTOR 3	FACTOR 4
D14	.86255			
D13	.85878			
D16		.72372		
D8		.71488		
D19		.60840	-0.30449	
D6			.77887	
D15	-0.31078		.61696	
D4				.74488
D3				.73448

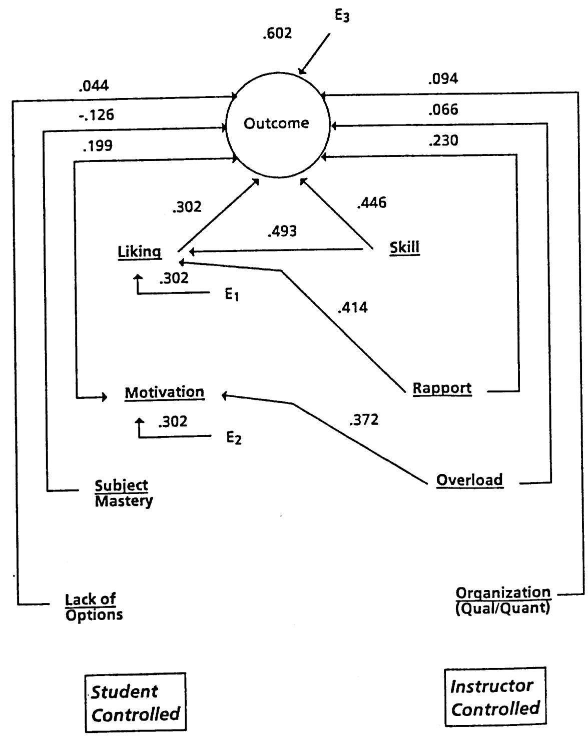


EXHIBIT E

PATH MODEL

EXHIBIT D

CORRELATIONS BETWEEN 9 FACTORS

	OUTCOME	LIKING	MOTIVATION	SUBJECT MASTERY	LACK OF OPTIONS	SKILL	RAPPORT	OVERLOAD	ORGANIZATION (QUAL/QUANT)
OUTCOME	1.0								
LIKING	.6237	1.0							
MOTIVATION	.2765	*	1.0						
SUBJECT MASTERY	-.1142	*	*	1.0					
LACK OF OPTIONS	.0563	*	*	*	1.0				
SKILL	.6234	.4930	.1155	-0.0355	.0287	1.0			
RAPPORT	.3489	.4144	-.0135	.0281	.0082	*	1.0		
OVERLOAD	.0949	.3719	.1855	.1043	.0000	*	*	1.0	
ORGANIZATION (QUAL/QUANT)	.1278	.1344	.0472	.0928	-.1007	*	*	*	1.0

* Because factor scores were used, these elements all equal zero.

MARKETING PRINCIPLES: STUDENT ATTAINMENT AND INSTRUCTOR PERFORMANCE

Edward J. O'Brien, Southwest State University

Abstract

The attitudes and viewpoints of professors teaching Marketing Principles are set forth and compared with those of students prior to and following study in the introductory course. Instructors of Marketing Principles appear to have relatively little impact on attitudes and views held by students completing course work. A performance grid is presented for the matching of professors to classes in an application of Fiedler's Contingency Model for Leadership Effectiveness. Suggestions are also offered for improvements in the formating of the Marketing Principles course.

Introduction

Increasing public and institutional attention to faculty accountability and evaluation are demonstrating that the answer to what constitutes effective teaching is most elusive. During twenty plus years of teaching, administrative evaluations, peer evaluations, student evaluations and self-evaluations have produced some pain, a little pride, and precious little information on how well I'm "doing." Visits with former students who have experienced success produce good feelings --which diminish as one reflects on the many others who have worked with the individual and the hundreds of former students with ordinary careers. Most professors informally, perhaps subconsciously evaluate each class session. We come away with a good feeling: the hour has gone well, students were interested, responsive, analytical, and pushed us to the boundaries of our knowledge of the topic. Or there is a vague feeling of discontent. A presentation has been made but there was no ignition of collective intellectual effort and achievement. We resolve to work more intently during the next session and remind ourselves of the normality of peaks and valleys in human performance. But student and professor satisfactions or dissatisfactions are not necessarily evidence of effective teaching. Given the difficulties of measuring individual teaching performance, perhaps one must evaluate effectiveness at the macro level. Are professors of business successful in imparting knowledge and attitudes to their students?

Instructor Goals and Objectives

A recent study investigated the development of student attitudes and knowledge during study in the collegiate Principles of Marketing course and also during the first two years of university business studies (O'Brien 1980). Instructors in the Principles of Marketing course appeared to play a minor role in student acquisition of knowledge and attitude formation. The study suggested the necessity of assessing the views held by marketing instructors in order to make assumptions about instructor course goals and objectives. Marketing eductors may have course knowledge and attitude objectives which differ from those assumed to be common by the researcher. If this is the case, findings from the above cited research are limited in scope and inconclusive. Topics and content common to many of the Principles of Marketing texts in current use suggested a list of knowledge and attitudinal objectives which would likely be endorsed by most instructors. The list provided the basis for development of a questionnaire and attitude scales designed to assess the degree to which instructors accepted the text objectives for the Principles course. A very similar instrument had been used earlier to assess student attitudes and knowledge prior to and following study in Principles of Marketing.

The questionnaire and attitude scales used with student respondents in the previous research were sent to professors in a nationwide sample of 147 colleges and universities drawn from the American Marketing Association's membership roster of universities, colleges and schools. Sets of questionnaires were addressed to Chairperson, Department of Marketing, with a cover letter requesting that the instrument be provided to all professors who teach at least one section of Marketing Principles each academic year. A cover letter directed to the Marketing professor was attached to each questionnaire. Returns from 109 Marketing educators represented 72 institutions. The institutional return rate was 49 percent. Lack of data on the number of Marketing faculty meeting the above qualification prohibited calculation of a return percentage for individuals. No follow-up was conducted since anonymity of views was insured through absence of identification and coding. Analysis of returns via return envelope letterheads indicated no observable difference between respondents and nonrespondents regarding factors such as size, geographic location, or the public/private status of the institution. Seventy-three percent of the respondents were employed in academic units accredited by the American Association of Collegiate Schools of Business.

Results should be examined with cognizance of the difficulty of controlling for confounding variables, semantic difficulties in wording questions and attitude scales, and the variations in the interpretation of instructions which occur when a research instrument is administered to several hundred respondents at a number of locations by different researchers. The writer also does not intend to imply that professors should be indoctrinary in their teaching.

Instructor Response

Delivery of Standard of Living

The first question asked respondents to indicate whether Central planners in Government, Government Agencies, or Marketing and the Market System deliver the goods and services which constitute our standard of living in the United States.

TABLE I
DELIVERY OF STANDARD OF LIVING

	Students at Begin. of Principles of Marketing Course	Students at conclusion of Principles of Marketing Course	Marketing Professors	$\overline{Z}$ score of Mktg. Prof. vs. student beginning Prin. of Marketing	Mktg. Prof. vs. students completing Prin. of Marketing
Central Planners in Government	0%	2%	0%		
Government Agencies	4	3	2		
Marketing & The Market System	96	94	100	2.076	2.520

TABLE II
PRIMARY BUSINESS FUNCTIONS

	Students at Beginning of Principles of Marketing Course	Students at Conclusion of Principles of Marketing Course	Marketing Professors	$\overline{Z}$ Score of Marketing Professors Compared to Students Beginning Prin. of Mktg. Course	$\overline{Z}$ Score of Marketing Professors Compared to Students Completing Prin. of Mktg. Course
Accounting	40%	36%	10%	-5.027	-4.870
Data Processing Information Systems	10	13	6	-	-
Finance	34	32	61	3.871	4.878
Insurance	1	-	-	-	-8.625
Law	11	10	-	-3.504	-3.382
Management	70	62	40	-4.317	-3.637
Marketing	75	79	97	4.763	4.367
Personnel Management	2	4	1	-	-
Production	49	46	69	2.999	3.844
Real Estate	-	-	-	-	-
Research	10	16	10	-	-

The percentage of subjects checking each response is presented in Table I.

Figures are rounded to the nearest full percent. The percentages may total more or less than 100 percent due to multiple responses, write ins, and the rounding of percentages. The statistical text $\overline{Z}$ determines the significance of a difference between proportions. A $\overline{Z}$ of $\pm$ 1.96 indicates a difference significant at the .05 level. A negative $\overline{Z}$ score indicates that the proportion of marketing professors selecting the item was significantly less than the student group, while a positive $\overline{Z}$ score indicates a significantly larger proportion of marketing professors selected the item. Only significant $\overline{Z}$ scores are listed.

A significantly higher proportion of marketing professors indicated that the U.S. standard of living is delivered via the market system than students who have completed Principles of Marketing and those who have not taken the course. A majority of people in all three groups hold this view.

Primary Business Functions

The second item on the questionnaire asked respondents to select the three primary business functions from a list of eleven. A majority of professors selected marketing, production, and finance as the primary business functions. Students favored marketing, management, and production with accounting a close fourth most selected function. Thirty-nine percent of the marketing professors selected the combination of marketing, production, and finance while only a handful of students in each group chose that combination. Significant differences existed between professors and both student groups on most functions. See Table II.

If one accepts the view that finance, production, and marketing are the primary or most basic business functions, experience in the principles of marketing course does not appear to have much impact on the primacy students attach to marketing and other business functions.

Utilities of Marketing

Views on the utilities created by marketing were investigated via a question which asked respondents to indicate the utilities they associated with marketing. The responses on form utility must be set aside since the wording of the question led some respondents to answer in direct absolute terms while others answered in terms of indirect contributions to form utility via the involvement of marketing personnel in product planning and design.

While professors and students beginning study in principles of marketing have very similar views concerning the information utility created by marketing, study in the course produces an unexpected reduction in the percentage of students associating this utility with marketing at the conclusion of the course. The marketing principles course does increase student awareness of the place, time, and possession utilities provided by marketing. While significant differences exist between students and professors at both the start and conclusion of marketing principles, students move appreciably closer to the views held by professors. Results are presented in Table III.

TABLE III
UTILITIES OF MARKETING

	Students at Beginning of Principles of Marketing Course	Students at Conclusion of Principles of Marketing Course	Marketing Professors	$\bar{Z}$ Score of Marketing Profs Compared to Students Beginning Principles of Marketing	$\bar{Z}$ Score of Marketing Profs Compared to Students Completing Principles of Marketing
Form utility	34%	45%	50%	2.426	-
Information utility	60	47	61	-	2.270
Place utility	56	76	99	7.751	5.297
Possession utility	25	53	95	10.326	7.529
Time utility	50	72	95	7.533	4.970
None of the above	3	2	-	-	-

TABLE IV
MOST BUSINESS TRULY APPLY THE MARKETING CONCEPT ORIENTING ALL ACTIVITIES TO THE ULTIMATE OBJECTIVE OF SATISFYING CONSUMER DESIRES.

	Students at Beginning of Principles of Marketing Course	Students at Conclusion of Principles of Marketing Course	Marketing Professors	$\bar{Z}$ Score of Marketing Profs Compared to Students Beginning Principles of Mktg Course	$\bar{Z}$ Score of Marketing Profs Compared to Students Completing Principles of Mktg Course
Strongly agree	2%	5%	3%	-	-
Agree	57	65	23	-5.109	-7.222
Uncertain	18	18	13	-	-
Disagree	22	12	57	5.130	8.669
Strongly disagree	-	1	7	2.803	3.146

Adoption of Marketing Concept

A five position attitude scale was used to secure responses to the statement "Most business truly apply the marketing concept orienting all activities to the ultimate objective of satisfying consumer desires." Both student groups are much more accepting of the statement than are marketing professors with the professors significantly lower in the "agree" responses and significantly higher in "disagree" and "strongly disagree" responses. With professors holding such views, it is curious to note that study in Principles of Marketing produces somewhat more agreement and much less disagreement with the statement. Results are presented in Table IV. Professors may be more positive in class than in expressing personal views. An examination of principles texts indicates that authors present conservative views of the extent to which firms have adopted the marketing concept and thoroughly discuss problems associated with the concept. Perhaps it is the idealism of the young which accounts for this change in attitudes during marketing studies.

MARKETING OF INNOVATIONS

Professors are significantly stronger in their view that marketing efforts are needed to secure adoption of a superior innovation than are the two student groups. An attitude scale ranging from strongly agree to strongly disagree was used with the statement "When a new product is useful or superior to existing products, consumer demand develops naturally without marketing efforts as rapidly as people become aware of the new or improved product." Marketing studies do not bring student views closer to those of their professors. Rather, students appear to move closer to the view that a superior innovation will sell itself. Student views may stem from frequent personal experiences with trying new items on the advice or recommendations of friends, but this fails to explain the unexpected shift of opinion during marketing studies. Results are presented in Table V.

Marketing's Impact on Employment

Marketing's contribution to society via provision of employment was researched with a question asking respondents to check the areas listed with results in Table VI. A great many multiple responses were received on this question even though the second and third items encompass the previous item(s). While professors are significantly above the student groups in viewing marketing as contributing to employment throughout society, no real change in student attitudes occurs during study in marketing principles.

Societal Contributions

To elicit a composite view of marketing from respondents, a question asked if marketing in general was: "An unavoidable necessity which increases demand so that excess production is taken off the market enabling firms to realize expanding sales and profit goals"; "Useful in creating some utilities"; And "A force in society which goes beyond the basic delivery of our goods and services to improve the quantity and quality of our standard of living." Professors, to a significant extent, see marketing as a more influential force for location in society than does either group of students. A majority of both student groups share this positive view, while sizable minorities (14-20%) hold rather negative outlooks. Study in Principles of Marketing does

TABLE V

WHEN A NEW PRODUCT IS USEFUL OR SUPERIOR TO EXISTING PRODUCTS, CONSUMER DEMAND DEVELOPS NATURALLY WITHOUT MARKETING EFFORTS AS RAPIDLY AS PEOPLE BECOME AWARE OF THE NEW OR IMPROVED PRODUCT.

	Students at Beginning of Principles of Marketing course	Students at Conclusion of Principles of Marketing Course	Marketing Professors	$\bar{Z}$ Score of Mktg. Profs. Compared to Students Beginning Principles of Mktg Course	$\bar{Z}$ Score of Mktg. Profs. Compared to Students Completing Principles of Mktg Course
Strongly agree	5%	4%	0%	-2.327	-2.045
Agree	24	33	6	-3.886	-5.451
Uncertain	5	18	6	-	-3.122
Disagree	58	39	56	-	2.935
Strongly disagree	8	6	35	4.783	6.710

TABLE VI

MARKETING'S IMPACT ON EMPLOYMENT

	Students at Beginning of Principles of Marketing Course	Students at Conclusion of Principles of Marketing Course	Marketing Professors	$\bar{Z}$ Score of Profs Compared to Students Beginning Principles of Mktg Course	$\bar{Z}$ Score of Profs Compared to Students Completing Principles of Marketing Course
Marketing careers only	48%	47%	0%	-8.212	-8.589
Marketing plus other business careers	50	50	3	-7.926	-8.539
All areas of employment	86	79	99	3.596	4.959

TABLE VII

SOCIETAL CONTRIBUTIONS

	Students at Beginning of Principles of Marketing Course	Students at Conclusion of Principles of Marketing Course	Marketing Professors	$\bar{Z}$ Score of Mktg. Profs. Compared to Students Beginning Principles of Mktg Course	$\bar{Z}$ Score of Mktg. Profs. Compared to Students Completing Principles of Mktg Course
An unavoidable necessity which increases demand so that excess production is taken off the market enabliing firms to realize expanding sales and profit goals	14%	20%	0%	-3.983	-4.959
Useful in creating some utilities	4	8	5	-	-
A force in society which goes beyond the basic delivery of our goods and services to improve the quantity and quality of our standard of living	75	67	95	4.253	5.727

not bring students into closer alignment with the views of professors. Results are presented in Table VII.

Discussion

The findings of the research indicate that there are significant differences in the knowledge and attitudes of marketing professors and students. Earlier research and this study both indicate that little development of knowledge or attitudes in the nine areas investigated occur during study in the Principles of Marketing course. Marketing educators were found to hold the views and attitudes targeted by this researcher to a remarkable degree. Lack of student educational attainment in Principles of Marketing cannot be attributed to confusion of concepts and attitudes espoused by professors.

Not being able to measure individual performance with accuracy or confidence and with macro performance not at impressive levels, we must consider new conceptualizations of the student attainment, faculty performance envelope. As supply side economists focus on a portion of the economy, in measuring the teaching effectiveness of professors we have tended to examine only part of the educational entity.

A Conceptualization

Figure One presents four extreme combinations of professor/student performance. Performance varies along a continuum between the extremes. The Northwest corner (stars) is the most enjoyable and productive situation for capable, motivated professors and students. The Northeast corner (cuckoo's nest) holds a high level of frustration potential for the professor. Faculty seek escape by gravitating to upper division courses, graduate courses, and smaller classes where a high level of student effort can be extracted. Professors may seek employment with institutions applying more selective admissions standards.

The Southeast corner is a satisfactory situation for participants with low levels of ability and motivation. Taxpayers and society, as a whole, may have cause for concern regarding the cost and productivity of the flock. Professors and students with the characteristics of this quadrant may move (voluntarily or involuntarily) from institution to institution until a "match" is found.

FIGURE 1
PERFORMANCE GRID

		Student Effort & Ability: High	Med.*	Low
Professor's Effort and Ability	High	STARS		CUCKOO'S NEST
	Med.*		TYPICAL	
	Low	DONKEY		TURKEYS

* Mid levels of effort and ability or high on one and low on the other.

The Southwest corner frustrates students to the extreme that student evaluations produce scathing results and student comments lead droves of students to avoid the courses and sections taught by these professors. The unlabeled sectors constitute compromise situations which are probably acceptable to most professors and students.

Proposals

Department chairpeople and deans in planning course schedules might experiment with Fiedler's contingency model for leadership effectiveness (1976). Fiedler believes that the effectiveness of a group depends on the interaction between the leader's personality and the situation. A Least Preferred Coworker (LPC) scale is administered to determine if a professor is task motivated or relationship motivated. For optimum levels of performance, relationship motivated professors should be assigned to classes with moderately favorable conditions (professor-student relations, task structure, and leadership position power), while task motivated professors should be assigned to situations that are favorable or unfavorable. In determining faculty/course assignments, faculty and administrators, at this point in time, would have to make unverified assumptions about the three elements which determine the favorableness of the situation. It would seem that there is face validity in assuming that elective courses would have better professor-student relations than required courses and that small classes would permit better relationships than large classes. Task structure would seem to be greater in quantitative courses such as marketing research and business statistics than in principles courses and these higher than seminars. Leadership position power should be relatively high in elective and graduate courses. Rather than training oneself or altering performance to suit the position, Fiedler recommends that one be matched to a position where there is an optimum prospect of success. While sidestepping performance evaluation, the approach theoretically results in maximum levels of performance.

Course Format

The last two to three decades have brought a tremendous growth in marketing information as well as an explosion of general knowledge. There has been accumulation and maturing of knowledge pertaining to marketing practices, classification systems, and theory, and similar growth in support data from the behavior and quantitative sciences. Authors of marketing texts have extracted materials to permit better coverage of essential information and a few have brought out shorter and longer versions for quarter and semester length courses.

The time has come to experiment with alternative course formats. A four semester credit/five quarter credit Principles course might be tried, but given concern for attitude formation and knowledge accumulation, a two course sequence would be preferable. A number of two course subject matter dichotomies might be utilized. Some possibilities include: macro marketing and micro marketing, or any of several distinct breakdowns of subject matter (e.g. product planning/pricing and promotion/distribution). With additional time to examine and consider information and a longer period of time to assimilate and organize acquired knowledge, business students will gain a better understanding of marketing and its role in the firm and society and greater proficiency in the management of marketing for the benefit of consumers, citizens, and business enterprise.

References

Fiedler, F., M.M. Chemers, and L. Mahar, Improving Leadership Effectiveness: The Leader Match Concept (New York: John Wiley & Sons, 1976).

O'Brien, E.J. "Marketers As Noodlers," Journal of the Academy of Marketing Science, 1980 (Summer), 293-301.

FACTORS AFFECTING THE ACADEMIC ACHIEVEMENT OF MARKETING STUDENTS

Daniel J. Brown, Oregon State University
William G. Browne Oregon State University
Beverly A. Browne Oregon State University

Abstract

A study of a graduating class of seniors in marketing examined factors associated with successful academic achievement using, first, a required comprehensive examination, and second, overall GPA. A number of potential variables were investigated for their relevance to achievement. grade-related, school-related, comprehensive examination-related, work-related, extra curricular-related, and demographic. Many did not seem to be associated. Overall, academic aptitude and past academic performance seemed to be the most important predictors of achievement.

Introduction

Marketing educators may speculate as to the personality, background, motivation, intelligence, etc. needed to be a successful marketing student. The study reported below attempted to evaluate some of the variables that educators have proposed as factors leading to success or failure in marketing classes and in the marketing curriculum.

For college students in general, it has been estimated that 25 to 35 percent of achievement can be explained on the basis of aptitude (Kirkland and Hollandsworth 1979). The remainder of the variation in achievement, then, depends upon other factors. For example, part-time employment, over 15 hours per week (Ma and Wooster 1979; Hammes and Haller 1983), seems to have an adverse effect on performance. As another example, test anxiety sometimes has been shown to decrease performance (Culler and Holahan 1980; Kirkland and Hollandsworth 1979, Klines 1984). For a College of Business with many more female marketing students today than 10 years ago, a titillating question is "how well do women perform compared to the men?"

The data in this study represent a census of all students graduating with a marketing concentration in 1983 from the College of Business. The data were used to generate a profile of the marketing student in terms of overall academic performance, college backgrounds, anxiety from and study time related to examinations, employment, involvement in other extra curricular activities, and general demographics. The profile information was related to two measures of academic performance, the student's score on a final comprehensive examination and overall GPA, in an attempt to identify factors associated with these variables.

Background

During the spring of 1978, the instructors of the capstone undergraduate marketing course installed a requirement for all students concentrating in marketing. The students had to pass a standardized comprehensive examination as a necessary but not sufficient condition to pass the course and to graduate in marketing. The final grade was based on readings and projects (in addition to this basic requirement). The exam was first given early in the term to all sections of the class. Students (10%) who did not pass the examination were welcome to take the exam (the same exam) until they passed it. This requirement and the administration of the comprehensive remained the same until 1982, when the examination was reformulated, and the requirement of passing the exam was dropped. Administration of the retakes was too time consuming, both for the students and faculty. For instance, one of the students from the 1980 class had to retake the examination eleven times before passing.

In 1983, the marketing faculty agreed to continue the comprehensive examination requirement. The authors were speculating on the factors that lead to success on the examination and wanted to obtain a profile of the students' background and their success on the exam. The authors listed factors that might relate to an individual's examination score. In TABLE 1, these factors are listed in six categories

Methodology

A questionnaire was developed to obtain background data on the students taking the examination. There data were combined with student records to obtain a profile of the marketing students' background and career intentions. Six background areas were covered in the questionnaire -- grade-related, school-related topics, comprehensive examination-related topics, work-related topics, extra curricular activities, and demographic profiles. Collegiate course grades, and GPA topics, high school GPA, junior college transfer status, and SAT information was obtained from the students' files.

A comprehensive examination was developed from test banks of marketing principles and marketing management books not used in any of the marketing courses within the college. Questions covered every major topic listed in the table of contents of the principles books and on the course outlines for the various sections of the course. The proposed exam was reviewed by members of marketing faculty, and small adjustments were made to accommodate their suggestions.

Early in the spring quarter of 1983 the comprehensive examination was given during the first hour of a two hour class and the questionnaire was administered during the second half of the class. A few of the students who missed the scheduled examination were given the examination and questionnaire at a later date. The questionnaire response data, student record information and the examination score representing 31 variables were punched onto computer cards for each student.

TABLE 1
FACTORS EXPECTED TO AFFECT PERFORMANCE ON MARKETING COMPREHENSIVE EXAMINATION

	DESCRIPTION
GRADE-RELATED	University GPA Individual Course Grades (four courses) High School GPA SAT Scores (VSAT & MSAT) Scholastic Scholarship Expectations on Standardized Exams Test Score
SCHOOL-RELATED	Time in College (years) Number of Marketing Classes Weekly Time Spent Studying (hours) Minor Transfer Student Attitude About College of Business Graduate School Intentions Years in Business School Expected Graduation Date Years in Business Courses
COMPRESHENSIVE EXAMINATION RELATED	Exam Study Time (hours) Examination Anxiety Exam Score
WORK RELATED	Selected Job Already Weekly Hours Worked During School Expenses Earned During School Membership in Marketing Club
EXTRA CURRICULAR	Elected Offices Committee Assignments Hours Devoted to Extra Curricular Seeking Career in State
DEMOGRAPHICS	Type of Residence Gender Greek Affiliation

The 8.3 version of the Statistical Package for the Social Sciences (SPSS) was used to generate statistical data concerning the relationships between the variables. Two measures of achievement were studied. The examination score was first used as the dependent variable, and then grade point average (GPA) was used as a dependent variable in second single stage regression study. The results are presented below.

Results and Discussion

Individual examination scores for the 166 students taking the examination ranged from 56 to 99. The average score on the 56 question examination was 82.5. In TABLE 2 the results of single step regression analyses are displayed concerning each variable in regard to comprehensive examination score as the dependent variable. The same analysis was completed for the students' GPA, using examination score and other variables as independent variables. TABLE 4 displays the variables that have a significant association at the .10 level with the examination score and university GPA.

Comprehensive Score Factors

The following variables were associated with comprehensive examination score: GPA, Statistics grade, Marketing Principles grade, Marketing Management grade, Economics grade, VSAT score, MSAT score, personal expectations in regard to standardized (objective) exams, minor, years in the business school, years in business courses, and expected graduation date (See TABLE 2). There is probably substantial auto-correlation among many of these variables. For instance, all of the grade-related variables have significant associations with one another.

Three of the four of the school-related variables dealt with actual and expected longevity in the College of Business. It would appear that the students who had been in the College longer and who had taken business courses for a longer time duration did better on the comprehensive examination. This would imply that transfer students from community colleges, students changing university majors into business, and students taking the course early in the sequence did not do as well. There is also significance between the score and expected graduation date with those nearer to graduation having the higher examination scores. The fourth school-related variable associated with examination scores is the student's required minor. Those with the more rigorous minors (computer science, forestry, etc.) were associated with higher examination scores.

Of the variables having little association with the examination scores, a few should be mentioned. Time spent at the university (not to be confused with time spent in business courses or the college of business) had no significance, meaning that students who had stretched out their educations beyond the normal four years and part-time students did not have a more difficult time with the examination. The number of marketing courses taken did not affect the examination results. Since all of the students had completed the required principles and management courses it can be concluded that the examination was fairly representative of these basic courses and not the electives of which the student could have taken any number.

TABLE 2
RESULTS OF A SINGLE STEP MULTIPLE REGRESSION ANALYSIS USING EXAM SCORE AS THE DEPENDENT VARIABLE

Variable	n	$\bar{X}$	r^2
GRADE RELATED			
University GPA	162	2.80	.156[1]
Individual Course Grades			
Statistics	145	2.60	.037[3]
Marketing Principles	162	2.74	.098[1]
Marketing Management	146	2.55	.177[1]
Economics	150	2.50	.070[2]
High School GPA	111	3.34	.009
SAT Scores			
VSAT	88	42.90	.219[1]
MSAT	88	48.33	.139[1]
Scholastic Scholarship	166	16%	.010
Expectations on Standardized Exams	162	3.00	.111[1]
SCHOOL RELATED			
Time at OSU	165	3.60	.019
Number of Marketing Classes	165	4.48	.017
Weekly Time Spent Studying	162	25	.019
Minor	146		.051[2]
Transfer Student	166	36%	.022
Attitude to College of Business	161	2.50	.005
Graduate School Intention	161	69%	.015
Years in Business School	166	3.00	.059[2]
Expected Graduation Date	165	1 term	.037[3]
Years in Business Courses	166	3.30	.037[3]
COMPREHENSIVE EXAM RELATED			
Exam Study Time (hours)	166	4.00	.014
Examination Anxiety	166	low	.013
WORK RELATED			
Selected Job Already	166	28%	.004
Weekly Work Hours During School	166	6.70	.005
Expenses Earned During School	166	45%	.001
Seeking Career in State	166	38%	.002
EXTRA CURRICULAR			
Elected Office	166	14%	.017
Committee Assignments	166		.000
Hours Devoted to Extra Curricular	166	2.40	.007
DEMOGRAPHICS			
Gender	166	53%F	.002
Greek Affiliation	166	48%	.034

[1]Significant beyond the .01 level
[2]Significant beyond the .05 level
[3]Significant beyond the .10 level

The variables in the remaining groups (Comprehensive Examination-Related, Work-Related, Extra Curricular-Related, and Demographic) had little association relative to examination results. Examination study time, for example, had little relevance, meaning that the students who had internalized the prerequisite course material did well on the examination with minimal preparation. "Hours the student worked during the school week" and the "portion of total college expenses earned" had no meaningful association with examination performance. Having close ties with students previously taking the examination (Greek affiliation) appeared to have little association with success on the examination.

Grade-Point Achievement (GPA) Factors

Only one of the Grade-Related variables does not indicate significance relative to GPA, and that variable is having a scholastic scholarship. (See TABLE 3).

In regard to School-Related variables, evaluation of the school was a significant variable at the .10 level. This implies that the students with a more favorable evaluation of the College generally had a higher GPA and those with less favorable attitude had a lower GPA. What, in fact, was possibly measured, was a reverse causal relationship. GPA may have influenced a student's evaluation of the College. As expected, years in the Business College, years taking business courses, and expected graduation date did not have a significant association with GPA.

Of the Comprehensive Examination-Related factors, study time and comprehensive examination scores had a significant relationship (.10) in regard to GPA. The amount of study time factor probably indicates that the better overall students tended to spend time more effectively in preparation for the comprehensive examination. The exam score variable indicated that students with higher scores on the exam tended to have higher GPA's.

None of the Work-Related variables were associated with GPA. It may be inferred that the number of hours worked per school week or the portion of school expense a student earns has no association with GPA. Of course, the individuals with substantial work hours may extend their undergraduate program over a longer period.

In the extra curricular group, students who held elected offices were associated with higher GPAs, whereas the number of weekly hours devoted to extra curricular activities had little or no significance in regard to GPA.

Gender, of the demographic group of variables, was associated with GPA. In this College the women tended to have a significantly higher GPA than men. Belonging to a fraternity or sorority did not associate with higher or lower GPA's indicating that membership does not affect scholastic performance. This can be verified for the total University since the

"Greeks" have approximately the same GPA as the entire student body.

TABLE 3
RESULTS OF A SINGLE STEP MULTIPLE REGRESSION ANALYSIS USING OVERALL GPA AS THE DEPENDENT VARIABLE

Variable	n	$\bar{X}$	r^2
GRADE RELATED			
Individual Course Grades			
Statistics	145	2.60	.134[1]
Marketing Principles	162	2.74	.257[1]
Marketing Management	146	2.55	.318[1]
Economics	150	2.50	.287[1]
High School GPA	111	3.34	.259[1]
SAT Scores			
VSAT	88	42.90	.258[1]
MSAT	88	48.33	.137[1]
Scholastic Scholarship	166	16%	.009
Expectations on Standardized Exams	162	3.00	.371[1]
SCHOOL RELATED			
Time at OSU	165	3.60	.001
Number of Marketing Classes	165	4.48	.014
Weekly Time Spent Studying	162	25	.001
Minor	146		.016
Transfer Student	166	36%	.001
Attitude to College of Business	161	2.50	.052[2]
Graduate School Intention	161	69%	.028
Years in Business School	166	3.00	.004
Expected Graduation Date	165	1 term	.036
Years in Business Courses	166	3.30	.001
COMPREHENSIVE EXAM RELATED			
Exam Study Time (hours)	166	4.00	.038[3]
Examination Anxiety	166	low	.023
Exam Score	166	82.50	.156[1]
WORK RELATED			
Selected Job Already	166	28%	.193[3]
Weekly Work Hours During School	166	6.70	.000
Expenses Earned During School	166	45%	.008
Seeking Career in State	166	38%	.013
EXTRA CURRICULAR			
Elected Office	166	14%	.046[3]
Committee Assignments	166		.003
Hours Devoted to Extra Curricular	166	2.40	.003
DEMOGRAPHICS			
Gender	166	53%F	.064[2]
Greek Affiliation	166	48%	.003

[1]Significant beyond the .01 level
[2]Significant beyond the .05 level
[3]Significant beyond the .10 level

TABLE 4
SUMMARY OF SIGNIFICANT VARIABLES USING EXAM SCORE AND GPA AS THE DEPENDENT VARIABLES

	Dependent Variables	
	Exam Score	GPA
INDEPENDENT VARIABLES	GPA	Exam Score
	Statistics Grade	Statistics Grade
	Basic Marketing Grade	Basic Marketing Grade
	Marketing Management Grade	Marketing Management Grade
	Economics Grade	Economics Grade Highschool GPA
	VSAT Score	VSAT Score
	MSAT Score	MSAT Score
	Expectations on Standardized Exams	Expectations on Standardized Exams
	Minor Years in the Business School Years in Business Courses	Attitude Towards the College of Business
		Study Time for the Exam
		Elected Office
		Gender

Summary

This study examined seniors about to graduate from the College of Business with concentrations in Marketing. Their overall track records as well as one instance of examination performance were reviewed and associated with other factors.

As measures of overall aptitude, the high levels of association between SAT scores and academic performance measures should be expected. It is interesting that for these marketing students, verbal aptitude shows a stronger association than math aptitude.

Success predicts subsequent success. Students who have a history of doing well in school also achieve in marketing, while those who do poorly overall tend to do poorly in marketing. In assessing their own performance, the students seem to be realistic.

Interestingly, women in Marketing within the College of Business are achieving higher GPA's than their male counterparts. However, they did not do any better on the specific comprehensive examination.

References

Culler, Ralph E. and Charles J. Holahan (1980), "Test Anxiety and Academic Performance - The Effect of Study Related Behaviors," Journal of Educational Psychology 12 (February). 16-20.

Hammes, Judith M. and Emil J. Haller (1980), "Making Ends Meet - Some of the Consequences of Part-Time Work For College Students," Journal of College Student Personnel, 24 (November), 529-35.

Kirkland, Karl and James G. Hollandsworth (1979), "Text Anxiety, Study Skills and Academic Performance," Journal of College Student Personnel, 20 (September), 431-6.

Klines, Ivan P. (1984), "Item Arrangement, Cogwitive Entry Characteristics, Sex, and Test Anxiety as Predictors of Academic Achievement," Journal of Experimental Education 52 (Summer), 214-19.

Larson, Jeffrey H., Ray W. Alvord, and Kenneth Higbee (1982), "Problems related to Academic Performance in College Students," College Student Journal 16 (Winter), 335-42.

Ma, Li-Chen, and Robert A. Wooster (1979), "Effect of Unemployment on the College Student´s Academic Performance," College Student Journal 13 (Spring) 12-20.

SHAPING THE MARKETING DISCIPLINE:
AN ANALYSIS OF DISSERTATIONS*

Michael R. Czinkota, Georgetown University

Introduction

The value of academic activity and output has always been elusive in its measurement. Frequently, the general areas of expected performance are defined as teaching, research, and service, and contributions to each area are expected from faculty members who are good academic citizens. As far as an evaluation of the particular contribution is concerned, faculty committees and deans seek resort to proxy measures for guidance. In the field of teaching, the number of courses and students taught and the student evaluations of teachers are often used. For research, one often looks to the number of publications and the types of publication vehicles in which they appeared. For service evaluations, the number of committees on which an individual serves and the hours of time expended in the performance of service are often assessed.

In the entire process of course, one frequently experiences a feeling of inadequacy since it is not only the accumulation of numbers that is sought. What one really attempts to measure is in most instances the total contribution of an individual to a field, an institution, and to society. Ideally, one would like to know the influence and impact of an individual on his setting in order to give him or her the appropriate recognition.

As a result, we see the emerging use of even more sophisticated measures than the ones discussed above. Informal interviews are conducted with alumni asking them to assess ex post the value of their educational experience. Letters from peers are sought to obtain an outside view of an individual's research, and sometimes the numbers of citations of written works are counted--using sources such as the Social Sciences Citation Index (1). On occasion, these numbers are then comparatively ranked (2) to determine one's relative standing in the field.

While all these measures are certainly of some use, this author proposes that there is another major factor which, so far, has been insufficiently included in evaluations and which can enlighten evaluators about the influence and impact of an individual. This factor is the dissertation. Dissertations are good indicators of the contributions made to all the three areas of teaching, research, and service, but they go beyond that. Dissertations often reflect the significant impact of one particular individual--the dissertation chair--or another--the doctoral candidate--and provide for a multiplier effect of that influence through the subsequent activities of the successful former student.

It is therefore proposed that more prominence be given to the role of supervisors of dissertations in faculty evaluations. In order to further this purpose, this article reports a study of dissertations in the field of marketing and the resulting findings.

Method

An investigation was designed to determine a count of dissertations in the field of marketing, an attribution of these dissertations to the individuals chairing the dissertation committee, and the number of marketing dissertations produced in universities during the period of 1972 to 1983.

The primary source of information used for this research was the Dissertations Abstract International Index (DAI) (3). This index was used in two ways. For the time period of 1972 to 1983, all dissertations under the key word "marketing," were called. Secondly, from 1975 to 1983, all dissertations which were contained under the subject heading of marketing in the Dissertation Abstract International Index were listed. The reason for using the subject heading of marketing only after 1975 was that DAI began using this heading only then. For each dissertation, the name of the university at which the dissertation was completed and the name of the faculty chair of the dissertation committee was transcribed. In cases where more than one person chaired the dissertation, such as co-chairs, both individuals were listed with an attribution of the dissertation. In those instances in which only an individual chairperson and no university were listed, the most recent university at which this individual was active was used for university attribution of the marketing dissertation. Since the study concentrated on the field of marketing in the United States, only dissertations emanating from U.S. universities were included. All dissertations sponsored at foreign institutions listed in the DAI were excluded.

[1] Social Sciences Citation Index, Institute for Scientific Information, Philadelphia, PA. 1972 - 1983.

[2] Rugman, Allen M., Brown, Kim and Peach, Kathy, "International Business Scholarship: An Analysis of Publications and Citation Counts, 1976-1982," Dalhousie Discussion Papers in International Business, Center for International Business Studies, Dalhousie University, Halifax, Nova Scotia, Canada, September, 1983.

*Research assistance by Richard Farano is gratefully acknowledged.

[3] Dissertation Abstracts International, University Microfilms, Ann Arbor, Michigan, Vol. 32, 1972 - Vol. 44, 1983.

In the DAI index, frequently only the name of the dissertation, the name of the candidate, and the name of the dissertation chairman were mentioned without mention of the name of the sponsoring university. In these cases, the faculty handbook of the American Assembly of Collegiate Schools in Business (4) was used to obtain the university name. If the name was not found in this publication, the original dissertation was obtained from the Library of Congress in order to provide as complete a data set as possible. Similarly, on occasion, dissertation listings in the DAI index contained a listing of the university but no listing of the dissertation chair. In these instances, again, the original dissertations were obtained from the Library of Congress.

For the time period under investigation, a total number of 883 dissertations falling either under the subject heading or the key word heading of marketing were identified. In spite of detailed follow-up procedures, it was not possible to identify the university granting the doctoral degree in 14 cases. In 24 cases, it was not possible to identify the dissertation chair. This occurred because some dissertations had not been received by the Library of Congress, were checked out, lost, or were for some other reason unavailable.

Findings

Various findings emanate from this study. Table 1 provides a summary of the results. The total number of marketing dissertations identified was 883. These had been chaired by all together 458 different individuals, resulting in an average of 1.9 dissertations per person. The 43 most active dissertation chairs, comprising 9.4% of the population of dissertation chairs, sponsored 212 dissertations, thus accounting for 24% of the total dissertations. The twelve most active universities in turn accounted for almost 35% of all dissertations produced. Table 2 provides an identification of the most active marketing dissertation chairpersons in the time period from 1972 to 1983. All those individuals chaired four dissertations or more during that time as identified through the method described above. The largest number of dissertations sponsored by any one individual was nine, closely followed by two persons who sponsored eight dissertations each and one individual who sponsored seven.

The activities of the leading universities are shown in Table 3. During the period under investigation, only 12 universities produced 20 or more marketing dissertations. The clear leader in that field was Michigan State University which had a total output of 47 dissertations, followed at some distance by Northwestern and Ohio State.

[4] Faculty Personnel, American Assembly of Collegiate Schools of Business, St. Louis, Missouri, 1975.

When looking at these tables, some words of caution ought to be kept in mind. First, even though the key word "marketing" was the only method available for identifying marketing dissertations during the period of 1972 to 1975, there is some imprecision to this use. A dissertation listed under this key word category may not pertain directly to business marketing. For example, a political science dissertation can contain the word "marketing" and not be sponsored by the marketing department or business school but rather by the political science department. Similarly, dissertations sponsored by the marketing department may not contain the word marketing or make any reference to the term marketing in the abstract and therefore not be included under that key word. This may apply in cases which are taught as sub-fields of marketing, e.g., logistics or transportation.

Secondly, due to these possible omissions and commissions, and due to the previously mentioned fact that not all dissertations could be be attributed, it must be kept in mind that these rankings are only relative and not necessarily entirely robust. It is for example possible that individuals listed as having sponsored four dissertations have in fact sponsored more than that, just as it is possible that universities may have produced more marketing doctorates than listed. However, it seems that this investigation provides a reasonably accurate picture of the most active individuals and universities in the field of marketing based on the information publicly available, short of visiting every marketing department in the country.

Conclusions

It was the purpose of this article to afford more prominence to the role of dissertations in evaluating the influence and impact of faculty members. While it would probably be unwise to state that quantity of dissertations produced is always the equivalent of quality, these findings provided some indication of the skills and capabilities of individuals and institutions as educators, researchers, and contributors to society in the field of marketing. It provides information about the relative standing of individuals and institutions, a fact which can not only be used by current members of the academic community. It can also be used as one piece of information by students who are in the university selection process for doctoral studies in the field of marketing. The data presented provides some information as to the stability and establishment of a doctoral program in marketing and can also aid in evaluating the possible overdependence of an institution on any one particular individual. Finally, due to the previously mentioned multiplier effect of dissertations, this study also provides some indication as to placement possibilities of doctoral students after graduation since a chair or an institution having produced many dissertations could be more able to resort to the network of colleagues outside the institution than is the case for individuals or institutions which have produced much fewer doctorates.

It would seem worthwhile to conduct similar analyses of dissertations not only in the field of marketing but also in other fields. Also of interest could be an exercise attempting to trace the effect of individual activities further than this study has done, by attempting to identify the activities of former students and their productivity. It would seem that such work would permit a better assessment of the influence and impact of individuals and institutions on an academic discipline.

TABLE 1
SUMMARY FINDINGS OF DISSERTATION ANALYSIS

Total No. of Dissertations	883
Total Individual Chairs	458
% Share of 12 Most Active Universities	34.9
% Share of 43 Most Active Universities	24.0
Av. No. of Dissertations per Chair	1.9

TABLE 2
MOST ACTIVE MARKETING DISSERTATION CHAIRS
1972-1984

NAME	UNIVERSITY	# OF DISS.
Starling, Jack M.	North Texas State	9
Bass, Frank M.	Purdue	8
LaLonde, Bernard J.	Ohio State	8
Day, Ralph L.	Indiana	7
Brunk, Max E.	Cornell	6
Guiltinan, Joseph P.	Kentucky	6
Kiser, G. E.	Arkansas	6
Lazer, William	Michigan State	6
Sturdivant, Frederick	Ohio State	6
Taylor, Donald A.	Michigan State	6
Hair, Joseph F., Jr.	LSU	5
Henley, Donald S.	Michigan State	5
Levy, Sidney J.	Northwestern	5
Mason, J. Barry	Alabama	5
Peterson, Robert A.	Texas	5
Schiffman, Leon G.	CUNY	5
Sheth, Jagdish	Illinois-Urbana	5
Staelin, Richard	Carnegie-Mellon	5
Stern, Louis W.	Northwestern	5
Wilson, David T.	Penn State	5
Woodside, Arch G.	South Carolina	5
Zaltman, Jerry	Pittsburgh	5
Bowersox, Donald J.	Michigan State	4
Cunningham, William H.	Texas	4
Darden, William R.	Arkansas	4
Farley, John U.	Columbia	4
Fisk, George	Syracuse	4
Greyser, Stephen A.	Harvard	4
Konopa, Leonard J.	Kent State	4
Kotler, Phillip	Northwestern	4
Ladd, George W.	Iowa State	4
Mayer, Morris L.	Alabama	4
McVey, Phillip	Nebraska	4
Mellott, Douglas W., Jr.	Louisiana Tech	4
Middlestaedt, Robert	Nebraska	4
Pearson, Scott R.	Stanford	4
Pride, William M.	Texas A&M	4
Rao, C. P.	Arkansas	4
Ray, Michael L.	Stanford	4
Ryan, John A.	Texas Tech	4
Terpstra, Vern	Michigan	4
Tull, Donald S.	Oregon	4
Wilemon, David	Syracuse	4
Total Number of Dissertations		212

TABLE 3
U.S. UNIVERSITIES PRODUCING MOST MARKETING DISSERTATIONS
1972-1983

RANK	UNIVERSITY	# OF DISS.
1	Michigan State	47
2	Northwestern	32
3	Ohio State	27
4	Arkansas	25
4	Illinois-Urbana-Champaign	25
6	Indiana	23
6	Kent State	23
8	Nebraska-Lincoln	22
8	Stanford	22
10	Pennsylvania State	21
10	Texas-Austin	20
12	Harvard	20
TOTAL		308

THE UNDERGRADUATE MARKETING MAJOR:
AMBIVALENCE IN THE MARKET PLACE

Robert H. Luke, Southwest Missouri State University

Abstract

This paper discusses present employer attitudes over the hiring of marketing majors, their perceptions of hiring marketing majors over other business majors, and perceived adequacy of current marketing programs...particularly as employers may differentiate between marketing and management programs for hiring purposes. Findings show that there is a lack of clear direction in employer's assessments of marketing programs for some hiring needs. That there may be an inability to separate functions of marketing from functions of the job leads to the conclusion that other disciplines within the field of business may also have an ambivalence in the marketplace.

Introduction

An undergraduate marketing major seeking a marketing-related position may encounter a confusing array of employer attitudes. Some prospective employers may attach no special significance to a concentration in marketing. Others may assume, at least implicitly, that marketing and general business programs are almost identical in certain areas. A few firms may actually restrict their recruiting to marketing majors. In a larger number of firms, a bachelor's degree with a general business concentration may be considered sufficient for marketing-related positions. The one feature which the marketing major can expect is ambivalence in the market place.

Impetus for the study which produced the preceding description came from informal feedback which indicated an apparent lack of clearcut relationships between job opportunities and undergraduate concentration. This led to an attempt to survey the market for marketing majors among midwest-sunbelt firms primarily involved in marketing-oriented activities. The objective was to develop a picture of market attitudes toward marketing majors.

Methodology

Two dimensions of the marketability of marketing majors were examined: (1) relative demand for marketing majors vis-a-vis other business majors; and (2) perceived adequacy of current marketing programs. The survey instrument was a two-page questionnaire which was mailed to 270 representatives of firms engaged primarily in marketing activities. These firms included commercial banks, savings and loan associations, as well as the more traditional marketing-oriented operations. Also included were major industrial firms having their national headquarters in sample cities.

Ninety-eight (36 percent) of the questionnaires were returned. Ninety-four firms are represented. Demographic variables used in analyzing responses include size of the firm, number of employees, city population, respondent's title, institutional category, and number of direct competitors operating in the same city. Contingency table analyses with chi square tests were used to evaluate the data. Responses are discussed in the following sections.

Results

Relative Demand for Marketing Majors

Two aspects of market demand were examined: (1) market parameters or constraints affecting potential demand for undergraduate degree holders; and (2) relative demand for marketing majors. Market parameters were examined through four questions; the questions and response patterns are summarized in Table I.

TABLE I

SOME MARKET PARAMETERS

	Response Pattern		
Question	Yes	No	No Response
1. Does your firm require new professional employees to have at least a bachelor's degree?	56	40	2
2. Does your firm hire college graduates with an MBA?	84	9	5
3. Does your firm require applicants to have earned an MBA before they will be considered for employment?	0	98	0
4. Is an employee required to have an MBA before he can advance into management ranks of your firm?	2	95	1

Relative demand for Marketing majors was the subject for three questions which are presented with responses in Table II.

TABLE II

RELATIVE DEMAND FOR MARKETING MAJORS

Questions and Responses

5. Is a job applicant required to have a major in a particular field of business administration in order to be considered for a position in one of your marketing functions?

Responses			
	Yes = 17	No = 77	No Response = 4

6. If the answer to the above question was yes, which of the following is considered the most desirable academic major?

Responses		
	Marketing = 18	Management = 7
	Finance = 1	Accounting = 1

7. If you have a choice between two job applicants with no previous experience and with comparable scholastic records, which one would you prefer solely on the basis of academic major?

Responses		
	Marketing over Management	= 13
	Marketing over Accounting	= 27
	Management over Accounting	= 15
	Management over Finance	= 7
	Accounting over Finance	= 5
	Accounting over Management	= 5

Basically, the responses indicate that the market for college-trained personnel is not as formalized as might be expected. This is reflected in the slight majority requirement that applicants must have college degrees to be eligible for employment. Further, the lack of strong preference for marketing majors to fill marketing positions is consistent with less formal characterizations of the market.

The market described in the responses to questions in Table I is flexible. Fifty-seven percent of the respondents indicate that their firms do require college degrees prior to employment; forty-three percent do not require degrees. For the new degree holder, this means that competition extends beyond the dimly-perceived group of fellow degree holders. At this time, the bachelor's degree is sufficient preparation when college training is a prerequisite to employment in marketing institutions. None of the responding firms requires an MBA for initial employment. Only two firms require an MBA prior to advancement into managerial ranks.

When the responses are subjected to cross classification and statistical analysis, one statistically significant (5%-level) difference can be identified. This occurs when responses to question one are categorized according to the size of the firm as represented by number of employees. The response matrix, in summary form, reveals proportionately more larger firms, those employing more than 500 people, require prospective employees to have college degrees:

Size of Firm Vs. Degree Requirement
Response Matrix

	500 employees	500 employees
Yes, degree required	21	34
No, degree not required	29	13
No response	1	0

As the number of employees in a firm increases, there is greater likelihood that management will hire only college graduates. This provides some indication of the structure underlying the market.

Relative demand for marketing majors is the subject of the question in Table II. Seventy-nine percent of the respondents to Question 5 indicate that there is no preference for any specific academic major to fill marketing positions in their respective firms. Preferential demand for marketing majors over other majors would appear to be strong, but not without apparent competition from management majors.

It cannot be statistically demonstrated that the aggregate response pattern to Question 5 is significant. However, significant difference is noted when responses are compared to the response pattern for Question 1. Seventy-one percent of those firms that hire only college graduates have no particular preference regarding academic major when filling finance positions. Ninety-seven percent of those firms which do not require a college degree similarly have no academic preferences for marketing vacancies. The response matrix is shown in Exhibit I.

EXHIBIT I

COLLEGE DEGREE VERSUS PREFERENCE FOR UNDERGRADUATE MAJOR

	Is a specific major preferred?	
Is Degree Required?	Yes	No
Yes	16	39
No	1	38

Demand for specific academic majors is more likely to be associated with firms that require applicants to hold college degrees. However, the responses clearly indicate that such preferences are not common occurrences.

The responses to Questions 6 and 7 are susceptible to statistical misinterpretation. It is perhaps more useful to simply look at the obvious patterns. In both instances, marketing is preferred over other majors for the implied marketing vacancy. However, management is well-represented in the responses, suggesting that there is some confusion about what constitutes a marketing position and marketing major vs. what constitutes a management position and management major. Academics do not tend to clear this confusion by including a "Marketing Management" course in almost every curriculum.

Responses to Questions 1 through 7 do not present an encouraging picture for new college graduates. The market is far from being the exclusive domain of the college graduate. In fact, the market is probably more competitive than might be expected, given society's emphasis on education.

The amorphous nature of the market is also reflected in absence of one-to-one correspondence between academic major and employer preferences when filling vacancies. For marketing majors, management appears to provide the strongest competition. There is no indication, however, that any one business major has overwhelming precedence over another. In summary, the market is flexible and competitive, resulting in fluid demand for marketing and other business majors.

Adequacy of Marketing Programs

Respondents were asked for comments on perceived significant differences, if any, between management and marketing in terms of educational preparation for a career in marketing. Those comments can be roughly classified into pro-management, pro-marketing, and indifferent categories. The difference between management and marketing, as described by fifteen pro-marketing respondents, is most evident in the "broader outlook" of the marketing major. Two comments which are representative of the comments by the pro-marketing group are:

1. "Marketing major has broader training, better equipped for leadership. Management is more specialized, more technical."
2. "Management majors are generally specialists while marketing majors tend to be generalists. We prefer generalists as candidates."

Nine respondents chose to comment on the general preparedness of marketing graduates, without addressing themselves to any distinction between marketing and management. Their comments were directed at additional coursework suggestions or at overall abilities and attitudes. In the first category, respondents favored more "management training with follow through ability," although one respondent cautioned against over education. In the second category, comments were directed at the unrealistic expectations of new college graduates. The following conveys the tenor of such comments: "The main problem we encounter is trying to get recent graduates to realize that the top jobs in bank marketing... are not handed out to those with college training and no experience. Often professors are guilty of convincing students that they are worth more to a corporation than they really are."

In summary, there are no definite findings on the adequacy of current marketing programs. Size and scope of this study are not sufficient to produce such results. However, there is evidence of dissatisfaction with specific coursework. There is some indication that some practitioners do not make clear and sharp delineation between marketing and management. It is apparent that marketing practitioners are not united in their concepts of what marketing programs should include.

Conclusions and Implications

Respondents do not clearly or strongly differentiate between marketing and management majors as acceptable applicants for marketing positions. Only 17 out of 98 respondents indicate that their firms require marketing training for marketing positions. This startling result is more upsetting when the composition of the sample is recalled. Specifically, marketing-oriented firms dominate the sample.

There are several important implications associated with this finding. First, demand for marketing majors can be passive, not active. It is up to the individual in some instances to sell potential employers on his merits; academic major may be helpful as an auxilliary selling point, but it will not insure preferential consideration. Public relations and communications majors, who are normally outside a College of Business Administration, fight for marketing positions as do those majors within the College.

The market is not as highly structured in terms of academic-major/job opportunity relationships as academic specialization implies. In fact, it appears that the market is more competitive than expected. Employers will consider college graduates and non-graduates for the same positions. They will consider marketing majors and management majors for the same positions. Thus, marketing majors face a demand structure in which their supposed superior credentials, including a college degree and marketing major, are actually indifferent characteristics.

Academic major appears at best to be an incidental requirement, suggesting that the academic emphasis on "concentrations" or "majors" may be beneficial mostly to academicians. This of course completely ignores the presumed role of educational background, and especially academic major, in movement up the executive ladder.

There is a lack of clear direction in the respondents' assessments of marketing programs. In part, this may reflect an inability to separate marketing functions and management functions in actual work situations. Some 32 percent of the respondents however perceive no real distinction between marketing and management majors in preparing for a marketing career. Collectively, the findings suggest that marketing majors face an additional obstacle in their job hunting: they are expected in some instances to be very knowledgeable about areas outside marketing. This is inconsistent with most marketing programs.

Alternatively, the imperfect image of marketing and marketing functions should be disturbing to educators. To some practitioners, marketing functions and management functions are not necessarily separate and distinct fields of knowledge. Have educators failed to communicate the differences in decision making requirements in each area? Have marketing majors tended to develop programs which overspecialize their students, resulting in a very narrow package of skills and knowledge which are not readily marketable?

Other questions generated by the findings include: Are the findings of this study relevant also for computer information systems, finance, and accounting majors? Is there a general lack of preferential relationship between academic major and job opportunities? As educators, are we erroneously developing "majors" and "concentrations" contrary to the needs of the business community? Is there a definite relationship between academic major and subsequent pattern of career development? Is a marketing program geared to job opportunities in major marketing centers relevant to job opportunities in regional marketing and industrial centers? Is the market examined in this study typical in terms of ambivalent attitudes toward marketing and marketing majors?

The survey instrument is simplistic and statistically valid analysis is extremely difficult. The regional character of the study definitely requires a proviso on the general applicability of the findings. The study suffers from the usual limitations of size, depth, and scope.

The findings of the study are at least provocative. They suggest the need for more intensive examination of a topic that may produce discomfort in academic halls.

MARKETING MANAGEMENT

THE MARKET FOR PRODUCTS TO SUPPORT PHYSICAL FITNESS ACTIVITIES

Kent L. Granzin, University of Utah
Janeen E. Olsen, University of Utah

Abstract

Physical fitness is a growing area of consumer participation, thus marketing interest. This study investigates the nature of the market for products to support this activity by distinguishing among three market segments based on expenditures for products to support physical fitness activities. The results show the segments can be characterized in terms of their patterns of relatively passive and relatively active leisure pursuits, their attitudes, and their demographics and media habits.

Introduction

Physical fitness has captured the interest of Americans as never before. In its various forms, physical fitness claims an expanding flow of consumer dollars, a figure recently estimated at six billion dollars a year (New York Times 1983). Expenditures for home exercise equipment are about one billion dollars a year, for athletic clothing about three and a half billion, and for sporting goods about fifteen billion dollars yearly (Sanoff 1984). Makeshift gyms are appearing in an increasing number of homes, homes that may be equipped with such devices as a $300 rowing machine (Maloney 1984). And a number of books dealing with exercise and dieting have made the best-seller lists.

In terms of participation, a Gallup poll found 59 per cent of Americans exercise daily, double the percentage doing so in 1961. In 1983, 34 million tried some form of strenuous physical conditioning exercise. Almost 20 million Americans take part in aerobic exercise (Huntley and Taylor 1984). To provide direct service to their customers, entrepreneurs have been expanding the number of fitness facilities at a rate of over five per cent a year, with 1500 reported under construction in 1984 (Sanoff 1984).

Recognition of the benefits of physical fitness is expanding. In the workplace, employers have come to recognize the importance of fitness to productivity, and many companies have taken steps to support the fitness activities of their employees (U.S. News and World Report 1980; Inc. 1982). Business firms have come to regard support for fitness activities as a positive appeal in their efforts to attract desired employees (English 1984). They are financing memberships in private health spas, or even opening their own fitness centers for employees (Huntley and Taylor 1984). Boeing has built a three and one-half million dollar facility for its workers (English 1984).

The medical profession has linked fitness to general good health (Morgan and Godbey 1980; Allsen, Harrison and Vance 1980; Cooper 1982). Among the benefits of regular exercise are a reduction in obesity, depression, muscular-skeletal problems, and cardiovascular disease (Greist 1979; Maloney 1984).

As a result of the increased emphasis on fitness, marketers have rushed to serve their customers with equipment, clothing, training, and other related offerings (Sales and Marketing Management 1980). Companies in the fitness market are prospering (Lazo 1983), but competition for the fitness dollar has become fierce (Pyle 1980), and those who seek to serve this market successfully must understand its characteristics.

This report details the findings of an investigation into the nature of broadly conceived market segments for the adjunct products that are used by those who participate in fitness activities. It is not, however, an investigation of the segments for participation itself (e.g., purchase of lift tickets for skiing or admission tickets for professional basketball games). Studies of these latter areas of market activity have been reported elsewhere, and the examination of even a few of these areas would involve a project far beyond the scope of the research reported here. Specifically, this paper presents the findings of research into the characteristics of three market segments delineated by their expenditures on products to support physical fitness activities.

Conceptual Background

The criterion variable for this study is expenditures on products that support physical fitness activities. Given the large number of persons who take no part in fitness activities, the unimodal pattern of expenditures to support fitness actitivites does not conform to any regular distribution. Thus, it seems appropriate to use Twedt's (1964) concept of the "heavy half." In this vein, the population was conceived as composed of three segments: (1) persons who made no expenditures; (2) persons whose expenditures lay below or at the median level of expenditure; and (3) persons whose expenditures lay above the median level of expenditure.

To provide variables having the potential to characterize these market segments, we searched the literature of recreation and leisure studies, as well as the literature that presents findings from marketing research into the markets for products and services conceptually similar to those at issue here.

Although a wide variety of predictor variables have been suggested by previous studies, they may be introduced here in three categories, and treated accordingly for analysis. These categories are: (1) life style; (2) attitudes; and (3) demographics and media habits. This section treats the hypothesized predictor variables in each of these three categories in turn.

Life Style

Life style has been conceptualized in terms of patterns of overt behavior Anderson and Golden (1984). Specifically, those activities that are selected to fill one's leisure time seem to best express one's personal choice in a way that is relatively free from the imposed responsibilities of life. The overt behavior at issue here is therefore one's set of leisure pursuits. In this view, one's life style reflects the possibly unique pattern of activities chosen from the available set of activities, which may be considered as relatively passive or relatively active leisure pursuits (Duncan 1978). The idea of a pattern of activities means that, because a person has a limited time budget, participation in any given fitness activity may be seen as either competitive with or complementary to other available alternatives.

In the first (competitive) instance, for example, the time spent on one activity cannot be spent on another activity. In particular, the more active pursuits considered to promote fitness may be chosen in lieu of, or to provide a "change of pace" from, the alternative, more passive aspects of one's life style. Time taken for exercise is not available for such less physically-taxing leisure pursuits as fishing, camping, taking vacations, and reading books.

In the second (complementary) instance, each fitness activity may be considered in terms of its place in a larger pattern of pursuits, which includes a variety of relatively active pursuits. Thus, the market segments of interest can be characterized in terms of not only relatively passive activities, but in terms of patterns of active pursuits, including those both more (e.g., running and jogging) and less (e.g., golf) likely to directly promote physical fitness. In this study, the variables selected to represent both passive and active pursuits came mainly from the representative list of such activities provided by Granzin and Williams (1978), as augmented by several additional activities currently popular with the general population as contributions to fitness.

Attitudes

The attitudes category could conceivably subsume an almost limitless number of variables. Those suggested by the literature may be divided roughly into those that relate to oneself and those that relate to influence of others. As an example of those relating to oneself, people participate in activities because they deem them important (Dishman and Gettman 1980) and gain intrinsic satisfaction from their participation (Crandall 1980; Unger and Kernan 1983). They may see active pursuits as a way to release tensions (Dardis, Derrick, Lehfeld and Wolfe 1981; Thaxton 1982). Their level of self-motivation to participate may reflect a general drive to accomplish goals (Dishman and Gettman 1980), and they may find exercise helps performance in subsequent activities other than exercise (Folkins and Sime 1981).

Influence of others may appear as a need for social contact. The social nature of many fitness activities can appeal to those who need to develop interpersonal relationships (Crandall 1979; Beard and Ragheb 1983). And the choice of both participation in fitness activities in general and the favored types of activities in particular may depend on one's susceptibility to the influence of certain reference groups (Harris 1979). However, people may be restrained from participation when it creates conflict with others of the various roles they fill; e.g., roles that embody responsibilities toward family and work (Harris 1979; Snyder and Spreitzer 1973; Spreitzer and Snyder 1983).

Demographics and Media Habits

Demographics, of course, have been found predictive of a wide variety of human activities. More pertinent here, participation in leisure pursuits has been related to sex of participant (Hawes 1978; Lewko and Ewing 1980), occupational prestige and socioeconomic status (Clarke 1956; White 1975), and education (White 1975; Yu and Mendell 1980). Given the expense of supporting many leisure pursuits, it is no surprise that participation has also been linked to income (White 1975; Thompson 1978; Thompson and Tinsley 1978; Ludtke, O'Leary, and Wilke 1979; Yu and Mendell 1980). And it also appears relevant to consider the constraints faced by persons who wish to participate in fitness activities (Harris 1978); i.e., one's medical condition, employment outside the home, having a young child, and physical proximity to a fitness facility.

Media habits, of course, hold implications for promotional strategy and tactics. Here, media habits include indicators of television viewing, radio listening, and newspaper reading behavior.

Method

Data Collection

Data were collected by means of a survey of 180 adults aged 18 and over in the largest metropolitan area of a western state. The sample was selected in accordance with an age-and-sex quota based on the most recent census of the metropolitan area. Interviewers were trained in research techniques and were fully knowledgeable of the purpose of the study. They were assigned to various geographic sections of the metropolitan area to ensure socioeconomic representation in the sample. Respondents provided data by replying to a personally administered, self-completion questionnaire. Presence of the interviewers served to motivate the respondents, monitor their compliance with the instructions, and to interpret instructions if necessary.

The tables for this report give the measures employed to operationalize the variables suggested by the conceptualization presented above. (Because of space limitations, the tables are not included in this abridged report, but are available from the authors). For life style items, the individual activities were grouped into relatively passive and relatively active pursuits on the questionnaire, in accordance with the conceptualization of the previous section. Participation in both the relatively passive and relatively active elements of one's life style was measured by asking respondents how many days per relevant period they normally participate in each of the activities listed. The base period used for responses was either a year or a month, depending on the normal seasonality of this activity and participants' normal frequency of participation (e.g., water skiing on an annual basis and photography on an monthly basis). For clarity, all measures of frequency of participation are reported with respect to an annual basis in Tables 1 and 2.

The instrument used six-point rating scales like the following scale, which was used to measure the respondent's attitude toward perceived societal norms:

How do you feel about the amount of emphasis that our society places on physical appearance?

Not enough 1, 2, 3, 4, 5, 6 Completely too much

Demographics and media habits were measured by forced choice and open ended items that employed standard formats.

The criterion variable of membership in a market segment was measured by response to a question about how much money the person spent during the last year on clothing and equipment for activities included in or related to the set of relatively active life style variables. In accordance with Twedt's (1964) concept of the light and heavy halves of the market, three segments were created: (1) the None segment that comprised the 48 (26.7 per cent) who spent no money for this purpose; (2) the Light segment that comprised the 68 (37.8 per cent) who spent 75 dollars or less; (3) the Heavy segment that comprised the 64 (35.5 per cent) who spent more than this amount.

Data Analysis

Given a categorical measure of the criterion variable, and four sets of continuous measures for the predictor variables (treating the relatively passive and active life style variables as two sets), four separate discriminant analyses were used to test the respective multivariate hypotheses of relationship. Canonical loadings with an absolute value of .30 or greater denoted those variables important enough to be included in the interpretation of the discriminant analysis. In addition, to provide supplementary information about these hypothesized relationships, individual analyses of variance were conducted for each of the potential predictor variables.

Results

Life Style

Table 1 presents the results of the discriminant analysis involving the relatively passive elements of one's life style. The results show a statistically significant relationship between the predictor set and membership in a market segment (p=.001), as determined by the chi-square value computed from the appropriate Wilks' lambda. Tests of significance for each individual root found one significant root. Its canonical variate is dominated by participation in moviegoing, taking vacations of a weekend or less, and watching spectator sports. The canonical variate seems to represent a variety of ways to "get out of the house". This function relates monotonically to membership in a market segment when the segments are arrayed by increasing level of expenditures.

Six variables reach significance in ANOVA, including the three listed above. Of the six significant variables, participation in power boating and the three variables listed above as important to the discriminant analysis are related monotonically to expenditures. However, while attendance at the cultural events listed in the questionnaire is highest for the Heavy segment, it is lowest for the Light segment. Reading books finds an inverse monotonic relation to the canonical variate, with the None segment being the most frequent readers, and the Heavy segment the least frequent readers.

Most fairly, the analyses involving the relatively active elements of life style should be considered as methods for describing the segments, rather than as tools of statistical inference. That is, the existence of a relationship between participation in and expenditures for these pursuits should be a foregone conclusion. Therefore, the emphasis here will be to describe the relative importance of the individual pursuits in determining one's membership in an expenditure segment. The meaning of these results should come from the relative importance of the set of leisure pursuits in stimulating spending for fitness.

The discriminant analysis, which is summarized in Table 2, reveals one significant root. The main contributors to this function are weight training, playing team sports, playing tennis, snow skiing (a sport which is readily available near the area surveyed), running and jogging, and swimming. This variate represents a variety of pursuits that, for the most part, require special facilities to support participation. The relationship for this function is monotonic to expenditures. The ANOVA's show significance for these six variables, and these six univariate relationships are all monotonic to expenditures.

Attitudes

The discriminant analysis for the set of attitude variables also finds significance (p=.000), with one significant root. This function (Table 3) is described primarily by three variables that dominate the canonical variate: self-perceived fitness, activity level relative to one's social circle, and self-perceived athletic ability. The positive loadings for these three variables represent a feeling that one is in good physical shape both in some absolute sense and also in comparison with one's friends. The centroids for the three segments based on fitness expenditures show the discriminant function to relate monotonically to market segments based on increasing expenditures in the order of None, Light, and Heavy segment membership.

These three variables and another, need for tension release, find significance at the .05 level by one-way ANOVA. Here too the relationships are monotonic, and the ANOVA's give the additional information that the Heavy segment finds a greater need for tension release.

Demographics and Media Habits

The discriminant analysis involving demographics and media habits is significant (p=.000), with both functions reaching significance by individual test (Table 4). The first function (p=.000) serves primarily to contrast the participants, both Heavy and Light, with the non-participants. The canonical variate is dominated by being younger, being a member of a health spa, not watching TV in the afternoon, having greater employment outside the home, and having relatively less interest in easy listening music. This variate seems to reflect youth and a busy daytime existence. The first function is monotonically related to expenditures.

The second function for this discriminant analysis distinguishes the Light segment from the Heavy segment (p=.003). The variate is defined primarily by two variables, having a pre-school child and living a lesser distance from the nearest health spa. In general, the results indicate the Light participants (at least the homemakers) may be somewhat constrained by having a young child, even though they live closer to a spa. However, the first influence, at least, exists for only a minority of the re-spondents, so one must must be careful not to over-generalize from this result.

Additional variables finding significance in ANOVA, but not important to the discriminant analysis, are: having a medical reason not to exercise, household size, and watching TV in the evening. The ANOVA's revealed both monotonic and non-monotonic relationships between the predictor variables and expenditures. The Heavy segment is most likely to belong to a spa, and least likely to have a pre-school child in the home, watch TV in the afternoon, and prefer easy-listening radio programming. On the average, this segment is youngest and has the longest average distance to travel to a spa. Thus, this segment may be characterized as younger, busier, more mobile persons who focus their lives outside the home. The Light segment is most likely to have a pre-school child in the home and to watch TV at night. This segment lives closest to a spa and has the largest average household size.

Discussion

In general, the results show the Heavy and None segments to form the polar extremes in terms of the characteristics investigated in this study. The Light segment possesses most of the characteristics of the Heavy segment, but to a lesser extent. Thus, this discussion concentrates on the characteristics of the Heavy group, and explicitly refers to the Light segment only in those cases where this segment was found to possess distinctive characteristics of its own.

The findings with respect to the elements of life style indicate quite simply that relatively active people often find a variety of outlets for their energy and interests. Some substitution of active for passive pursuits can be seen in the findings, but for the most part the two classes of pursuits are complementary. Members of the Heavy segment are still more likely to engage in relatively passive activities (e.g., spectator sports) than are those in the Light and None segments. And members of the Light segment are more likely to participate in passive activities than the members of the None segment.

The findings for the attitude variables provide the clearcut message that those who spend money to support fitness activities think of themselves as physically fit. There is a link between expenditures and self-image. However, the causal direction of influence cannot be inferred from a survey such as this one. For instance, it may be that (e.g., older) persons who do not see themselves as relatively fit are not likely to spend money to try to preserve or improve their fitness. Conversely, (e.g., younger) persons who allocate their funds to support a variety of active pursuits may rationalize their expenditures by pronouncing themselves physically fit.

As predictor variables, one's self perceptions fare better than variables that reflect the influence of other persons. Also, the findings with respect to the set of attitudes indicate that the more closely the focal point for the attitude relates to fitness itself (as opposed to, say, nutrition), the stronger the relationship between that variable and membership in a fitness segment.

Several demographic measures define the Heavy segment as younger and healthier persons who appear to do more for their fitness, even though they have less free time for exercise, at least during the daytime. They seem less burdened by the responsibilities of family and (to a slight extent) employment than those in the Light segment. They appear more disposed to focus the activities of their more mobile lives outside the home.

As an indication of their enthusiasm, members of the Heavy segment are willing to "go the extra mile" to pursue their interest in their physical condition. These persons live farther from the nearest spa than any other segment, although the current proliferation of spas may mean this distance is a minor concern. They are more likely to join a spa, which is an expense in itself that does not replace further expenditures on support materials. (In fact, a spa membership may create social pressures to obtain these materials.)

With respect to radio programming, the results indicate avoidance, rather than participation. However, their pattern of preference indicates the Heavy segment can be reached through the more "lively" types of music. That is, contemporary popular and rock music capture the attention of this segment more than easy listening programming. The patterns of TV viewership are much the same for the Heavy and Light segments, concentrated in the evening hours. Thus, nighttime messages would be one useful means of reaching both these market segments. Conversely, less-expensive attempts to reach the non-participants would fare relatively better in the afternoon, although they too can be reached more easily in the evening, as well.

Summary and Conclusions

This study has investigated the characteristics of persons who form three market segments based on expenditures for clothing and equipment to support physical fitness activites. The findings show the relatively heavy spender to be a younger, healthier, generally more active person. This person engages in a fairly wide spectrum of leisure pursuits, in some cases to provide a channel for tension release. The heavy spender pursues a wide variety of leisure interests, many of which are quite removed from the physically demanding pursuits that develop and maintain one's physical fitness. While no direction of cause and effect between attitude and participation can be supported, the heavy spender has the self-image of being fit and athletic, both in an absolute sense and when compared with friends. In general, the light spender possesses many of the characteristics of the heavy spender, but to a lesser extent.

References

Anderson, W. Thomas, Jr. and Linda L. Golden (1984), "Lifestyle and Psychographics: A Critical Review and Recommendation," Advances in Consumer Research, Provo, UT: Association for Consumer Research, 405-411.

Beard, Jacob G. and Mourir G. Ragheb (1983), "Measuring Leisure Motivation," Journal of Leisure Research, 15, 219-228.

Clark, Alfred C. (1952), "The Use of Leisure and Its Relation to Levels of Occupational Prestige," American Sociological Review, 21 (June), 301-307.

Crandall, Rick (1980), "Motivations For Leisure," Journal of Leisure Research, 12 (No. 1), 45-53.

_______, (1979), "Social Interaction, Affect and Leisure," Journal of Leisure Research, 11 (No. 3), 165-181.

Dardis, Rachel, Frederick Derrick, Alane Lehfeld and K. Eric Wolfe (1982), "Cross-Section Studies of Recreation Expenditures in the United States," Journal of Leisure Research, 13 (No. 2), 181-194.

Dishman, Rod K. and Larry R. Gettman (1980), "Psycholbiological Influences on Exercise Adherence, " Journal of Sport Psychology, 2 (No. 2), 295-310.

Duncan, David J. (1978), "Leisure Types: Factor Analysis of Leisure Profiles," Journal of Leisure Research, 10, 113-125.

Folkins, C. H. and W. E. Sime (1981), "Physical Fitness Training and Mental Health," American Psychologist, 36, 373-389.

Granzin, Kent L. and Robert H. Williams (1978), "Patterns of Behavioral Characteristics as Indicants of Recreation Preferences: A Canonical Analysis," The Research Quarterly, 49 (No. 2), 135-145.

Hawes, Douglas K. (1978), "Satisfactions Derived from Leisure-Time Pursuits: An Exploratory Nationwide Survey," Journal of Leisure Research, 10 (No. 9), 247-264.

Huntley, Steve and Ronald A. Taylor (1984), "Keeping in Shape - Everybody's Doing It," U.S. News and World Report, 97 (Aug. 13), 24-25.

Lewko, John H. and Martha E. Ewing (1980), "Sex Differences and Parental Influence in Sport Involvement of Children," Journal of Sport Psychology, 2 (No. 1,) 62-68.

Ludtke, Richard L., Thomas J. O'Leary and Arthur S. Wilke (1979), "Activity Levels and the Fitness Account," Journal of Leisure Research, 11 (No. 3), 207-214.

Miller, M. C. (1980/1), "A Comparison of Mass Media Effectiveness in Health Education," International Journal of Health Education, 23, 49-54.

Sanoff, Alvin P. (1984), "Business Gets Healthy From Athletics, Too," U.S. News and World Report, 97 (Aug. 13), 26-27.

Snyder, Eldon E. and Elmer A. Spreitzer (1973), "Family Influence and Involvement in Sports," Research Quarterly, 44 (October), 249-255.

Spreitzer, Elmer and Eldon E. Snyder (1983), "Correlates of Participation in Adult Recreational Sports," Journal of Leisure Research, 15 (No. 1), 27-29.

Thaxton, Lyn (1982), "Physiological and Psychological Effects of Short Term Exercise Addiction on Habitual Runners," Journal of Sports Psychology, 4 (No. 1), 73-80.

Thomas G. S. (1979), "Physical Activity and Health: Epidemiologic and Clinical Evidence and Policy Implication," Preventive Medicine, 8, 89-103.

Thompson, C. Stassen and A. W. Tinsley (1978), "Income Expenditure Elasticities for Recreation: Their Estimation and Relation to Demand for Recreation," Journal of Leisure Research, 10 (No. 4), 265-270.

Twedt, Dik W. (1964), "How Important to Marketing is the Heavy Half?" Journal of Marketing, 28 (January), 71-72.

Unger, Lynette S. and Jerome B. Kernan (1982), "On the Meaning of Leisure: An Investigation of Some Determinants of the Subjective Experience," The Journal of Consumer Research, 9 (March), 381-392.

White, Terrence H. (1975), "The Relative Importance of Education and Outdoor Recreation Participation," Journal of Leisure Research, 7 (No. 3), 191-199.

Yu, Jih-Min and Ron Mendell (1980), "The Development and Utility of a Leisure Behavior Index," Research Quarterly for Exercise and Sport, 51 (No. 3), 553-558.

(Additional references may be obtained from first author.)

MARKETING MICROCOMPUTER HARDWARE

Richard D. Teach, Georgia Institute of Technology
Linda L. Gregg, Georgia Institute of Technology

Abstract

The emergence of the microcomputer has brought high tech marketing concepts to the fore. This entire industry is new and provides an opportunity to study marketing behavior without a lot of historical baggage. This paper will illustrate techniques used in the marketing of microcomputers. Product life cycles, the influence of technology, price, promotion, physical distribution and the selection of target markets all affect the marketing effort. Each of these influences will be examined.

Introduction

The microcomputer hardware industry is somewhat unique in the fact that although the product is very technical, the marketing techniques of the product can be compared to those employed in selling toys and toothpaste. [1] The machine itself frequently has little to do with its own success or failure. This high tech industry has turned into a major marketing gambit and the main determinant of the success of the machine is how well the company can distribute and market its product. [2]

The purpose of this paper is to try to illustrate some of the marketing techniques used by makers of microcomputers. Because of the wealth of material that is available and constant change in the industry, the scope of the paper has been limited to the marketing of the microcomputer itself. Peripherals such as modems, printers and extra disk drives have not been considered.

Product Life Cycles

Generally, high tech products, once introduced into the market place undergo dramatic changes in demand over relative short periods of time. These changes in demand over time are known as the life cycle of the product and this function varies in both length and shape by some unknown process and differs from product to product.

There are generally four phases within a life-cycle. The first phase is the incubation period in which the product is first introduced into the market.
During this time period substantial effort is put forth in order to educate people on how the item is used and how it will make their jobs and/or lives easier, better and/or more profitable. Sales of the product in this stage of the product life cycle are generally slow. In the microcomputer example this was the time in which the "techies" had to be convinced that a microcomputer was in fact a possibility, that it could do useful work and that it was affordable. Following this stage the produce enters a growth stage which is a period of rapidly increasing sales. For the microcomputers this point in time can be established at the point in time at which IBM entered the market. Their entry assured "non techies" that some standardization had occurred and the product was more than a passing fad. After the period of rapid growth the maturity phase begins in which there may be continued growth but the spectacular growth in demand for the product levels off. Eventually the course of the product life cycle continues on until it reaches a point in time in which demand actually declines to a point that the product is not longer a viable force in the market place. [3] This process can be expected in the Microcomputer industry.

Not only do product life cycles pertain to industries as a whole, they pertain to individual products within an industry. One only need to look at the history of Atri's various models, The Commodore C64 and even the Apple IIe. The microcomputer definitely is subject to this product life cycle. When they first began to arrive on the scene about 10 years ago, the incubation period involved letting people know that they could have a computer in their own home or business and showing them ways that it could be used to make life easier. This incubation period was followed by a period (5-6 years) of rapid growth. This growth was basically due to the easy sales to the hobbyists, enthusiasts, and techno-fanatics. [4]

In 1985, the industry appears to be entering into the maturity phase. PC Week reported that 16% of all white collar workers own personal computers and at least 57% of the white collar workers are using personal computers where they work. [5] Many observers agree that the next phase will be difficult to obtain growth because the remaining market contains those people who are still afraid of computers and those who must be convinced that a computer can be useful to them or that it can solve problems in a faster or easier manner.[6]

Technology's Influence

There are technological changes that are constantly being made in this industry and it is very important for the manufacturers to be aware of the new advances that are going to make the machines faster, more compatible, easier to use and have give larger memory capacity. This type of advance is being made now with the emergence of market acceptance of such things as the hard disk, touch sensitive screens and the microcomputers ability to accept audible commands. Not being aware that these changes are being made by competitors can quickly cause a producer to lose his market share. The old ad pitch, "be the first on your block to own a ...." works well in the microcomputer industry.

When new technologies in the form of new features first become available, few if anyone one knows which ones of them will create a large demand and which ones will not. The high tech industries do not rely upon marketing research to any substantial degree. Many times a producer feels that a certain asset will be a definite selling point of his machine only to find that once it is actually offered to the market, the public likes the new feature but feels that it is not worth the added expense. This happened to Apple Inc. with their Lisa microcomputer. They were certain that this would increase their profits because it was such a great machine. It was very easy to use and had outstanding technology behind it. But the product was not successful. Most experts feel that the reason for its lack of sales was not because people did not like what it could do but rather that it simply cost too much. Even changing it's name to the Macintosh XL did not stop its demise. On the other hand the IBM AT is an example of new technology that is doing well. It uses the Intel 80286 microprocessor and offers the speed of the hard disk. This new machine's success and the inability of IBM to deliver the masses of ordered machines is one reason that has caused the production of what is called the "AT clones."

Promptness

Being able to keep abreast of the new technology has a direct affect on another issue, being prompt in getting the product on the shelves of the retail outlets. The buyers of microcomputers are a fickle lot. If a company can be in the market before others, it has a chance of capturing a larger percentage of the available market. It is this aspect that can be a great advantage to the "me-too" products if the market leaders such as IBM and Apple are slow in delivering the new products. Clones that are able to get into the market quickly, will be able to establish a foothold in the market. This is their chance to make high sales, but as soon as the shortages of IBM or Apple inventory abate, the interest in the compatibles slackens and therefore profits diminish. [7]

Product Modifications

There are many vital factors involved in designing the microcomputer and it is up to each manufacturer to decide which items are going to be emphasized and which ones will be disregarded in order to cut down the costs.

Physical size is one of the main features that make microcomputers so attractive to businesses. The days of having large rooms dedicated to the housing of large mainframes is coming to an end in many business. The inaccessibility and the special expertise needed to interact with a mainframe or even a minicomputer is unneeded or unavailable in many businesses. However, micro's are not perfect substitutes, many of a businesses needs still require a mainframe. Almost all microcomputers and even some super minis can sit upon a desk top and still leave room for work space around it. There are also lap size microcomputers available.

The physical size of the microcomputer can have an influence on which market target a company attracts. The lap size micros are targeted to the business man on the go. They usually are small enough to fit into a briefcase and are perfect for using during those hours spent traveling by plane. Apple however, is finding that the size of their machine can also hinder acceptance into a targeted market. They have been trying to get the Macintosh into the business realm, but are finding that because the product is small in size it is often viewed as a toy and not suitable for the business desk. Not only physical size but memory limitations also affect demand. [8]

Expandability

One of the drawbacks to Apple's acceptance into the business world has been its closed architecture which prevents other companies from inventing add-ons that increase the appeal of machines. [9] These add-ons include additional disk drives, communication products, internal backup tapes, and network boards. [10]

Compatibility

Along with expandability, compatibility is a major aspect that must be included when designing a marketing program for a microcomputer. Many companies provide IBM compatibility with a lower price in order to grab a piece of IBM's market share. Since 1982, when IBM joined the microcomputer industry, it quickly took over the majority of the business market share (63% by some estimates). [11] It is for this reason that it has become so important for other microcomputer makers to be IBM compatible. If they intend to be part of the $38 billion business microcomputer computer market they must be compatible with the leader. [12] Even Apple, who has always strived to be an alternative to IBM, has changed its strategy and has begun creating software that allows compatibility. [13]

Quality

The perceived quality that a microcomputer exhibits plays a major part in getting the attention of the consumer. "An ideal computer would be lightweight, fast and have just about every conceivable expansion option built in. But a dazzling list of features isn't enough - they all have to be useful and they must work." [15] Good engineering is a necessary but not sufficient ingredient. The failure of IBM's PCjr was primarily due to its inferior keyboard. BY the time it was corrected the market had already moved on to other products and had lost its confidence in that particular machine. [16]

Compaq Computer Corporation's goal is to be known as a company that offers quality products. Benjamin Rosen, president of Compaq states, "On every model we've sold we've offered a little more than IBM - faster speed, more memory, a bigger screen, words and graphics on the same screen, etc..." Quality is beneficial to company since offering these types of products allows them to avoid price cutting [17] and the secure repeat business. [18]

Standard Features

Deciding on the quality of microcomputer that will be offered involves determining which attributes should be standard on the machine. THe manufacturer must weigh what is enough memory for example, can hinder sales because it would limit operations. Having too much technology can drive the price up so high that the potential buyer is unable to justify the expense. The primary objects that are considered currently are expandability, graphics capability, and portability.

Price

The price of microcomputers is an object of great variability. They range from around $145 to $6000 depending on the target market, the amount of memory, speed, the state of advanced technology and other special features. Pricing appears to be the least influential part of marketing these machines. [19] The producers are finding that having the lowest priced product is helpful only in the short run because enventually the competition will cut its price to match or beat any posted price. [20] specific information on how the manufacturers determine their prices is unavailable. This bit of strategic information is confidential. One source however noted that companies use between 42% and 51% of their business market sales on making the product and the remainder is spent on advertising and administration expenses. [21]

Once a product enters the market, the end user price appears to fluctuate with the wind. Reductions are based on what the market leaders are doing and how high the inventories are building up in the warehouse. There are two times a year that you can expect the prices to reduce at least 15% to 20%.This occurs at the Christmas shopping season and in August. [22] These prices drop during the Christmas season in order to boost sales to the home market. (This failing market will be discussed later.) Summer months have proven to be a slow sales period, causing inventories to increase and prices to fall, especially in August.

Many times when sales are sluggish, dealers will add some extra items to the computer package to make the product more valuable. This usually means software packages are included in the original price the effect of which reduces the total cost to the end user.

Target Markets

There are many different markets to which microcomputers are targeted. The broadest categories are the home, school and business markets.

The Home Market

The home market is the most curious of the three. This is the one that so many people were most excited about 5 years ago but now has become a major disappointment. Many observers feel that the home market is basically dead. Keith Thompson, and editor of Microcomputing magazines says, "It is my opinion that there's no mass market in the foreseeable future for a 'serious' home computer. The closest that most consumers will ever come to a home computer are the microchips that are being designed and built into everything from cars to toasters. They're so 'user-friendly' and useful that consumers won't even realize that they're there. Isn't this the way it should be? Maybe the home revolution has already happened." [23]

Probably the only way that the home market can be touched is catering to the business man who brings his work home with him. The Commodore Amiga with its advanced 32 bit architecture, fantastic screen graphics, supposed MSDOS compatibility, and low price is targeted toward this group of buyers. [24]

The School Market

Apple Computers have had a large impact in reaching the school market. They were able to get an early jump in this area and it has secured for them a substantial share of the market. Apple obtained this large lead by offering the equipment to the schools. Their object is to lure the loyalty of the students that would come through their familiarity with working with Apple throughout their school career. As an added incentive, Apple also offers special discount rates for students purchasing their equipment. Apple is betting that this market will be a stepping stone to the business market. When these students get into the work force they will be accustomed to the Apple micros and perhaps will be instrumental in getting their companies to use Apple in the office. [25]

Apple is really taking a big risk by expecting to profit in the long run. It appears to me that the microcomputer business is just not a long run game. There are too many variables such as competition and technology changes. The industry is moving so fast that it is very hard making up for lost time caused by errors. This is demonstrated by the remarkable amount of individuals that have failed over the long run in the various aspects of this industry.

The Business Market

The major target is the business market making up $25 billion worth of product. This market can e sliced into many segments, only three of which will be discussed in this paper. They are the novices, women and professionals.

Apple is striving to get the attention of the novices, meaning those people in the business sector who have had limited experience in working with computers and may even exhibit "computer-phobia." Apple feels that they can reach this group because their machines are user-friendly. This could be a very successful strategy because many corporate executives have had little exposure to operating computers. [26] A market segment that appears to be overlooked by the computer producers is the female executive and her influence on the professional world. Generally advertising has shown the man sitting at the keyboard and the woman is merely looking over his shoulder.[27] With women becoming more involved at higher levels in the working world, microcomputer marketing specialists must begin to exploit this segment and start meeting the needs of this neglected market segment.

The final business segment to discuss is the group of mid management professionals. This group is comprised of white-collar non-clerical workers in large organizations. Generally speaking, price is not the primary consideration of this segment. Microcomputers provide substantial value when compared to their cost and the actual dollar costs are relatively low as compared to other office and manufacturing equipment. These machines save money in the long run and can help produce tangible income. Professionals expect powerful machines that solve problems. The manufacturer's brand name on the machine they use is probably not as important to them as whether or not their business problems are being solved.[28] This is why the computer dealer's task is so instrumental.

Methods of Promotion

Buyers go to computer dealers and sellers with specific problems that need to be solved. It is important that computer manufacturers make efforts to educate these dealers on the versatility of their machines. The manufacturers need to assist the dealers in becoming aware of what software packages are available and workable on these machines and provide ideas on how to promote the product lines to the business buyer.

Software availability is vital to the promotion of microcomputers. Manufacturers usually line up software contracts before the product is released and sometimes even before it is manufactured.[29] Software has a major influence on hardware sales because buyer want the machine that provides the largest variety of applications and solutions to their problems.[30]

Advertising in periodicals is the prominent method of promotion in this industry. The actual ads are frequently not as important as the critiques that are written on the machines in the various microcomputing journals and periodicals. These reviews report the positive and negative attributes of these machines and have a strong influence on whether they make much of an impact on the market. Given the fact that several of these computer magazines primarily cover the same machines, the multiple coverage provide the buyer added information about a considered or possessed machine and increases the confidence of the potential or actual purchaser about the machine.

The Confidence Factor

Confidence is an important factor in convincing potential customers into becoming buyers. Since the industry is so for a manufacturer to communicate to buyers that their products will be supported for several years into the future. No one wants to own an orphan. Steven Greenberg, president of Anametrics Services, a marketing agency for Commodore International Ltd. stated that "One of the premiums people are willing to pay for (when purchasing a microcomputer) is that if a screw falls out of a unit, they will be able to purchase that same screw in six months."[31] It's even been claimed by Apple that Apple has helped boost confidence in their company be never making a computer obsolete.[32]

Distribution

The most frequently used distribution channels are through direct sales, dealers and VARs (value added resellers). VARs, "depend on their ability to provide a hardware and software system solution," contribute over 17% of hardware sales.[33] IBM, Apple and AT&T all use both direct sales and retail dealers as distribution channels. Compaq, on the other hand, has developed a strategy of providing security to their dealers by using them as their sole channel.[34] They depend on dealer loyalty and shelf space for their success. They also provide the dealers with generous discounts and liberal return policies.[35] This is a major contributing factor for Compaq's success because dealers tend to promote products which provide large profits.[36]

Conclusion

The microcomputing industry is a very risky venture that cannot be conquered without a successful marketing strategy. A necessary but not sufficient part of this strategy requires having a "quality" product in the eyes of the buyer. Current conventional wisdom even requires IBM compatibility. While manufacturers may provide support for software development, independent software firms provide a necessary ingredient for successful hardware sales; a large variety of available software. While microcomputers started out with very small amounts of RAM, the original Apple II bragged of possessing 4 K and the IBM PC was introduced with 16 K, the more memory the better is now the rule. A producer must get exposure in periodicals and trade journals. In addition a manufacturer must keep track of even minute changes in the market place, and provide continued incentives for dealers to promote their product. If microcomputer manufacturers are willing to do all of these things, they have a very good chance of being successful in the market place.

[1] Richard Teach "Marketing Problems in High Technology" Technology and the World Around Us International Congress on Technology and Technology Exchange, 1985; pp. 394
[2] -----"Of Cats and Cat Food" Forbes; Dec 5, 1983; pp. 52
[3] William J. Stevenson, Production/Operations Management Richard D. Irwin, Inc. 1982; pp. 239.
[4] -----"Observers See Big Backdown From Industry's Blistering Growth"; PC Week, Mar 26, 1985; pp 107.
[5], [6] Ibid.

[7] -----"AT Compatibles Vendors Racing Against Time", PC Week, May 21, 1985; pp 119.
[8] -----"512K Mac: Packing The Missing Punch"; Creative Computing; Feb, 1985; p.46
[9] -----"Can John Sculley Clean Up the Mess At Apple?" Business Week, July 29, 1985; p 70
[10] -----"IBM Images" Creative Computing, July, 1985; p 86.
[15] -----"The STM PC Portable": Popular Computing, Aug, 1985: p 97.
[16] -----"IBM Images"; Creative Computing; July, 1985 p. 86.
[17] -----"No Margin For Error"; Forbes, Jan 14, 1985 p 286.
[18] -----"Business At Compaq Is Better Than Ever"; PC Week Aug 6, 1985, p 112.
[19] -----"Red Ink, New Lines Hit PCs Business Marketing; Aug., 1984; p 9.
[20] -----"It's Anybody's Race Now in Home Computers"; Business Week; Jan 21, 1985; p 32.
[21] ----- "IBM Rivals Are Glad The PC2 Isn't Ready"; USA Today; July 22, 1985; Business Section page 1.
[22] Idid.
[23] Keith Thompson "Will Computers Go Homeless" Microcomputing Sept., 1984; p6.
[24] ----- "Amiga May Move Commodore Out of Toyland"; PC Week; Aug 6, 1985; p 19.
[25] Campus Sales and Research New York Times News; Jan 20, 1984; p 8.
[26] ----- "Apple's Strategy To Move Mac Off the Beach": Electronic Business; Sept 15, 1984; p 86.
[27] ----- "Who Will Byte Apple Next? Or, Computers Tempt Women, Too" Merchandising; Feb, 1984 p 16.
[28] ----- "As Technology Matures...Computing's Highrollers Turn to Marketing": Business Marketing; Jan, 1985, p 96.
[29] Robert Sobel, IBM Colossus In Tradition: Truman Talley Books' 1981; p 344.
[30] ----- "Apple Takes On Its Biggest Test Yet" Business Week; Jan 31, 1983; p 70.
[31] ----- "AT&T Building Ad Attack for Computer Bow": Advertising Age; April 2, 1984; p 60.
[32] ---- "Apple Cart": Creative Computing; Jan, 1985; p 167.
[33] ----- "Value-Added-Resellers Pursue Business Markets With Support and Services": Mini-Micro Systems; Aug, 1984; p 205.
[34] ----- "No Margin For Error": Forbes; Jan 14, 1985; p 286.
[35] ----- "Why Compaq Must Try Harder To Stay No. 2": Business Week; May 13, 1985; p 136.
[36] ----- "Computer Squeeze IBM's Christmas Season Price Cuts Will Pinch Retailer's Already Shrinking Profits: Fortune; Nov 26, 1985; p 243.

The Use of Price Discrimination as a Demand Management Technique in the Service Sector: The Case of Tourism

Michael H. Morris, University of Central Florida
Duane L. Davis, University of Central Florida

Abstract

Price discrimination represents a valuable, but often overlooked, pricing tool to the marketing manager. This is especially the case in the marketing of services. This paper briefly reviews the theoretical justification and legal implications of price discrimination. The results of an exploratory study on attitudes and behaviors regarding price discrimination in tourism are summarized. Suggestions are made for further research.

Introduction

The nature and dimensions of service marketing activities are becoming increasingly well-known in the marketing literature (Lovelock 1984). This literature suggests that service marketing is indeed a significant area of study in contemporary marketing thought. Various published articles and texts address the unique aspects of service marketing (Rathmell 1974; George and Marshall 1984; Berry 1980).

One of the aspects which creates a potential problem for marketing stems from the fact that services in general cannot be inventoried. This "inventory problem" leads to the situation where irregular demand coupled with constrained production capacity can lead to the possibility of lost revenues due to not enough production capability, or substantial costs, due to excess production capacity. Managerial responses to the "inventory problem" in the service sector have largely been viewed from two opposing perspectives (Sasser 1974 and Lovelace 1984). Of course, the astute manager will usually attempt to blend both of these perspectives to arrive at some kind of optimizing strategy to this perplexing problem.

The first perspective can be considered a supply side or capacity response. The type of response typical in this approach includes the addition of part-time staff, rental of extra facilities, laying off of staff, automation and creative scheduling. These are all potential capacity expanders or reducers as demand fluctuates (Sasser 1976). The opposing perspective views the task as a demand problem. Here, such techniques as developing a formalized reservation system, implementation of a formalized queing structure, demarketing, and marketing mix inducements (off-peak pricing; promotional campaigns designed to encourage the use of slow times, etc.) have all been used to varying degrees to minimize the dysfunctional consequences of not being able to inventory a service.

The role of price, in particular price discrimination, as a means to modify demand patterns has long been acknowledged by markets. Despite this acknowledgement, little research has been conducted on either the use of price discrimination techniques or the views of management on their overall effectiveness. As a result, this paper seeks to examine the price discrimination issue in more depth. More specifically, the present paper first reviews the conceptual foundations of the discrimination issue, then presents the empirical findings of a pilot study designed to identify management views about price discrimination, its actual use, and its perceived effectiveness in one service industry; namely, the tourism industry in Florida.

Conceptual Foundations of Price Discrimination

While price discrimination is a widely used marketing tool, it is frequently misunderstood by practitioners and academicians alike. This misunderstanding is due to varying definitions (Monroe 1979) and the ambiguous legal situation which surrounds the price discrimination issue (Johnson and Schneider 1984). As a result, these two aspects are addressed in order to clarify the conceptual framework that this study was conducted under.

Conceptually, price discrimination can be defined as the sale of technically similar products at prices that are not proportional to the marginal costs of manufacture, sale, and delivery, with due allowance for risk and certainty (Koch 1974, p. 307). In other words, price discrimination can be said to occur if

$$\frac{\text{Price}_1}{\text{Marginal Cost}_1} \neq \frac{\text{Price}_2}{\text{Marginal Cost}_2}$$

where 1 and 2 represent the sale of technically similar products (Stigler 1966, 209-10). The reason price discrimination is defined in this manner is to account for the situations where the prices of two products are equal but the marginal costs are different. Under this definition, price discrimination is said to occur even though there is no absolute difference in the price of the products.

The primary reason for a firm to use price discrimination in its marketing programs is to increase profits. The basic requirements for price discrimination to be used effectively, and thereby increase profits, are that there are two or more identifiable classes of buyers whose elasticities of demand for the product differ appreciably, and that can be separated at a reasonable cost (Stigler 1966, p. 210). If these requirements cannot be met, then there is little likelihood that price discrimination would be used as a viable marketing strategy.

In practice, price discrimination is implemented in a variety of ways. A useful classification to examine this issue is the one of systematic and unsystematic discrimination. Unsystematic discrimination is usually evident in price bargaining, or haggling, where the buyer attempts to negotiate the best possible price from the seller. Here, there appears to be no consistency or systematic basis for price differentials except for the voracity of the buyer.

Conversely, systematic discrimination exists when there is some underlying basis for separating market segments and subsequently charging discriminatory prices in one or more of these segments. Systematic discrimination is widely used in our "one-price" policy society. Here, such factors as age (children's discounts, senior citizens' discounts), sex (ladies' days and nights, club memberships), location of buyers (zone pricing, in-state versus out-of-state tuition), buyer's income or earning power (professional association dues, doctor's fees), time (off season/hour discounts, product variables (branding and product size) to name a few, have all been utilized as bases for price discrimination (Watson 1963; Monroe 1979).

Legal Aspects of Discrimination

The pillars of legislation dealing with price discrimination are the Clayton Act (1914) and the Robinson-Patman Act (1936). Neither piece of legislation prohibits price differences per se. Instead, the legislation, particularly the Robinson-Patman Act, deals with the situations when it may be legal, and illegal, to discriminate on the basis of price (Monroe 1979). It is commonly accepted that the Robinson-Patman Act and the price discrimination issue overall is one of the most confusing and complex laws ever enacted by Congress (Johnson and Schneider 1984). This situation has led to a number of evaluations of the Act and its implications for marketers (Posner 1976; Stern and Eovaldi 1984, pp. 263-79).

For the purposes of this paper, the legal issues surrounding the price discrimination issue in the tourism sector are minimal. This state of affairs exists because price discrimination in selling to ultimate consumers is assumed by the Federal Trade Commission, the courts, lawyers, and marketers to be legal (Monroe 1979, p.250). As a result, the use of price discrimination as a marketing tool in the tourism industry, or any consumer-oriented industry for that matter, should be strictly related to the economic aspects of the technique and the views of management toward its usage. The present paper deals with these issues.

A Case Study

To better understand price discrimination in services marketing, we surveyed managers of tourist attractions within the State of Florida regarding their attitudes and behaviors toward the practice. Tourism is an especially illustrative type of service, in that this industry has not only experienced dynamic growth, and is subject to seasonal and cyclical demand fluctuations, but also exemplifies many standard characteristics of a service. Specifically, tourist attractions sell an intangible good with which production and consumption occur simultaneously, the customer must be present, the "product" cannot be inventoried, and the service cannot be separated from its source. While they strive for standardization and uniformity, there is also some variability in what is delivered to each customer. Moreover, most tourist attractions are both equipment-based and people-based. The employees (or actors, as the company prefers to call them) at Walt Disney World are as critical as Space Mountain or the monorail.

Method

Following a pretest using small local attractions in the Orlando, Florida area, a structured questionnaire consisted of scaled end multi-response items, as well as a few open-ended questions. The survey was an exploratory attempt at identifying the extent of price discrimination, bases for discrimination, effectiveness of the practice, satisfaction with the practice, and future intentions regarding its use. A self-addressed, stamped envelope was also included. The use of mail was decided upon because of the geographic dispersion of the sample, cost constraints, the fact that it allowed respondents time to respond at their convenience, and, importantly, the threatening nature of questions regarding a firm's pricing practices.

The sampling frame consisted of the membership of the Florida Tourbook, published by the American Automobile Association, and those listed in the Orlando Sentinel Adventure Guide. Of interest were those attractions that charged an admission fee. While the total population is relatively small, a reliable listing of all such attractions was unavailable at the time of the study. A total of 158 surveys were mailed, with 70 attractions responding, for a response rate of 42 percent. Of these, sixty-seven charged an admission fee. Mailing took place in early March of 1985, the beginning of a very busy season for Florida tourist attractions. This may have affected the response rate.

Results

Because of the threatening nature of the subject, and the promise of respondent anonymity, only two self-descriptor questions were included, age of attraction and size. Most of the respondent organizations (84 percent) had been in business at least ten years, with only seven percent having been in existence four years or less. Size was measured by 1984 annual attendance figures. A total of 16 respondents (25 percent) had fewer than 50,000 in attendance, while 29 (45 percent) had between 50,000. Only eight (13 percent) attractions handled more than 500,000 patrons.

For price discrimination to be a meaningful tactic, price itself would have to be a salient attribute in the buyer's evaluation process. This would seem to be the case, at least in the minds of those who manage tourist attractions. Based on a five-point scale (very important-not important at all), 62 percent of the respondents indicated price was important or very important, 9 percent rated it of average importance, and 29 percent felt it was of little or no importance.

It appears that price discrimination in tourism is a relatively popular practice. Ten different bases for discrimination were investigated: age, sex, residency in Florida, student status, membership in the armed forces, size of group, membership in various organizations (e.g., Boy Scouts), time of day, special events, and "other." As illustrated in Table 1, the most heavily used form of discrimination is that based on age, followed by party size, membership in certain organizations, special events, and student status. Only gender has not been used at all. This was interesting given the various occasions where its use might seem appropriate, such as ladies' nights, Mother's Day, and Father's Day. The "other" category included members of the clergy, law enforcement officers, or attraction employees, among others. Separately, the tendency to use any of these factors was not significantly related to the perceived importance of price on the part of attraction managers.

Table 1

Bases for Price Discrimination and Their Usage

Basis	Used now, in the past or sometimes	Never used
Age	87%	13%
Sex	0%	100%
Florida Resident	28%	72%
Student	61%	37%
Military	47%	54%
Party Size	71%	29%
Organizations	68%	32%
Time of Day	19%	81%
Special Events	66%	35%
Other	52%	36%

The popularity of age as a factor in pricing may be due to a number of factors. Not only is it a commonly accepted practice in service businesses, but age groupings are fairly easily identifiable, reachable, relatively large in size, and often fairly homogeneous with regard to their needs and buying behavior. The mean number of age categories used by tourist attractions was 2.25. In fact, 71 percent of all attractions use between two and three age groups in their admission price structure. The most frequently used groups include a children's category (usually those under age 12) and a regular adult group. Also mentioned was a junior category and a senior citizen category. Somewhat suprisingly, however, only 22 percent of the attractions reported that they offered special admission prices to senior citizens.

Three-fourths of the respondents had a "free admission" pricing category, usually for those under a certain age, but in one case, for those who were 80 years and older. Those attractions that tended to use more age categories were also more likely to use other (non-age) bases for price discrimination.

Discrimination on the basis of individual usage (i.e., quantity discounts) is not a heavily utilized tactic. For example, in examining the usage of special admission rates for various lengths of time (e.g., two-days, three-days, a week), it was found that the overwhelming majority did not use multiple-day passes. At the same time, 41 percent reported the use of annual passes, 14.5 percent provide season passes, and 10 percent offer a lifetime pass.

Another widely used form of price discrimination is the use of coupons. That is, a customer is given a price break on presenting pre-issued coupons. The majority of respondents (58 percent) currently utilize coupons. The managers attributed from zero to 40 percent of total 1984 admissions to coupon use, but with a mean of only .5 percent. Other reduced price admissions accounted for zero to 76 percent of total admissions, with a mean of 20.5 percent.

Given the tendency on the part of tourist attractions to use price discrimination in some form, the question becomes "why?". That is, what are their underlying objectives? The largest group (59 percent) stated that their main objective was to increase attendance. Some had more specific segmentation objectives in trying to raise attendance, such as to encourage more attendance by families, large groups, or school groups. While none specifically mentioned price elasticity, implicit in this attendance objective is an assumption on their part that some groups are more price sensitive than others. Others cited a fairness objective, both in making the attraction accessible to segments of society to which it might seem less accessible (e.g., military personnel) and in reflecting the value received by different segments. Still others cited the need to meet government requirements as an objective.

An attempt was also made to assess the perceived effectiveness of price discrimination tactics. Almost 54 percent of the respondents indicated that charging different prices to different customers was either a very effective or fairly effective tactic, with 18.5 percent indicating indifference, and 23.1 percent claiming it was ineffective. Those who see it as ineffective felt that price discrimination did not significantly affect those who were not currently attending, while others would come any way (at a higher price). The most effective bases for discrimination appear to be age, student status, group size, and organizational membership. Relatively less effective was military status.

Finally, the key concerns and future use plans of managers regarding this practice were assessed. Where there are concerns, they center around administrative problems and fairness problems. Some managers felt price discrimination can pose accounting and budgetary difficulties, is not always fair, and that the practice caused customer resentment and confusion. One respondent from a large attraction also suggested a concern that price discrimination might detract from the organization's quality image. None cited a concern with legal problems.

Tourist attraction managers are generally satisfied with their current amount of usage and their current approaches to price discrimination. About 73 percent of them plan no changes in their pricing method in the foreseeable future, while 10.6 percent indicated the likelihood of increased use of price discrimination. There were 7.0 percent who anticipated moving away from such tactics.

Table 2

Major Concerns about Price Discrimination

Concern	Present Responding
Accounting Problems	11.5%
Customer Resentment	3.8%
Customer Confusion	5.8%
Fairness	11.5%
Accessibility	5.8%
No Concerns	26.9%

Discussion

Based on these results, it appears that price discrimination is a relatively important demand management tool in the tourism industry. Tourist attractions rely on price discrimination to a significant extent. The primary objective is to influence revenues through greater capacity utilization. The approach can be termed systematic, based on our earlier discussion, as it is predicated on an underlying assumption that there are individual market segments with distinct demand curves. This rationale is judgemental, at best, in that it is not typically based on empirically derived demand curves or elasticity calculations. In some cases it may simply be custom or wishful thinking. In fact, the bases for price discrimination which are used most frequently tend to be the more traditional and easily applied approaches.

A sizeable number of managers embrace the use of price discrimination as an effective tactic. Their problems with the practice tend to be more operational than legal or ethical. At the same time, these managers need to do more to methodically assess the impact of discriminatory schemes, both on revenues from the target segment and on overall revenues. An interesting issue in services marketing concerns the impact of price discrimination on those segments who are charged standard prices, especially over time.

Other research issues suggested by these findings include the need to better establish the relationship between the saliency of the price attribute to consumers and the impact of price discrimination. Is price discrimination not actually a benefit segmentation scheme? This relationship gets more complex, however, when consumers use multi-attribute decision rules to make purchase decisions.

In addition, it would be an important contribution if specific operational criteria could be developed for evaluating different market segments as potential candidates for price discrimination. Examples might include segment price elasticity, segment cross-elasticity, segment homogeneity, segment size, segment reachability, and price saliency. Related to this issue is the question of whether there are generic bases for price discrimination which are consistently more effective (such as age in this study), or whether effectiveness is situation specific.

Study Limitations and Implications for Future Research

The present study contains two major limitations which affect the generalizability of the study's results. First, the study is only exploratory because there is a current lack of empirical research dealing with the price discrimination as a demand management technique and the related measurement problems.

Second, the small sample size and limited population (i.e., Florida tourism industry) makes the generalization of the study's results tenuous at best. The exploratory nature and lack of external validity in this study leads to the need for more in-depth research across a wider population before any conclusions can be made on the nature and effectiveness of the price discrimination issue in the demand management area.

References

Leonary Berry, "Services Marketing is Different," Business (May-June), 1980, 24-29.

William R. George and Claudia Marshall, Developing New Services, Proceedings Series (Chicago: American Marketing Association) 1984.

James C. Johnson and Kenneth C. Schneider, "Those Who Can, Do -- Those Who Can't . . .: Marketing Professors and the Robinson-Patman Act," Journal of the Academy of Marketing Science, (Summer 1984), Vol. 12, No.3, pp 123-138.

James V. Koch, Industrial Organization and Prices, (Englewood Cliffs: Prentice-Hall) 1974.

Christopher Lovelock, Services Marketing, (Englewood Cliffs: Prentice-Hall) 1984.

Kent Monroe, Pricing (New York: McGraw-Hill) 1979.

Richard Posner, The Robinson-Patman Act (Washington, D.C.: American Enterprise Institute for Public Policy Research) 1976.

John Rathmell, Marketing in the Service Sector (Cambridge, Mass.: Winthrop) 1974.

W. Earl Sasser, "Match Supply and Demand in Service Businesses," Harvard Business Review (November/December) Vol. 54, 1976, 133-40.

Louis Stern and Thomas Eovaldi, Legal Aspects of Marketing Strategy (Englewood Cliffs: Prentice-Hall) 1984.

George Stigler, The Theory of Price (London: Macmillan Company) third edition, 1966.

Donald Watson, Price Theory and Its Uses (Boston: Houghton Mifflin) 1963.

MARKETERS SHOULD ENCOURAGE BARGAINING

Ted Mitchell, University of Nevada Reno

Marketers Should Encourage Bargaining

Abstract

Bargaining models suggest an optimal pricing strategy that is not necessarily consistent with the conventional theory of setting price with respect to marginal cost and marginal revenue. This paper suggests that sellers should negotiate with large accounts and should set their list prices and discount structures for small accounts in terms of the target profit derived from a bargaining model.

Introduction

Many marketing managers recognize that bargaining for a major account with a major customer is a useful strategic alternative to the conventional target marketing strategy for achieving penetration in a new market. However, firms that are well established in a market tend to discourage bargaining with customers in the belief that bargaining is not an optimal process for achieving profits.

There are four extreme positions for the seller in the spectrum of economic situations:

1) The powerless environment of perfect competition in which the firm is a price taker.

2) The cut throat environment of bidding against other sellers for business from a monopsonist.

3) The problematic environment of bargaining with a customer in a monopoly versus monopsony situation.

4) The "take it or leave it" pricing environment of the monopolist as a price setter.

It is generally believed that the ideal market condition for sellers seeking maximum profits is the monopoly. The power of the monopolist flows from facing a downward sloping demand curve. It is the power to pick a price and adopt a policy of "take it or leave it". The conventional wisdom is that managers should seek strategies that will allow them to move from the undesirable positions of perfect competition, cut throat bidding and bargaining towards the position of the monopolist.

Firms are advised to adopt the marketing concept as a means to avoid the powerless environment of perfect competition (figure 1). Firms which successfully implement the marketing concept can gain a competitive advantage by designing product offerings that have downward sloping demand curves.

A well known mechanism for moving away from the bidding situation is to adopt a strategy of joint problem solving (figure 1). "By helping the customer to define his own needs, the salesman entered the sale at the very beginning, and in this way, could often place his products at a considerable competitive advantage (Ring et.al., 1984 p. 520)." The strategy of convincing the monopsonist that a product offering is a "unique" solution to the purchasing problem moves the seller into a potential bargaining situation.

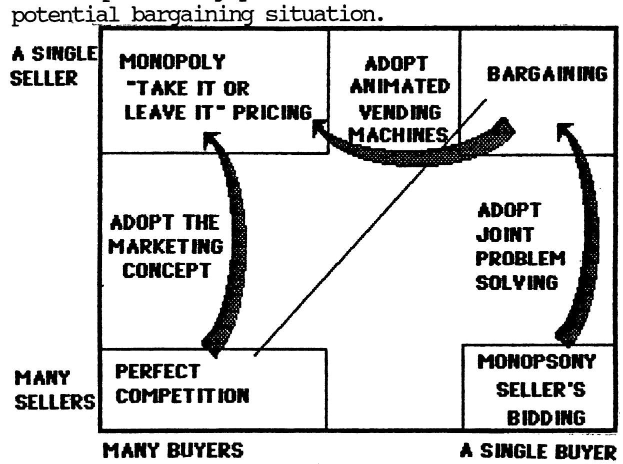


FIGURE 1
THE CONVENTIONAL WISDOM THAT MONOPOLY IS IDEAL FOR SELLERS

Bargaining with a customer who has a unique problem to which the seller has a unique solution is the classic case of monopoly versus monopsony. The conventional wisdom is for sellers to try and avoid bargaining situations whenever possible. Vending machines don't bargain. Therefore, the most obvious mechanism for avoiding bargaining situations is to replace salesmen with clerks who behave as animated vending machines and have no power to bargain (figure 1). Clerks, of course, can be trained to be persuasive and tailor product presentations to the specific needs of the customer in question.

It is, of course, well recognized that in many market situations customers have the power to engage their suppliers in a bargaining process and wring out extra concessions. Most sellers are reticent about engaging in the process because they believe they are giving something for nothing. For example, many suppliers believe that "in most instances, the cost increase to the supplier as a result of giving in to the retailer's demands (e.g. for advertising monies) will exceed the increase in revenues that he will gain from the action. Otherwise, the supplier should have incorporated the increased costs into his marketing strategy (Dickinson, 1981 p. 277)." Thus, the discounts and allowances, that some retailers have the power to successfully demand, are often perceived as costs which detract from an optimal marketing mix, but are perceived as costs necessary for keeping key accounts.

The belief that the monopoly position of "take it or leave it" pricing is the seller'a best position for optimal mix and profits discourages bargaining. Modern marketing theory virtually ignores the subject.

The purpose of this paper is to demonstrate that bargaining in bargaining situations is a superior approach to the monopolist's formula of setting price. There are higher profits for the seller and greater savings for the buyer in bargaining than in following the monopolist strategy of selecting the optimal mix with "take it or leave" pricing. Marketers should encourage bargaining in bargaining situations. It is likely that there are many firms losing sales and profits because of the misguided view that the monopolist's strategy is an optimal strategy. Marketers should encourage these firms to give their salespeople the power to bargain and to train them in sound bargaining tactics (figure 2).

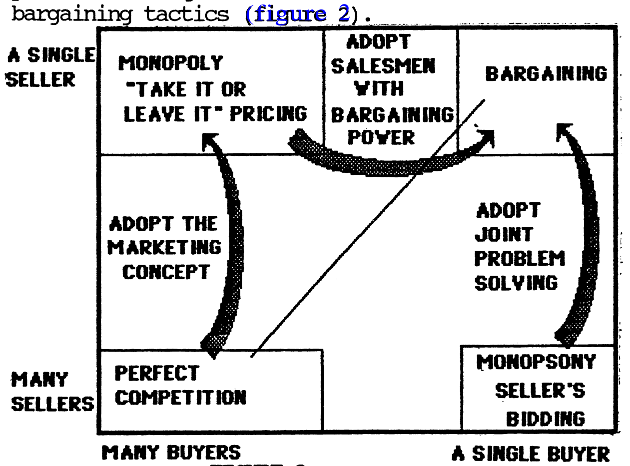


FIGURE 2
FOR MANY FIRMS BARGAINING IS A MORE DESIRABLE POSITION

It is obvious that the cost of training and maintaining salespeople who are professional bargainers is higher than the cost of using animated vending machines. It is also more difficult to manage salespeople who have the power to bargain than it is to manage a conventional salesforce, but in many cases the benefits of creating transactions through bargaining outweigh the extra costs of managerial complexity. Marketers should encourage bargaining in those cases where the joint benefits of bargaining exceed the additional costs of the bargaining process.

The monopolist's strategy might appear to be the optimal strategy if the number of customers is so large (e.g., consumer markets) that the costs of bargaining with each individual outweigh the potential benefits. However, firms that are facing downward sloping demand curves in the consumer market can benefit from the bargaining model of pricing. This paper will demonstrate how prices derived from the bargaining model can be incorporated into the "target-profit" pricing model (Kotler, 1984) used by many firms.

PROFITABLE BARGAINING

Most marketers are familiar with the tidy lines and functions on the diagrams economists use to represent supply and demand curves. Marketers often define the demand curve as the customer's optimal purchase response to the alternative prices that the seller might choose for a given offering. The optimal pricing formula for firms facing downward sloping demand curves is well known. The firm should set its production level Q_m (figure 3) at the point where marginal cost equals marginal revenue and set its price P_m at the level where the customer demand is just sufficient to purchase the quantity Q_m. Most marketers are familiar with the argument that under competitive conditions the firm is forced to adopt the competitive price P_c and the market will respond by purchasing the optimal economic quantity Q^*. The firm's profits with a competitive price P_c is, of course, always lower than under the monopoly price P_m. The monopoly always produces less output Q_m than the optimal output Q^*. Thus, sellers are assumed to seek monopoly conditions and economists always advise governments to encourage competition.

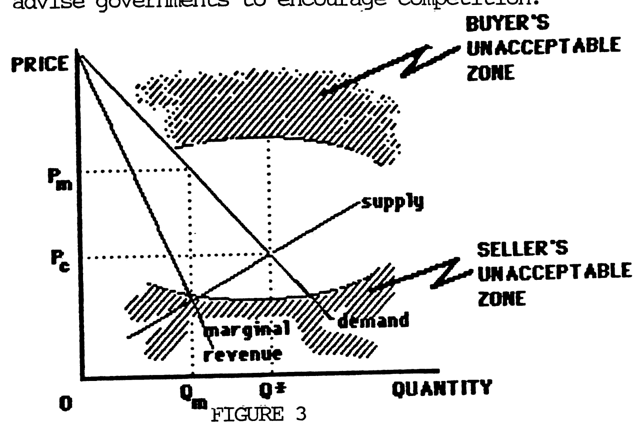


FIGURE 3
THE CONVENTIONAL ILLUSTRATION OF SUPPLY AND DEMAND

If a supplier chooses the monopolist's marketing mix and a list price P_m, then powerful buyers who successfully demand price concessions (e.g. advertising monies or rebates) are, of course, moving the seller away from an optimal point. In such cases, sellers can rightly assert that if the advertising monies were optimal, then they should have and would have been incorporated into the original marketing mix.

A MORE DETAILED REPRESENTATION OF SUPPLY AND DEMAND

Many marketers mistakenly believe that points which are not on the customer's optimal response function (i.e., demand curve) are unacceptable and/or unprofitable. The utility functions which economists use to create the conventional supply and demand curves also indicate that there are many transaction points which are not on the demand curves which are profitable and/or desirable for both buyer and seller (figure 4).

The potential for buyer and seller to achieve a superior transaction through bargaining to the transaction achieved using the monopolist's formula has been recognized by economists for many years (Bowley, 1928;Fellner, 1947). For example, the monopolist's solution to the serial monopoly problem illustrated in figure 4 is for the chemical supplier to set a price of P_m= \$180 per drum with the expectation that the retailer will respond with the optimal purchase of Q_m=10 drums. At the transaction point (P_m=\$180, Q_m=10), the supplier makes a total profit Z_m of \$322 and the retailer makes a total profit of \$122. The total profit for the channel system is \$444.

The optimal output Q^*=15 drums is achieved under competitive conditions where supply and demand

PRICE/DRUM	9	10 (Q_m)	11	12	13	14	15 (Q^*)	16
200	319,103	342,102	363,99	382,94	399,87	414,78	427,67	438,54
P_m 180	301,121	322,122	341,121	358,118	373,113	386,106	397,97	406,86
P_{b1} 160	283,139	302,142	319,143	334,142	347,139	358,134	367,127	374,118
P_{b2} 140	265,157	282,162	297,165	310,166	321,165	330,162	337,157	342,150
120	247,175	262,182	275,187	286,190	295,191	302,190	307,187	310,182
100	229,193	242,202	253,209	262,214	269,217	274,218	277,217	278,214
P_c 80	211,211	222,222	231,231	338,238	243,243	246,246	247,247	246,246
60	193,229	202,242	209,253	214,262	217,269	218,274	217,277	214,278
40	175,247	182,262	187,275	190,286	191,295	190,302	187,307	182,310

QUANTITY IN DRUMS

demand curve — monopoly transaction — bargaining transaction

supply curve — competitive transaction

SSS,BBB — first number SSS is seller's total profit; second number BBB is buyer's total profit

FIGURE 4
THE POTENTIAL PROFITABILITY OF ALL TRANSACTIONS

intersect resulting in a competitive price of Pc=$80 per drum. At the competitive transaction (P_c=$80, Q*=15) the supplier's total profit Z_c is reduced to $247 and the buyer's total profit is increased to $247. The total profit for the channel increases by $50 to a total of $494.

The quantity of 15 drums is considered optimal because all the transactions involving Q*=15 drums result in total profits of $494 and no other quantity produces a higher total profit for the channel. However, from a bargaining point of view, there are negotiated transactions at P_{b1}=$160 per drum and P_{b2}=$140 per drum for Q*=15 drums which provide superior profits Z_b for both the buyer (i.e., $127 and $157) and seller (i.e., $367 and $337) to the monopoly transaction at $180 per drum. The optimal transaction for the seller is not at the monopoly price, but rather, it is at the lower price of P_{b1}=$160 where the customer buys Q*=15 drums. In the transaction (P_b,Q*), the seller gains $45 and the buyer gains $5 in their respective total profits compared to the monopoly transaction (P_m,Q_m).

The example makes it obvious that bargaining can result in transactions that are better for buyer and seller than using the conventional formula for maximizing profits in terms of the customer's downward sloping demand curve. The formal proofs and analyses of such problems are clearly presented in the economic literature (Fellner,1949; Vatter et.al., 1978).

Although empirical studies (Siegal and Fouraker, 1960; Mitchell and Heeler, 1981 Stern, Sternthal and Craig, 1973) consistently support the hypothesis that the bargaining process results in transactions involving the optimal quantity Q*, bargaining is not usually considered to be a satisfactory pricing mechanism for the purposes of economists because there is no determinant solution. However, marketers have different concerns than economists and the belief that bargaining is not an optimal situation for sellers should be considered an obvious myth. A myth should not prevent marketers from overlooking the potential of bargaining in bargaining situations to improve their total profits.

The immediate implication from analyzing the bargaining situation is that optimal profits are not necessarily associated with the conventional wisdom of setting price in terms of marginal cost and marginal revenue. A second implication is that if a firm produces at the lower levels of output associated with Q_m rather than Q*, then the firm is not gaining the long term cost advantages of moving down the learning curve as quickly as it could.

THE PRACTICAL IMPLICATIONS FOR SELECTING PRICES

It is seldom that sellers find themselves in the classic case of having a unique buyer in the serial monopoly situation discussed above. The firm's downward sloping demand curve is more likely to represent the aggregated demands of many different buyers. However, the implications of the bargaining versus conventional pricing in the situation remains true. The practical problem is to establish a mechanism that will allow the seller to choose his optimal bargaining price P_b and have the customer respond with a total purchase of Q* when the market's optimal response (i.e., demand curve response) is to purchase Q at P_b and where Q is less than Q*. For example, if the supplier (figure 4) selected his optimal bargaining price P_b^1=$160, then the market will respond by purchasing Q=11 drums.

The practical solution to this problem is for the seller to establish a quantity discount structure or rebate structure based on his knowledge of his customers' average or specific needs. The quantity Q^* establishes the quantity necessary for the manufacturer to sell at P_{b1} and Q^*/n (where n=the number of customers, figure 5) establishes the average order size that the n customers must adopt if the optimal transaction (P_{b1}, Q^*) is to be realized.

BARGAINING WITH IMPORTANT CUSTOMERS

Bargaining implies that optimal output Q^* is achieved, and that all customers will be better off with prices and volume discounts derived from a bargaining analysis than under monopoly pricing. However, some customers will do better than others because they have the power to induce the seller into a bargaining process. For example, a powerful

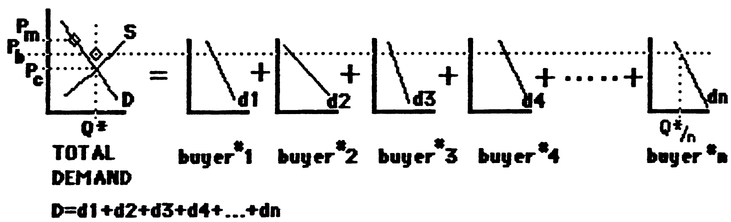


FIGURE 5
AN EQUIVALENT BARGAINING PRICE FOR MANY CUSTOMERS

customer in the serial monopoly (figure 4) may be able to bargain a 15 drum transaction for a price of P_{b2}=\$140 per drum and a weak customer may have to accept the list price with discounts P_{b1}=\$160 per drum.

The inducement for the market to purchase the optimal aggregate quantity Q^* is to have the quantity discount structure induce each individual account or customer to purchase Q^*/n at price P_{b1}, rather than the monopoly quantity Q_m/n at price P_m.

In theory, every customer is a unique customer with a specific downward sloping demand curve. Therefore, in theory, every customer is a potential bargaining problem. However, in practise, the bargaining process is expensive and most firms will only bargain with large and/or important customers. At the point in time when the bargaining process is initiated with a customer, the firm is in the position of considering the customer as the n^{th} or marginal account because the marginal costs of serving the account can be determined. Thus, the situation can be studied as if it were a classic case of serial monopoly.

TARGET-PROFIT PRICING AS OPTIMAL PRICING

The traditional target-profit pricing model is a cost based pricing model that is often criticized as suboptimal for failing to account for customer demand and its implicit assumption that quantity determines price. The conventional view of the model (figure 6) is to assume that the firm establishes a target level of production Qt (often measured in terms of plant capacity) and then determines its total costs T to produce Qt. The final price per unit is determined by adding a "fair" profit Z to the total costs T and dividing by Q^t (e.g. $(Z+T)/Q^t$).

The seller's major weakness in such situations is that he is already committed to making a particular offering in the market. That is to say, in the absence of a negotiated transaction, a seller can not say that he will refuse to trade with the customer, whereas the customer can commit himself to the policy of "no deal, then no transaction." The seller's major strength in such situations is that the seller's marginal utility for the additional profits from the marginal customer may be considerably lower than the customer's marginal utility for any profits or benefits to be gained from accepting the seller's offer. The final price for the optimal quantity Q^* will be determined by the relative bargaining strengths of the two sides. Under conditions of equal power the total net gains available from bargaining will be split evenly (Nash, 1950; Raiffa, 1982). In any event, the bargaining process leads to a more optimal market solution for both buyer and seller than conventional monopolistic pricing theory.

The target-pricing model is a valid optimizing model if sellers actually choose Q^t to correspond to Q^* determined from the bargaining analysis of supply and demand and the "fair" profit Z corresponds to the anticipated profit Z_b in the bargaining transaction.

Many firms, of course, have been coping with bargaining pressures from key accounts for many years and have had their pricing formula evolve from market experience. Thus, it is possible that the target-profit model (with $Q^t=Q^*$) is a descriptive model of what firms in bargaining situations have been doing for years, but have not had a formal model with which to rationalize and articulate their selections of a target quantity Q^t and a "fair" target profit Z. If we assume that sellers have been following some pricing formula based on an informal analysis of the bargaining process, then the seller's traditional complaint that they have chosen an optimal mix for the system and that they are giving something for nothing to powerful customers is sound logic. However, when powerful customers are able to bargain for a lower price at Q^* than the seller's list price at Q^*, the system is not suboptimal.

CONCLUSION

The belief that bargaining should not be encouraged because monopoly positions are superior positions is a myth. Firms that are facing downward sloping demand curves should evaluate the range of poten-

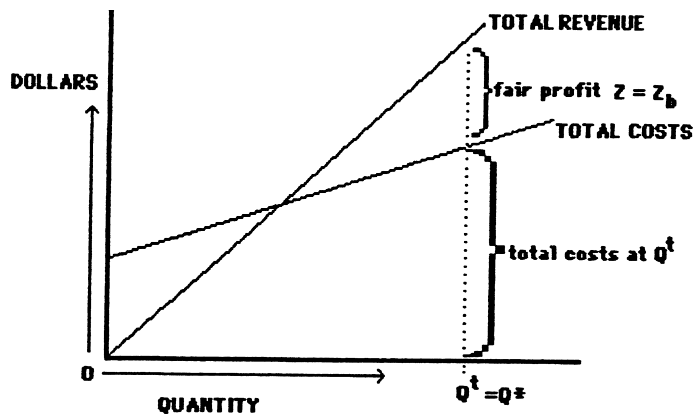


FIGURE 6
OPTIMAL TARGET-PROFIT PRICING

tial contracts that would be possible if they were to bargain with each customer individually before they choose to adopt the conventional pricing formula based on setting marginal cost to marginal revenue. The conventional pricing formula may be over-pricing the product, reducing profit and sales volume and, thus, retarding the firm's progress down its learning curve. Bargaining in bargaining situations can produce transactions with more profit and higher sales volume than the conventional monopolistic pricing formula.

In cases where it is profitable to engage in a bargaining process with key accounts, sales departments should be given more power to bargain and more training in how to bargain effectively.

In cases where there are too many small accounts to bargain with each efficiently, firms should first establish their optimal bargaining prices and production levels through an analysis of the aggregated bargaining situation and then use these figures for determining the optimal output and "fair" profit in a target-profit model. To induce individual customers to respond with purchases that will aggregate to the optimal production level, firms should implement appropriate policies regarding volume discounts and rebates.

REFERENCES

Bowley, A.L. (1928), "On Bilateral Monopoly, "The Economic Journal 38, pp. 651-659.

Dickinson, Roger A. (1981), Retail Management (Austin: Austin Press), pp. 273-280.

Fellner, W. (1947), "Prices and Wages Under Bilateral Monopoly", The Quarterly Journal of Economics (August), pp. 503-532.

_______(1949, Competition Among The Few (New York: Alfred Knopf Inc).

Kotler, Philp (1984), Marketing Management (Englewood Cliffs, N.J.: Prentice-Hall), pp. 705-712.

Mitchell, T. and R. Heeler (1981), "Towards A Theory of Acceptable Outcomes, "Behavioral Science vol. 26, pp. 163-176.

Nash, John (1950), "The Bargaining Problem, "Econometrice XVIII, pp. 155-162.

Raiffa, Howard (1982), The Art and Science of Negotiation (Cambridge, Mass.: Belknap Press).

Ring, L.R., D. Newton, N.H. Borden and E.R. Biggadike (1984), Decisions In Marketing (Plano, Texas: Business Publications Inc.) pp. 518-521.

Siegal, S. and L. Fouracher (1960), Bargaining and Group Decision Making Experiments in Bilateral Monopoly (New York: McGraw-Hill).

Stern, L.W., B. Sternthal and C.S. Craig (1973), "Managing Conflict in Distribution Channels: A Laboratory Study, "Journal of Market Research vol. 10 (May), pp. 169-179.

Vatter, P.A., et.al. (1978), Quantitative Methods in Management (Homewood, III.: Richard D. Irwin Inc.).

THE OLDER RETAIL SHOPPER: A REVIEW AND DIRECTIONS FOR FUTURE RESEARCH

Alan J. Greco, The University of North Carolina at Charlotte

Abstract

The past 15 years have witnessed increased attention to the older consumer. This paper reviews the literature relating to the elderly retail shopper. The major findings of published empirical works are presented and areas for future research are identified. In the future, greater attention should be directed to the analysis of cause and effect relationships and to segmentation of the elderly market.

Introduction

The older consumer market has recently been recognized as one of considerable size and economic potential. The U. S. Bureau of the Census (1984) has estimated the 65 and older population to be 28.6 million in 1985 and has projected this number to increase to 34.9 million (or about 13 percent of the U. S. population) by the year 2000. French and Fox (1985) report that less than 20 percent of this age group live below the poverty level and that their discretionary buying power per dollar of income averages more than that of persons under 50 years old. Thus, the size, growth, and purchasing power of the elderly population should continue to attract the attention of both academicians and practitioners.

The purpose of this paper is to review the empirical research findings pertaining to elderly retail shoppers and their behavior with respect to modes of retail distribution. Current research in this area is organized around patronage behavior, perceived importance of store attributes, and sources of information used in retail shopping and store selection. An examination of this literature will provide an indication of our present knowledge of the elderly retail shopper and suggest directions for future research.

Patronage Behavior

Several common findings have emerged from research on the patronage behavior of elderly shoppers. First, older consumers tend to be store loyal. Second, the elderly seem to patronize department stores more often than members of other age groups. Third, in-home shopping is not commonly used by older Americans. Finally, stores located in central business districts appear to be popular among senior citizens.

Store Loyalty

Gillett and Schneider (1978) in a non-product-specific study of the usage of a community-wide senior citizen discount card found evidence of store loyalty among the 300 respondents. Forty-two percent of the elderly in their study did not use their card because of the distance of participating retailers or because the participating retailers were not regularly patronized by the cardholder. Gillett and Schneider concluded that price discounts alone are not sufficient to alter patronage patterns among a substantial proportion of the elderly. At the same time, Gelb (1978), in another non-product-specific investigation found that 64 percent of the respondents felt that shopping around is more trouble than its worth. However, 57 percent said they would be attracted to a new store that displayed a window sign saying "Welcome Seniors" and 56 percent indicated that they would pay a little more to shop at a store that catered to retirement age people (Gelb 1978).

Several researchers found additional evidence of store loyalty among senior citizens in studies involving specific product classes. Samli and Palubinskas (1972) reported that elderly consumers exhibit a high degree of store loyalty for drugs, food, magazines, tools, and hardware products. At the same time, the elderly were found to be less store loyal when purchasing shopping goods such as apparel and appliances, perhaps indicating a desire for better bargains on these relatively high priced items. Martin (1976), however, found that elderly female apparel shoppers tended not to comparison shop for clothing. These results are corroborated by Lumpkin and Greenberg's (1982) study of apparel-shopping patterns of elderly men and women. These researchers not only found that store reputation is more important to persons 65 and over than to members of younger age groups, but also that the older respondents do not like to try new stores. Finally, in a study of food shoppers, it was found that at the time of the study, 80 percent of the respondents aged 65 and older were shopping at their regular store (Zybtniewski 1979). Shoppers under 65 years of age were prone to shop at more than one grocery store.

Types of Stores Patronized

In a comparison of alternative modes of retail distribution for a variety of consumer goods, Barnes and Peters (1982) noted that consumers aged 65 and over generally prefer shopping at retail stores to mail-order, door-to-door, or telephone shopping. Regarding specific types of stores, Bernhardt and Kinnear (1976) found that persons 65 and over are less likely to shop at discount stores than other age groups. The elderly prefer, instead, to shop at department stores. Martin (1976) found that women clothing shoppers aged 60 and older tend not to purchase apparel in specialty boutiques -- only 1.2 percent of the 60-plus women bought clothing from this type of retailer, while 6.1 percent of the 40-59 years group and 21.6 percent of the 18-30 years group did so. On the other hand, Lumpkin and Greenberg (1982) found that elderly male and female apparel shoppers patronize specialty shops more often than discount stores -- this was not the case with younger shoppers. Their findings did, however, support Bernhardt and Kinnear's (1976) results that the elderly shop most often at department stores.

In-Home Shopping

Contrary to popular belief, in-home shopping is not widely used by senior citizens. In an exploratory study of 75 residents of a public housing complex for the elderly, Mason and Smith (1974) found that 79 percent of the residents did not engage in any form of in-home shopping. In another research project, Mason and Bearden (1978a) found that the elderly rarely engaged in catalogue shopping. In a subsequent article, based upon the same data, Mason and Bearden (1979) reported that only 20.8 percent of their respondents agreed with the statement, "older people prefer to buy groceries by telephone and have them delivered." Lumpkin and Greenberg's (1982) research indicated that the elderly do not use in-home shopping to any greater extent than younger persons.

The Central Business District

Mason and Smith (1974) found that residents of a public housing complex preferred to purchase clothing and personal care items in the central business district, while food, home furnishings, and automobile maintenance services were shopped for elsewhere. Bernhardt and Kinnear's (1976) research also indicated that, in general, older shoppers prefer to patronize central business district merchants.

The popularity of central business district retailers among the elderly may be the result of a continuation of shopping patterns established early in life (Mason and Smith 1974), or perhaps these downtown merchants are more accessible to the elderly via public transportation facilities. The latter would seem to be the case for the elderly shoppers surveyed by Bernhardt and Kinnear (1976) and by Samli and Palubinskas (1972). In both studies, the majority of elderly respondents used a taxi or bus to reach their shopping destinations. These findings are consistent with the fact that nearly 40 percent of the households headed by a person over 65 do not own an automobile (Visvabharathy and Rink 1983).

Several studies suggest that transportation or inaccessible store location may present a problem in shopping trips planning for at least some segments of the elderly consumer market. Mason and Smith (1974), for example, learned that nearly one-third of the respondents in their study of low-income elderly relied on friends or relatives to take them shopping, while 28 percent depended on taxis or buses, and 13 percent walked to nearby stores to shop. In an investigation of older consumers' current needs and wants at the retail level, Lambert (1979) found that 13 percent of their 232 respondents aged 65 and over expressed a need for transportation to and from stores and shopping centers. Consistent with Mason and Smith (1974), Gelb (1978) found that about one senior citizen in four reported that at least half the time someone younger took him or her shopping. Twenty-six percent felt that at least half the time they found it more of a problem to get to the store than it was a year ago. Furthermore, the majority (64%) said shopping around is more trouble than its worth. Barnes and Peters (1982) found that those elderly restricted by a lack of transportation or health limitations reported significantly lower usage of stores for food, drugs, clothing, and household item purchases than those persons without such restrictions.

It is noteworthy that at least two studies reported that transportation is not a problem for the elderly. Both Lumpkin and Greenberg (1982) and Dove (1984) found that senior citizens rated store location as less important than did members of younger age groups, thus suggesting that transportation and decreased mobility may not be widespread problems among elderly consumers in general.

The Importance of Store Attributes

A consumer's perception of store attributes helps form the consumer's attitudes toward a retailer and, in turn, may affect patronage decisions (Arnold et al 1983, p. 196). In several studies of store attributes with respect to elderly consumers, conflicting findings have emerged, particularly in the perceived importance of price discounts, store selections and brands, and in-store services.

Price Consciousness

Mason and Bearden (1978a) found that the majority of elderly shoppers in their study were willing to make special efforts to purchase from retailers who offered price discounts specifically designed for retirement age shoppers. At the same time, Gelb (1978) noted that 56 percent of the senior citizens in her Houston study said they would pay a little more to shop at a store that catered to older people. Subsequently, Lambert (1979) reported that price discounts were important to 59% of his respondents aged 55-64 and to 53% of the 65 and older respondents. In a study of senior citizen discount card usage, Gillett and Schneider (1978) found that the majority of older consumers were using their card, and that 76 percent of the non-users said they would probably use the card in the future. Lumpkin and Greenberg (1982) found that elderly consumers are not particularly price conscious and that they do not check advertising for price specials any more than younger shoppers do. In a survey of California residents, Dove (1984) reported no significant difference in the perceived importance of price among respondents ranging in age from 17 and younger to 56 and older. In fact, the older respondents reported service and product quality to be more important than price. Finally, in an investigation of food shopping behavior, Zybtniewski (1979) wrote that the over 65 shopper tends to be more price conscious than younger shoppers and that the elderly use shopping lists and coupons more often than their younger counterparts.

Store's Selection and Brands

Mason and Bearden (1978a) found that 59 percent of their respondents purchase store brands on at least every third shopping trip. Zybtniewski's (1979) findings revealed that 65 and older grocery shoppers tend to be brand loyal and that, at least for generic brands, the average number of generic products tried is 40 percent fewer among those respondents over 65 than for those under 65. In shopping for clothing, Lumpkin and Greenberg (1982) found that wide variety and brands carried were not important store attributes for the elderly. Earlier, Gelb (1978) reported that the majority (56%) of the elderly respondents said that clothing stores should have a special department for retirement age people, perhaps indicating a desire for a wider selection and/or better service. In a non-product specific investigation of the perceived importance of eight store attributes, merchandise selection was ranked fifth in importance by consumers aged 56 and older (Dove 1984).

In-Store Service and Store Personnel

In-store service appears to be very important to the elderly shopper. Dove (1984) found that 86.1 percent of elderly shoppers felt that service was an important store attribute. Of eight store attributes investigated in her study, service was ranked first in importance. In an investigation of older consumers' unmet needs and wants, Lambert (1979) found that about one in five senior citizens desired personal assistance in locating products in stores. The same study revealed that 9 percent of the respondents aged 55-64 and 6 percent of those 65 and older wanted retailers to give purchasing advice on request. The latter seems to support Lumpkin and Greenberg's (1982) finding that elderly shoppers are not very self-confident when shopping.

Personal service seems to be especially important to older consumers when food shopping. Mason and Bearden (1979) found that 97 percent of the elderly felt personal services should be available for meat packaging in supermarkets. Similarly, Lambert (1979) and Zybtniewski (1979) reported the older shoppers expressed a desire for smaller package sizes for meat and produce.

While research evidence suggests that the elderly value personal service, there is some indication that it is not adequately provided on a regular basis. Gelb (1978) found that 56 percent of the senior citizens in her study felt that store owners were not glad to see them come in. Twenty-five percent of the 65 years and older respondents in Lambert's (1979) research wanted to be treated with more patience and dignity by store personnel -- about 20 percent of the 55-64 year old respondents shared these feelings. Mason and Bearden (1978b), in contrast to Gelb's (1978) findings, reported that only 13 percent of their elderly respondents felt that retailers do not like to have the elderly as patrons.

Another service of interest to older shoppers is the provision of resting facilities in stores. Sixty-nine percent of the respondents in Mason and Bearden's (1979) study indicated the need for a place to sit and rest in grocery stores. In a non-product-specific study, Lambert (1979) found that 8 percent of their 65 and older respondents desired resting facilities in retail establishments.

Store Reputation

In at least two studies, store reputation emerged as an especially important store attribute for elderly shoppers. Dove (1984) found a significant difference in the importance attached to this attribute between older (56+) and younger shoppers. Lumpkin and Greenberg (1982), in another trans-generational study, found that elderly apparel shoppers valued store reputation more highly than younger shoppers.

Other Store Attributes

Limited research indicates that parking (Dove 1964, Lambert 1979), small print sizes on labels and tags (Mason and Bearden 1978a, 1979; Lambert 1979; Visvabharathy and Rink 1983), and stores that are too large (Gelb 1978) present problems for the older shopper. Product quality is deemed to be important to older shoppers just as it is for younger shoppers (Dove 1984).

Information Sources of Older Shoppers In Making Store Selections

It is generally accepted that the elderly are exposed to the mass media, especially television and newspapers (Mason and Bearden 1978; Phillips and Sternthal 1977). Samli and Palubinskas (1972) noted that more than 90 percent of their respondents read a daily newspaper and that 27 percent spend at least two hours a day watching television. Bernhardt and Kinnear (1976) extended these findings by determining that the elderly are twice as heavy viewers of TV as other age groups between 6 to 9:00 a.m. Heavy viewing among the elderly also occurs between 6 to 7:00 p.m. These findings suggest that the elderly are at least exposed to the primary mass media; however, they are silent on the elderly's usage of information obtained through these media in making marketplace decisions.

While several studies (Schiffman 1971; Mason and Smith 1974; Klippel and Sweeney 1974; Mason and Bearden 1978a, 1978b; Michman et al 1979; Lumpkin and Greenberg 1982) have investigated the importance of pre-purchase information sources on product-related decisions, little is known about the importance of information sources on store selection. French and Crask (1977), for example, found that 72% of their 89 elderly respondents said that advertisements, in general, were an important source of information. Fifty-five percent indicated that media ads influenced their choice of stores. Further analysis revealed a difference in the reliance placed on advertising in choosing a place to shop. Specifically, the young-old (under 75) were influenced by advertising more often than the old-old (75 and older).

In a study directly addressing store selection, Dove (1984) found that the majority (86.5%) of older shoppers did not use television advertising in making store selections. Low usage rates were also reported for magazines and radio. Older consumers reported lower reliance on newspapers than did persons in the younger (26-55 years) age groups but still more than two-thirds of the elderly felt newspapers were important sources of information. Mail circulars were used by 54.1 percent of the elderly and about the same percentage reported using friends as a source of information in store selection. Overall, consistent with Lumpkin and Greenberg's (1982) findings for apparel shoppers, Dove found that older consumers tend to rate every information source lower in importance in store selection decisions than do members of younger age groups.

Summary of Findings

The literature reviewed generally suggests that older consumers are more store loyal than their younger counterparts. The elderly tend to prefer department stores and specialty shops to discount stores. In-home shopping is not well accepted by the majority of elderly shoppers. Many senior citizens are mobile and consequently do not experience difficulty in getting to and from retail stores.

The empirical findings regarding the importance of price discounts, product variety, and desired in-store services are less clear. For frequently purchased grocery items the elderly seem to be more price conscious than younger shoppers, while for shopping goods, such as apparel, the elderly are no more price conscious than younger consumers. A considerable proportion of older shoppers do desire to be treated with more respect and dignity in retail stores.

Relatively little is known about the importance of various information sources used by the elderly in the store selection process. However, it is generally agreed that older shoppers tend to rate information sources such as the mass media and friends as lower in importance than younger shoppers when deciding upon a store to patronize.

Directions For Future Research

Prior research on the antecedents and processes involved in patronage decisions among the elderly has been largely descriptive in nature. Such efforts are useful in answering "what is" questions. More attention should be directed to "why" questions. Why, for example, do older shoppers tend to avoid shopping at discount stores or using in-home shopping? Why is store loyalty greater among senior citizens than among younger shoppers?

Such questions may be partially answered by segmenting the senior citizens market into additional age and non-age-based dimensions (e.g., Towle and Martin 1976; Greco 1984; French and Fox 1985). This approach would seem appropriate since the vast majority of studies have treated the elderly as a homogeneous group.

Researchers need to move beyond static, cross-sectional research designs. Instead, cohort and longitudinal analyses should be incorporated into research methodologies when possible (Rentz, Reynolds, and Stout 1983). This approach would help separate generational and period effects.

Additionally, clarification is needed regarding who the elderly are. So far, different researchers have used varying chronological ages to depict the elderly. Since the elderly are not homogeneous, it may be more appropriate to use cognitive age in addition to the traditional chronological age in future research efforts (Barak and Gould 1985).

The adoption of the above recommendations, along with more representative samples of the elderly, should help resolve the equivocation regarding the perceived importance of price discounts, product assortment, transportation to and from stores, and information sources used in store selection.

References

Arnold, Danny R., Louis M. Capella, and Garry D. Smith (1983), Strategic Retail Management. Reading, Massachusetts: Addison-Wesley.

Barak, Benny and Steven Gould (1985), "Alternative Age Measures: A Research Agenda," in Advances in Consumer Research Vol. 12, eds. E. C. Hirschman and M. B. Holbrook, Association for Consumer Research, 53-58.

Barnes, Nora G. and Michael P. Peters (1982), "Modes of Retail Distribution: Views of the Elderly," Akron Business and Economic Review 13 (Fall), 26-31.

Bernhardt, Kenneth L. and Thomas C. Kinnear (1976), "Profiling the Senior Citizen Market," in Advances in Consumer Research Vol. 3, ed. B. B. Anderson, Association for Consumer Research, 449-452.

Dove, Rhonda W. (1984), "Retail Store Selection and the Older Shopper," Proceedings, Southern Marketing Association, 75-77.

French, Warren A. and Melvin R. Crask (1977), "The Credibility of Media Advertising for the Elderly," Proceedings, American Marketing Association, 74-77.

__________, and Richard Fox (1985), "Segmenting the Senior Citizen Market," Journal of Consumer Marketing, 2 (Winter), 61-74.

Gelb, Betsy D. (1978), "Exploring the Gray Market Segment," MSU Business Topics, 26 (Spring), 41-46.

Gillett, Peter L. and Robert L. Schneider (1978) "Community-Wide Discount Programs for Older Persons: A Review and Evaluation," The Journal of Consumer Affairs, 12 (Winter), 309-322.

Greco, Alan J. (1984), "Overlooked Senior Citizen Market Lends Itself Well to a Segmentation Approach," Marketing News, 18 (April 27), 7.

Klippel, R. Eugene and Timothy W. Sweeny (1974), "The Use of Information Sources by the Aged Consumer," The Gerontologist, 14 (April), 163-166.

Lambert, Zarrel V. (1979), "An Investigation of Older Consumers: Unmet Needs and Wants at the Retail Level," Journal of Retailing, 55 (Winter), 37-57.

Lumpkin, James R. and Barnett A. Greenberg (1982), "Apparel-Shopping Patterns of the Elderly Consumer," Journal of Retailing, 58 (Winter), 68-89.

Martin, Claude R. (1976), "A Transgeneration Comparison: The Elderly Fashion Consumer," in Advances in Consumer Research, Vol. 3, ed. B. B. Anderson, Association for Consumer Research, 453-456.

Mason, J. Barry and William O. Bearden (1978a), "Profiling the Shopping Behavior of Elderly Consumers," The Gerontologist, 18 (October), 454-461.

________________, and ____________ (1978b), "Elderly Shopping Behavior and Marketplace Perceptions," Proceedings, Southern Marketing Association, 290-293.

________________, and _____________ (1979), "Satisfaction/Dissatisfaction With Food Shopping Among Elderly Consumers," The Journal of Consumer Affairs, 13 (Winter), 359-369.

________________, and Brooks E. Smith (1974), "An Exploratory Note on the Shopping Behavior of the Low-Income Senior Citizen," The Journal of Consumer Affairs, 8 (Winter), 204-209.

Michman, Ronald D., Ralph T. Hocking, and Lynn Harris (1979), "New Product Adoption Behavior Patterns of Senior Citizens for Cold Remedies," Proceedings, Southern Marketing Association, 309-311.

Phillips, Lynn W. and Brian Sternthal (1977), "Age Differences in Information Processing: A Perspective on the Aged Consumer," Journal of Marketing Research, 14 (November), 444-457.

Rentz, Joseph O., Fred D. Reynolds, and Roy G. Stout (1983), "Analyzing Changing Consumption Patterns With Cohort Analysis," Journal of Marketing Research, 20 (February), 12-20.

Samli, A. Coskun and Feliksas Palubinskas (1972), "Some Lesser Known Aspects of the Senior Citizen Market -- A California Study," Akron Business and Economic Review, (Winter), 47-55.

Schiffman, Leon G. (1971), "Sources of Information for the Elderly," Journal of Advertising Research, 11 (October), 33-37.

Tongren, Hale N. (1981), "Retailing to Older Consumers," Proceedings, Southern Marketing Association, 93-96.

U. S. Bureau of the Census (1984), Current Population Reports, Series P-25, No. 952, Projection of the Population of the United States, by Age, Sex, and Race: 1983 to 2080, U. S. Government Printing Office, Washington, D. C. 43, 44, 73, 74.

Visvabharathy, Ganesan and David R. Rink (1983), "Selected Public Policy Issues Regarding the Elderly," Proceedings, American Marketing Association, 396-398.

Zbytniewski, Jo-Ann (1979), "The Older Shopper: Over 65 and Overlooked?" Progressive Grocer (November), 109-111.

DEPARTMENT STORE CHOICE AND GIFT PURCHASES: A STEPWISE LOGIT ANALYSIS

David Andrus, Kansas State University
Richard Sundheim, Kansas State University
Wayne Norvell, Kansas State University
Robert E. Hite, Colorado State University

Abstract

This study investigates national, chain department store versus small, independent department store attributes that affect store choices when making a gift purchase. Gift buying represents a significant proportion of retail sales and profits. The results indicate that consumers prefer buying clothing products as gifts in stores where they shop for their own personal consumption. Differences that affect department store choices when gift buying for a male versus a female are described. Marketing strategies to stimulate gift purchases are discussed.

Introduction

Gift buying represents a significant proportion of purchases in many product classes and is a pervasive retail consumption pattern (Ryans 1977; Lowes, Turner, and Wills 1968). The significance of gift buying to national and regional economies is large in terms of retail sales alone (Belshaw 1965; Davis 1972; Banks 1979; Caplow 1982). The Christmas shopping season alone can account for 30 percent of annual retail sales and 70 percent of profits for department stores (Weiner 1984). A major unanswered question is what variables affect store choice when making gift purchases (Poe 1979; Sherry 1983).

Previous Research

Gift giving research has focused on who gives, who receives, the types of gifts given, gift occasions, and the functions of gift giving (Belk 1979). Studies have also examined gift giving frequency for different occasions as well as prices paid (Ryans 1977). Other research has focused on factors affecting store choice in general, but few studies have identified factors that affect store choices in the gift exchange process. Research identifying store characteristics related to gift store choice could serve as a basis for retail strategies to influence the gift decision process.

There are differences in decision outcomes, information sources, and shopping behavior when a product is purchased as a gift rather than for personal use (Belk 1976; Gronhaug 1972; Ryans 1977; Lastovicka 1979). For example, relative to personal use purchases, gift shoppers who purchased for friends preferred department stores for electrical appliances, to set prices before beginning to search, and not to spend much time searching (Ryans 1977). People who bought gifts for family members tended to rely on instore information. Children tended to use television or friends as gift product information sources rather than store advertisements (Caron and Ward 1975).

Research has shown that consumers are often more involved in buying gifts for others than buying for personal use. For example, tableware buyers visited more shops when buying gifts than when buying for personal use (Gronhaug 1972). Clarke and Belk (1979) found more stores were shopped for gift purchases, especially for uninvolving products such as baby bath soap. Consumers may shop in more stores when buying a gift because of greater perceived risk in buying for others and because of lowered price constraints (Hart 1974; Shapiro 1970).

Mattson (1982) found that department stores were more likely to be shopped than speciality stores when females engaged in gift buying. He reported that salesperson attention, return policies and prestige brands were important store attributes for gift shoppers. Time-pressured gift shoppers visited mass merchandisers, relied on store familiarity, liked immediate salesperson attention, and broad product selection.

There are significant differences between male and female store choice behaviors (Bellenger, Robertson, and Greenberg 1977; Tatzel 1982; Andrus and Norvell 1985). There is evidence that these differences exist for signature good gift decisions. Andrus and Norvell (1985) found that women givers spent more shopping time and preferred less store clerk assistance than men. Men did not like gift shopping as much as women. Women were more fashion conscious consumers who preferred upscale department stores to national chains and lower scale department stores (Tatzel 1982, Hirschman 1979; Bellenger and Korgavonkar 1980).

There appears to be a void in the literature with regard to salient store attributes that affect consumer decisions regarding national, chain department store and small, independent department store choices for gift buying. This study examines store attributes and gift recipient sex differences that affect store patronage decisions for gift buyers. Variables that affect choosing small, independent department stores versus large, national chain department stores are examined. Store choice is related to the specific product category of designer clothing since clothing is the most frequently given gift (Jolson, Anderson and Leber 1981; Belk 1979; Caplow 1982). Speciality clothing represented over $9 billion in retail sales in 1983 (U.S. Bureau of Census 1984).

Methods

Sample and Procedures

Questionnaires were administered to 693 eligible undergraduate students at a large midwestern university. There were 343 males and 346 females who had a combined mean age of 20. The participants were from several different colleges within the university. Eighty-four percent were single and nine percent married. The remaining seven percent were divorced or widowed. Eighty-six percent stated they were in the young, single stage of the family life cycle.

Questionnaires were administered in sections of marketing, music, psychology, speech, engineering, and home economics classes during a two week period. The classes were large and were generally taken by a wide cross-section of the student body. Students were informed that the study examined clothing gift buying and gift store choices. They were told they would be asked items about buying gifts and selecting retail outlets to make a gift purchase. The students answered items about four department stores. Two of the department stores were small, independent retail outlets. Two department stores were large, national chain department stores.

Measures

The independent variable of wanting clerk help in selecting a clothing gift for a male or female friend (HELP) was rated on a 7-point Likert scale. The scale ranged from 1 (very strongly agree) to 7 (very strongly disagree). Sex was coded 1 for males and 2 for females. The other independent variables were which store has the most convenient location (LOCATION), offered the highest quality clothing for men or women (QUALITY), was best liked by your friends (FRIENDS), and which store would you most likely shop to buy your own clothes (YOURSELF). These variables were all coded 1 if a national, chain department store was chosen and 0 if a small, independent department store was chosen.

The dependent variable was which store the consumer would choose to buy a signature clothing gift for their best male or best female friend. National, chain department stores were coded 0 and the small, independent department stores were coded 1.

Results

Several descriptive findings provide information on how the participants view the stores and gift shopping. Ninety percent of the consumers who gift shop for a man in major chain stores also shop there for themselves. In addition, 45 percent consider major chain stores to have the best quality products, 55 percent find the chain store to have the most convenient location, 53 percent are male, and 82 percent say their friends like major chain stores best.

Ninety-one percent of the consumers who gift shop for a woman in major chain stores also shop there for themselves. Fifty-two percent consider the best quality products to be found there, 51 percent find the chain store to have the most convenient location, and 85 percent reported their friends like chain stores best.

Logit Analysis Results: Male Recipients

A stepwise logit analysis was performed on the entire data set to identify major factors that affected store choice when purchasing for male recipients. Five factors were identified using a .05 level of significance. One significant interaction among the five factors was identified. The data were then cross validated by splitting the total number of cases into a two-thirds analysis sample and a one-third validation sample.

A maximum likelihood logit regression model was run on the analysis sample using the five factors and the one interaction selected in the stepwise procedure. Each predictor variable's order of entry in the stepwise logistic regression equation is displayed in Table 1. The odds ratio for the dependent variable indicates the likelihood of purchasing a gift for a male in a major, chain department store versus a small, independent department store.

TABLE 1
STEPWISE LOGISTIC REGRESSION RESULTS FOR MALE GIFT RECIPIENTS: DISTINCTION BETWEEN MAJOR CHAIN AND SMALL, INDEPENDENT STORES (A)

Predictor(B) Variables	Coefficients(C)	Standard Error	Chi-Square
0. Intercept	0.0777	0.4923	0.02
1. Yourself	2.0269	0.3434	34.83
2. Quality	1.8767	0.3421	30.09
3. Location	-1.8613	0.8760	0.97
4. Sex	-1.7160	0.3394	25.56
5. Friends	0.7227	0.2957	5.97
6. Sex X Location	1.3722	0.5383	6.50

(A) Logit Model:
log p/(1-p) = 0.078 + 2.027 (Yourself) + 1.877 (Quality) -0.861 (Location) - 1.716 (Sex) + 0.723 (Friend) + 1.372 (Sex X Location)

(B) In order of inclusion in stepwise logistic regression.

(C) Numbers are given only when chi-square to enter is significant at the 0.05 level. The Location variable became insignificant when the Sex X Location interaction term entered the model.

For negative coefficients, the probability of gift shopping at a major, chain department store decreases as the value of the corresponding predictor variable increases. For positive coefficients, the probability of gift shopping at a major, chain department store increases as the value of the corresponding predictor variable increases. Thus, the coefficient of 2.027 for the first predictor variable (Yourself) indicates that those who shop at a major chain store for themselves increase the probability of gift shopping at a major chain store. That is, one tends to gift shop at the same type of store that is patronized for personal consumption. Similarly, the coefficient of 1.877 indicates that consumers tend to gift shop at stores they perceive as having the highest product quality (Quality). The coefficient of 0.723 indicates that consumers tend to gift shop at the stores where their friends like to shop (Friend). The problem of multicollinearity is low since the individual correlations between the main effect independent variables are all below 0.50.

The interaction term also needs to be considered to interpret the effects of location and sex on store choice. If a major chain store has the most convenient location, then males tend to have a slightly higher probability than females of gift shopping at a major chain store. If a small, independent store has the most convenient location, then males have a much higher probability than females of gift shopping at a major chain store. Thus, convenient location appears to have a very small effect on a male's decision on where to gift shop, but has a much larger effect on a female's decision.

The validation process provides unbiased estimates of the error rates (Crask and Perreault 1977). The classification matrix in Table 2 presents the cross-validation results. The matrix correctly identified 79.7 percent of the sample for male recipients, 80.1 percent for chain store shoppers, and 79.1 percent for small, independent store shoppers. The validating sample showed 71.9 percent correct classification with a 95 percent confidence interval from 66.1 to 77.7 percent. The percent correct classifications by random chance is 52.0. Therefore, the logit model is classifying significantly better than chance.

TABLE 2
CLASSIFIACTION MATRIX FOR
MALE GIFT RECIPIENTS(A)

Analysis sample

Actual Group		Predicted Group	
Store Choice	Number	Number Correct	Percentage Correct
Chain	266	213	80.1
Indepen-dent	177	140	79.1
Totals	443	353	79.7

Validation sample

Actual Group		Predicted Group	
Store Choice	Number	Number Correct	Percentage Correct
Chain	136	95	69.9
Indepen-dent	91	69	75.0
Totals	228	164	71.9

(A) Proportional chance criterion formula:
$C_{proportional} = p^2 + (1-p)^2$

Logit Analysis Results: Female Recipients

The same procedures used to develop the logit equation for male gift recipients were used for female gift recipients. A maximum likelihood logit model was run on the two-thirds analysis sample using the variables selected in the stepwise procedure. Table 3 displays each variable's order of entry in the stepwise logistic regression equation. The log-odds ratio indicates that probability of purchasing a gift for a female in a major, chain department store versus in a small, independent department store.

TABLE 3
STEPWISE LOGISTIC REGRESSION RESULTS FOR
FEMALE GIFT RECIPIENTS: DISTINCTION
BETWEEN MAJOR CHAIN AND SMALL, INDEPENDENT
STORES (A)

Predictor Variables(B)	Coefficients(C)	Standard Error	Chi-Square
0. Intercept	-2.759	0.408	45.84
1. Yourself	1.520	0.352	18.60
2. Quality	1.580	0.284	30.86
3. Help	0.262	0.073	12.81
4. Friends	0.872	0.281	9.63
5. Location	-1.216	0.728	2.79
6. Yourself X Location	1.676	0.779	4.63

(A) Logit Model:
$\log p/(1-p) = -2.759 + 1.520\,(\text{Yourself}) + 1.580\,(\text{Quality}) + 0.262\,(\text{Help}) + .0872\,(\text{Friends}) - 1.216\,(\text{Location}) + 1.676\,(\text{Location X Yourself})$.

(B) In order of inclusion in stepwise logistic regression.

(C) Numbers are given only when chi-square to enter is significant at the 0.05 level. The Location variable became insignificant when the Yourself X Location interaction term entered the model.

The coefficient of 1.580 for the predictor variable Quality indicates that consumers tend to gift shop at the stores they perceive as having the highest product quality. Similarly, the coefficient 0.262 for predictor variable Help indicates that consumers who want store clerk assistance prefer to gift shop in small, independent stores. The coefficient 0.872 for predictor variable Friends indicates, to a lesser extent, that consumers tend to gift shop where their friends like to shop.

In order to interpret the effects of the variables Location and Yourself on store choice, the interaction term also needs to be considered. This interaction effect is quite mild. Consumers tend to gift shop where they shop for themselves. Consumers are more likely to gift shop at a major chain store if it has the most convenient location. However, the interaction indicates that convenient location is slightly more important to those consumers who shop at small, independent department stores for themselves.

The classification matrix in Table 4 correctly identified 77.2 percent of the analysis sample for female recipients, 77.8 percent for the chain store shopper, and 76.1 percent for the small independent store shoppers. The validation sample showed 75.4 percent correct classification with a 95 percent confidence interval from 69.8 to 81.0 percent. The percent correct classification by random chance is 53.9. Thus, the logit model is classifying significantly better than chance.

TABLE 4
CLASSIFICATION MATRIX FOR
FEMALE GIFT RECIPIENTS (A)

Analysis Sample

Actual Group		Predicted Group	
Store Choice	Number	Number Correct	Percentage Correct
Chain	284	221	77.8
Independent	159	121	76.1
Totals	443	342	77.2

Validation Sample

Actual Group		Predicted Group	
Store Choice	Number	Number Correct	Percentage Correct
Chain	145	111	76.6
Independent	83	61	73.5
Totals	228	172	75.4

(A) Proportional chance criterion formula:
C proportional $= p^2 + (1-p)^2$

Conclusions

Consumers prefer to buy gifts for men and women in department stores where they usually shop for themselves. They tend to shop in department stores that they perceive as having high quality gift products. Gift purchasers buy products in stores where their friends like to shop. These are consistent findings whether consumers are shopping for a male or female gift recipient.

There are some differences between variables that significantly affect store choice when consumers purchase a gift for a man versus a woman. Women are more influenced than male gift givers by a store's convenient location. However, consumers in general prefer to buy a man a gift in a conveniently located store. When consumers buy a gift for a woman at a small, independent department store, they desire assistance from a store clerk.

Consumers may be trying to reduce risk and anxiety when gift buying for females. Gift giving behavior reflects giver and recipient perceptions of self and other (Neisser 1973; Shurmer 1971). Research has shown that there is an element of perceived risk in gift buying (Weigl 1975; Vincent and Zikmund 1976; Hart 1974; Clark and Belk 1979). Consumers may believe there is more risk or anxiety in buying a gift for a woman than a man, because women tend to shop more and be more fashion conscious than men (Tatzel 1982).

Buying clothing for women as a gift may take more consumer skill and product knowledge than buying for men, as there are normally more styles and brands of women's clothing. Andrus and Norvell (1985) found women gift givers enjoyed buying gifts more than their male counterparts did. The desire to discuss appropriate gifts with friends and to seek store clerk assistance may be related to the sex of the gift giver. Women may be more confident than men about brand and store choices when gift buying for men.

Consumers who shop at small, independent department stores prefer more store clerk assistance than consumers who shop at national, chain department stores. The national chain stores emphasize self-service and an impersonal atmosphere more than the smaller department stores. This may require consumers to depend more on their own shopping skills when gift buying. Gift purchasers may rely on store clerk help to help make gift suggestions, and the store clerk assistance may facilitate gift buying in the small stores. Consumers may select these stores because they like a great deal of assistance.

Marketing Implications

These results suggest several marketing strategies that department stores may use to stimulate gift purchases. When consumers gift shop in national, chain department stores or small, independent department stores they tend to desire a high quality clothing product. They also like to gift shop in stores of both types where they buy clothes for their own personal use. Department stores can stimulate gift purchases by using suggestive selling in which various promotions demonstrate the stores' ability to provide gifts. In-store displays and sales clerks could suggest to current customers that the department store is an appropriate source for clothing gifts. These gift suggestions could produce a reminder effect that stimulates clothing gift purchases in the future.

Both types of department stores should try to sell high quality clothing products as gifts. This would suggest that stores could advertise clothing gifts based on status and prestige. Advertisements which are intended to stimulate clothing gift giving should present a high quality, fashion conscious image. Higher prices are often associated with higher quality products (Assael 1984). Since gift shoppers desire high quality clothing products, they might pay higher prices when gift buying. Department stores may persuade consumers to trade-up to more expensive, prestigious brands when gift buying and thus maximize profits on per unit sales.

Consumers like to gift shop in stores that are conveniently located. Department stores need to alter consumer perceptions regarding their location. Department store executives who want to broaden their gift target markets should advertise more heavily based on a convenient location theme. The advertisements should stress the ease and appropriateness of buying a gift at their store.

Manufacturers of gift products should consider a selective (rather than exclusive) distribution strategy for their brands. However, it is important that store image be congruent with the gift brand image, or a reduction of the latter will occur. Gift manufacturers who use a selective distribution strategy for a particular product image level could enhance the ease and convenience of gift shopping. This strategy may be especially profitable for manufacturers who wish to sell to the female gift market.

When buying a gift for females, consumers prefer more store assistance and shop in department stores that are desirable to their friends. Gift advertisements could show satisfied female gift receivers that are similar to consumers in the target market. Consumers could be portrayed in group gift-giving situations where a department store label or product brand is receiving very positive social acceptance and resultant word-of-mouth communication. Word-of-mouth communication about gifts could be stimulated by department stores using planned secrecy campaigns and slogans (Assael 1984).

Another strategy would be for advertisements to present gift givers experiencing difficulty making a purchase for a woman. Store clerks could offer several products that reduce the shopper's anxiety and solve the buying problem. This type of advertisement would indicate that the gift store can offer the appropriate products and service that will satisfy both the giver and the recipient.

Consumers tend to select department stores where their friends like to shop for gift purchases. Advertisements could show gift shopping as a group experience. Promotions could offer price discounts on future gift purchases if a large number of gift products were bought within a specified time period. Advertisements could also suggest occasions, such as house-warming parties, when consumers should buy gifts for friends.

A limitation of this study is that the findings may be difficult to generalize to more diverse populations. However, college students represent a large gift giving segment. The authors encourage further research utilizing respondents from other geographic areas with varied background characteristics to determine if these findings are consistent in different shopping environments with different types of products. Future research could focus on sex differences with regard to skill and motivation to shop for gifts.

References

Andrus, David M. and Wayne Norvell (1985), "Sex Differences and Gift Decisions for Signature Goods," Proceedings of the Southwestern Marketing Association Conference, 5 (March), 50-53.

Assael, Henry (1984), Consumer Behavior and Marketing Actions, Boston: Kent Publishing Co.

Banks, Sharon (1979), "Gift-Giving: A Review and Interactive Paradigm," in Advances in Consumer Research, William Wilkie, Ed., Ann Arbor Michigan: Association for Consumer Research, 6, 319-324.

Belk, Russell W. (1976), "It's the Thought That Counts: A Signed Digraph Analysis of Gift-Giving," Journal of Consumer Research, 3 (December), 152-162.

Belk, Russell W. (1979), "Gift-Giving Behavior," Research in Marketing, 2, 95-126.

Bellenger, Danny R. and Pradeep K. Korgavonkar, (1980), "Profiling the Recreational Shopper," Journal of Retailing, 56 (Fall), 77-92.

Bellenger, Danny R., Dan H. Robertson, and Barnett A. Greenberg (1977), "Shopping Center Patronage Motives," Journal of Retailing, 53 (Summer), 29-38.

Belshaw, Cyril (1965), Traditional Exchange and Modern Markets, Englewood Cliffs New Jersey: Prentice-Hall.

Caplow, Theodore (1982), "Christmas Gifts and Kin Networks," American Sociological Review, 47 (June), 383-392.

Caron, Andre and Scott Ward (1975), "Gift Decisions by Kids and Parents," Journal of Advertising Research, 15 (August), 15-20.

Clarke, Keith and Russell Belk (1979), "The Effects of Product Involvement and Task Definition on Anticipated Consumer Effort," Advances in Consumer Research, William Wilkie, Ed., Ann Arbor Michigan: Association For Consumer Research, 6, 313-318.

Crask, Melvin R. and William D. Perreault Jr. (1977), "Validation of Discriminant Analysis in Marketing Research," Journal of Marketing Research, 14 (February), 60-68.

Davis, J. (1972), "Gifts and the U.S. Economy," Man, 7, 3, 408-429.

Grønhaug, Kjell (1972), "Buying Situation and Buyer's Information Behavior," European Marketing Research Review, 7, 33-48.

Hart, E.W. (1974), "Consumer Risk-Taking for Self and for Spouse," unpublished Ph.D. Dissertation, Purdue University.

Hirschman, Elizabeth C. (1979), "Intratype Competition Among Department Stores," Journal of Retailing, 55 (Winter), 20-34.

(For further references contact Senior Author)

IDENTIFYING THE FACTORS CONTRIBUTING TO CUSTOMERS DRIVING DIRECTLY BY A COMPETITOR TO SHOP AT THE HOST STORE

Michael M. Pearson, Bowling Green State University
Glenn T. Stoops, Bowling Green State University
Bob T. W. Wu, Bowling Green State University

Abstract

This paper examines the situation in which consumers drive directly by one retail store to shop at another retail store of similar type. This group of consumers, called "by shoppers" because they drive by one store to get to another, is analyzed to see if it differs demographically from other customer groups. In addition, characteristics of the "host store" (the store driven to) and the "competitor store" (the store driven by) are analyzed to determine their influence on the "by shopper" group.

Introduction

The emphasis of patronage studies may focus upon the characteristics of the consumer (Crask and Reynolds 1978, Bearden, Teel and Durand 1978), the host store (Bearden 1977), or the competitor stores (Gautschi 1981). Some studies (Pessimier 1980) have examined all three. Other patronage studies have emphasized spatial rather than behavioral aspects (Reilly 1931, Cohen and Applebaum 1960, Huff 1966). Some studies focus on intramarket patronage (Bucklin 1967, Moore and Mason 1969, Haines, Simon and Alexis 1971) and some focus on the intermarket (Herrman and Beik 1963, Thompson 1971, Darden and Perreault 1976). The "by customer" remains a tangent or ignored orphan in these areas. The purpose of this study was to draw upon the different variables utilized in the cited studies in order to investigate the "by customer." This study includes, among others, aspects of consumer patronage motives, host and competitor store characteristics, and the intraurban shopper.

Identification and study of the drive-by shopper--that shopper that drives by one store to shop at another store of the same type--is important for many reasons. First, identifying the drive-by shopper allows the retail store to extend its trade area by adding to its periphery. Second, determining the characteristics of this segment makes it an easier target to reach for the aggressive retailer. Third, arriving at the most important host store characteristics makes it possible to promote these characteristics to the better defined target market. Fourth, identifying the competitor characteristics allows the host retail store to position itself in the best position, taking advantage of its strengths and its competitors's weaknesses.

Research Design

The data base for this research was gathered through a customer "spotting" study conducted at the host store. The host store was one unit of an eight unit suburban supermarket chain located in a Standard Metropolitan Statistical Area of 750,000. The spotting was done by asking the consumer to identify "your street and the nearest identifying cross street."

In addition to the spotting data, customers were asked:

1. perceived distance from host store.
2. household weekly grocery expenditures.
3. patronage of competitor stores.
4. rating of host store.
5. rating of competitor store.
6. customer demographics.

With the above spotting information, the customer's location was plotted on a map and measurements were made to determine the mileage:

1. from customer's home to host store.
2. from customer's home to each competitor.

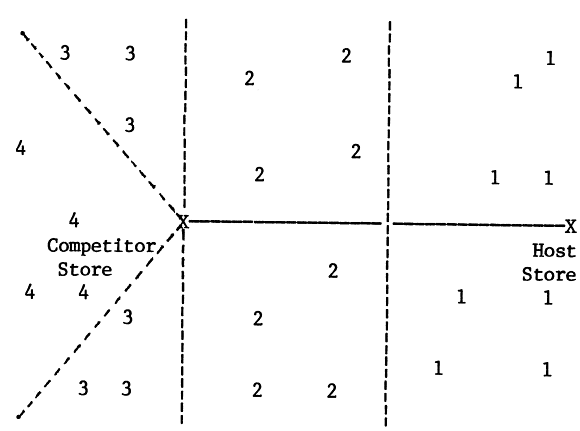
Customers were classified into four categories using the spotting data:

1. Customers who are located nearer the host store than to any competitor.
2. Customers who are nearer to a competitor than to the host store but do not have to drive near the competitor to shop at the host store.
3. Customer's who are nearer to a competitor than the host store but do have to drive near the competitor to shop at the host store.
4. Customers who have to drive directly by a competitor to shop at the host store.

Figure 1 shows a representative visual mapping for the four categories of consumers.

FIGURE 1

Classification for Categorizing Consumers



The total sample size consisted of 1765 cases.

Hypotheses

The hypotheses were designed to test the differences among the four groups of consumers. Three sets of variables were tested. They included demographic variables, host store characteristics, and competitor store characteristics.

Hypothesis 1.

There are no demographic differences among the four groups of consumers with respect to:

- H1a: Age.
- H1b: Race.
- H1c: Sex.
- H1d: Number in Household.
- H1e: Weekly Expenditures on Food.

Hypothesis 2.

The consumer's ratings of host store characteristics do not differ among the four groups with respect to:

- H2a: Locational Convenience.
- H2b: Specials.
- H2c: Prices.
- H2d: Services/Personnel.
- H2e: Variety (Products, Departments).
- H2f: Quality (Meats, Produce).
- H2g: Physical Characteristics.

Hypothesis 3.

The consumer's ratings of competitor store characteristics do not differ among the four groups with respect to:

- H3a: Locational Convenience.
- H3b: Specials.
- H3c: Prices.
- H3d: Services/Personnel.
- H3e: Variety (Products, Departments).
- H3f: Quality (Meats, Produce).
- H3g: Physical Characteristics.

Results

The analysis was conducted using cross-tabulation between the four consumer groups and the hypothesized demographic, host store, and competitor characteristics. The chi-square statistics and levels of significance are presented below. Where it will facilitate discussion, the cross-tabulation tables are presented.

TABLE 1

Demographics

Hypothesis	Variable	d.f.	Chi-Square	Probability
H1a:	Age	6	15.116	.019
H1b:	Race	3	15.454	.001
H1c:	Sex	6	19.135	.004
H1d:	Number in Household	15	11.116	.744
H1e:	Expenditures on Food	6	6.35	.385

The results indicate that three of the five demographic variables are highly significant in the description of differences between the groups of consumer. The age characteristic table was:

TABLE 2

Relationship to the Competitor by Age

	Age			
	18-34	35-55	Over 55	Total
1. Host store closest	176	156	107	439
2. Do not drive near the competitor	242	318	134	694
3. Do drive near the competitor	104	105	56	265
4. Drive directly by competitor	125	126	54	305
Total	647	705	351	1703

This table highlights the fact that the older consumer (over 55) is less likely to drive near or by a competitor in order to shop for groceries. Only 15.4% of the drive by shoppers were over 55 compared to 30.5%, 38.2%, and 16.1% in groups one, two and three respectively.

TABLE 3

Relationship to the Competitor by Race

	Race		
	White	Non-White	Total
1. Host store closest	424	15	439
2. Do not drive near the competitor	639	55	694
3. Do drive near the competitor	251	14	265
4. Drive directly by competitor	296	9	305
Total	1610	93	1703

In a result similar to the age characteristic, the non-white consumers are not as willing to bypass a competitor store in order to shop at the host store. Only 9.7% of the non-white shoppers fall into the drive by category compared to 18.4% of the whites.

TABLE 4

Relationship to the Competitor by Sex

	Sex			
	Male	Female	Couples	Total
1. Host store closest	78	306	55	439
2. Do not drive near the competitor	104	453	137	694
3. Do drive near the competitor	48	166	51	265
4. Drive directly by competitor	32	220	53	305
Total	262	1145	296	1703

Males are percentage-wise more willing to patronize the host store with 29.8% shopping at the closest store versus only 12.2% in the drive-by category. Females have a higher incidence of driving directly by a competitor's store in order to shop at the host store, with 19.2% in the drive-by category.

Table 5

Host Store Characteristics

Hypothesis	Variable	d.f.	Chi-Square	Probability
H2a:	Locational Convenience	3	65.125	.000
H2b:	Specials	3	8.171	.043
H2c:	Prices	3	10.137	.017
H2d:	Services/ Personnel	3	6.427	.093
H2e:	Variety	3	3.513	.319
H2f:	Quality (Meats,Produce)	3	1.298	.730
H2g:	Physical Characteristics	3	1.711	.635

The locational convenience, specials, and prices were significant host store characteristics at the .05 level. The service/personnel was significant at the .10 level.

The following table presents the distribution of those consumers who mentioned each of the four significant characteristics as a positive influence on their store choice. Each characteristic was analyzed individually. The significant variables are presented together for comparison purposes.

TABLE 6

Significant Host Store Characteristics

	Locational Convenience	Specials	Prices	Services Personnel
1. Host store closest (439)	187	98	119	129
2. Do not drive near the competitor (694)	152	207	251	167
3. Do drive near the competitor (265)	57	80	79	68
4. Drive directly by (305)	83	84	92	66
*Total	479	469	541	430

*Each column total represents the number of consumers out of 1761 who mentioned the characteristic as a positive attribute of the host store.

Obviously, convenience was rated higher with the nearest customers (group #1) with 41.5% noting this positive host store characteristic compared with 25.6% of the customers in the drive by category. This 25.6% convenience percent in the drive by category might be explained by the host store being on the way to or from work or other activities.

Twenty-six percent of the drive by customers noted the specials of the host store while only 21.6% of the nearest group of customers noted this host store characteristic.

Drive by customers note price as a positive characteristic of the host store more frequently than do the customers in either group one or three. Customers in group two ("nearer to the competitor but do not drive by") rate price higher than any of the other three groups. While the difference among these groups is significant, the nature of the difference is not clear.

Finally, service was rated lower by the drive by customers as a positive host store characteristic than by any of the other customer groups.

TABLE 7

Competitor Characteristics

Hypothesis	Variable	d.f.	Chi-Square	Probability
H3a:	Locational Convenience	3	40.097	.000
H3b:	Specials	3	4.266	.234
H3c:	Prices	3	8.753	.033
H3d:	Services/ Personnel	3	.436	.933
H3e:	Variety	3	3.812	.283
H3f:	Quality (Meats,Produce)	3	1.908	.592
H3g:	Physical Characteristics	3	.359	.949

TABLE 8

Significant Competitor Store Characteristics

	Locational Convenience	Prices
1. Host store closest (439)	62	151
2. Do not drive near the competitor (694)	190	232
3. Do drive near the competitor (265)	74	73
4. Drive directly by (305)	99	80
*Total	425	536

*Each column total represents the number of consumers out of 1761 who mentioned the characteristic as a positive attribute of the competitor store.

Only two of the characteristics of the competitor store showed significant differences among groups--locational convenience and prices. The reason for the location convenience is obvious in that, because the competitor store is closer to the consumer, it would be rated as more convenient. Price showed to be a significant competitor store characteristic in that the drive by shoppers showed a lower positive price impression of the competitor store (26.3%) than for any of the other categories. Percentages for groups one, two, and three were 34.4%, 33.4%, and 27.6% respectively

Conclusions

In summary, the researchers were able to reject three null hypotheses dealing with customer demographics (age, race, and sex), three dealing with host store characteristics (locational convenience, specials, and prices), and two competitor characteristics (locational convenience and prices). The demographics provide no real surprises. The host store and competitor store characterisitics, however, show a strong importance of price aspects as opposed to non-price aspects in drawing the by shopper.

TABLE 9

Summary of Hypotheses

H1a:	Reject	H2a:	Reject	H3a:	Reject
H1b:	Reject	H2b:	Reject	H3b:	Accept
H1c:	Reject	H2c:	Reject	H3c:	Reject
H1d:	Accept	H2d:	Accept	H3d:	Accept
H1e:	Accept	H2e:	Accept	H3e:	Accept
		H2f:	Accept	H3f:	Accept
		H2g:	Accept	H3g:	Accept

A rejection of the null hypothesis means that there are significant differences among groups with respect to the hypothesized variable.

There are two obvious directions in which this study can be extended. The first direction is to examine not just the attraction factors but also the alienation factors. The drive by status of the customer may not be a function of the attracting feature of the host store as much as the alienating features of the competitor store. The second direction deals with the relationship of variables within the host store, competitor store, and consumer categories and also the relationship among the categories themselves.

References

Bearden, William O., (1977), "Determinant Attributes of Store Patronage: Downtown Versus Outlying Shopping Centers," Journal of Retailing, Vol. 53 (Summer), pp. 15-22.

Bearden, William, Jesse E. Teel, and Richard M. Durand, (1978), "Media Usage, Psychographics, and Demographic Dimensions of Retail Shoppers," Journal of Retailing, Vol. 54 (Spring), pp. 65-74.

Bucklin, Louis P., "The Concept of Mass in Intraurban Shopping", Journal of Marketing, Vol. 31 (October 1967), pp. 37-42.

Cohen,S. and W. Applebaum, (1960), "Evaluating Store Sited and Determining Store Rents," Economic Geography, Vol. 36, pp. 1-35.

Crask, Melvin, and Fred Reynolds, (1978), "An Indepth Profile of the Department Store Shopper," Journal of Retailing, Vol. 54 (Summer), pp. 23-52.

Darden, William R. and William D. Perreault, "Identifying Interurban Shoppers: Multiproduct Purchase Patterns and Segmentation," Journal of Marketing Research, Vol. XIII, (February 1976), pp. 51-60.

Gautschi, David A., "Specification of Patronage Models for Retail Center Choice," Journal of Marketing Research, Vol. XVIII, (May 1981), pp. 162-174.

Haines, G. H., L. S. Simon and M. Alexis, "The Dynamics of Commercial Structure in Central City Areas," Journal of Marketing, Vol. 35 (April 1971), pp. 10-18.

Herrman, Robert O. and Leland L. Beik, "Shoppers' Movements Outside Their Local Retail Area," Journal of Marketing, Vol. 32 (October 1963), pp. 45-51.

Huff, D. L., (1966), "A Programmed Solution for Approximating an Optimum Retail Location," Land Economics, Vol. 42, pp. 284-295.

Moore, Charles T. and J. Barry Mason, "A Research Note on Major Retail Center Patronage," Journal of Marketing, Vol. 33, (July 1969), pp. 61-63.

Pessemier, E. A. (1980), Retail Patronage Behavior, Technical Report 80-112, Cambridge, MA: Marketing Science Institute.

Reilly, W. J., (1931), The Law of Retail Gravitation, New York, Knickerbocker Press.

Thompson, John R., "Characterisitics and Behavior of Outshopping Consumers," Journal of Retailing, Vol. 47 (Spring 1971), pp. 70-80.

TOWARD MORE STANDARDIZED TERMINOLOGY IN RETAIL BUYING

Peter M. Banting, McMaster University
David L. Blenkhorn, Wilfrid Laurier University

ABSTRACT

This exploratory study investigates the meanings implied by retail chain-store buyers when they use terminology that appears to be generally understood.

* * *

Lack of standardization of marketing terminology is one of the problems in arriving at a uniform body of marketing theory. This was apparent to the authors when studying new product adoption decision criteria used by non-food chain store buyers. Although a number of studies have been conducted in the grocery field establishing adoption criteria used by buyers when evaluating new products (Hileman and Rosenstein (1961), Gordon (1961), Borden (1968), Doyle and Weinburg (1973), Heller (1973), Alford and Mason (1975), Montgomery (1975)), only one study has directed attention to the new product evaluative criteria employed by chain store central buying units (CBUs) for non-food items (Banting and Blenkhorn (1982)). Further research in this area will be published this year (Banting and Blenkhorn (1986)). The study reported here examines the meanings of the criteria previously identified and is based on personal interviews with 30 CBU executives in a wide cross-section of non-food chain operations.

EXPECTED PROFIT CONTRIBUTION was the most important decision criterion used by buyers, but a simple numerical representation was not foremost in their minds. A large drug chain: "If a new product is an item necessary to our business (such as birth control pills), even though little or no money is made on the item, we still must carry it."

Buyers were reluctant to divulge their firm's minimum numerical requirement. A typical statement was: "As a rule of thumb, we expect to price a product at about double the price paid to the supplier." However, the price they were willing to pay was not necessarily the supplier's asking price. "We evaluate a new product in terms of the price at which we anticipate it can be resold, then offer what we are willing to pay for the item."

Without exception, every buyer interviewed could estimate the price at which his experience and knowledge of the market suggested the product could be sold. His definition of expected profit contribution hinged upon the combination of a large enough margin together with a large enough volume of sales for the new product. Since the buyer had already established his selling price (and therefore his related purchase price), the only remaining factor determining his expected profit contribution was an estimate of potential sales volume.

SUPPLIERS' ABILITY TO FILL REPEAT ORDERS QUICKLY. Depending on the product, repeat orders are the key to profitability. As a result, buyers dealt closely with suppliers, built "repeats" into the order contract, provided the supplier with a sales forecast, and demanded that back-up inventory be kept on hand by the supplier at shared financial risk. Still, even with the largest suppliers, problems occurred. However, communication between supplier and buyer could smooth matters somewhat. A camera retail chain stated: "Kodak ran into a small problem with their disc cameras. Their initial supply was good, but not the repeat orders. They informed us that we weren't going to receive all that was ordered right away; and our management were able to prepare themselves."

"Quickly" had various meanings to the respondents; ranging from "as soon as possible", to as much as six months - depending on the nature of the product. The two extremes given as examples were high fashion fads (required very quickly) and white goods (longer lead time). If delivery did not occur within the specified time, usually the order is cancelled. "Quickly" was identified in the buyer's mind as a constant; that is, a time period which was invarient (say, 10 days). Given this fixed value, reliability in meeting the buyer's time requirement became the key criterion in the meaning of the term "suppliers' ability to fill orders quickly."

The type of product affects both the time frame for filling the repeat order and the expectations of the buyer with respect to product availability. With fashion goods, buyers did not expect, nor did they want a supplier to have a warehouse full of goods, realizing that this back-up stock would probably affect the price. Respondents were very concerned that their customers might become disenchanted if a fast-moving item was unavailable because of an out-of-stock situation.

Respondents realized that many manufacturers book orders before producing. Sometimes they overbook, and cannot fill repeats. These buyers try to determine how much stock suppliers will have in reserve, and demand that suppliers hold floor stock. As a rule of thumb, suppliers were expected to have back-up stock equal to fifty percent of the initial order.

PRODUCT QUALITY means that each unit purchased from the supplier contains the characteristics and attributes that the supplier promised to deliver and the buyer agreed to purchase. Buyers viewed quality in relation to price: value for the money. According to a large national department store chain: "A plastic four-inch long stapler selling for 99¢ would pass a product quality test because of low selling price, even though the product quality is much lower than a metal stapler selling for $9". Quality was seen as a vehicle to attract and maintain customers.

Good quality means reliability, so that guarantees can be upheld. Chain store buyers did not want problems with defective merchandise. Problems are expensive to handle and affect the firm's image. When Rubic's Cube first entered the market, it was very scarce; but there were at least a dozen suppliers with a facsimile version of the Rubic Cube. Stated a book and stationery chain buyer, "They were offered to us and we tried several of them because we could not get the real one. After a short time we discontinued them, because after eight turns they fell apart. We thought it inappropriate to sell them, as they weren't consistent with our intended image." The image issue loomed in importance as buyers insisted that the quality of their new product be congruent with their firm's image.

The major national brand manufacturer's product was considered to be the product quality benchmark for all other similar products, including the buyer's private brands. Buyers insisted that quality be visible to the customer, enhance sales and improve the firm's image.

Buyers were unanimous in declaring that their firm had minimum quality requirements. Where industry standards had been established, buyers wanted the manufacturer to do his own testing before offering a product for sale to the chain store. Other measures of quality typically were maintained through continuous testing in-house, by government agencies, or by product buyers. A second camera chain cited an example: "We lined up in Japan the world's second largest manufacturer of pocket cameras to produce an exclusive for us - a new model. We didn't test it thoroughly enough and ordered 5,000 initially rather than the usual 50. When you get into large quantities, it is important that you examine and test the product thoroughly. If it is your exclusive product, you must provide the supply, the parts, the warranty. We made a mistake which took us five years to fix. It was a good product with one faulty part, the film advance gear was weak."

RETAILER OR DEALER MARKUP was expressed in several ways with "expected profit margin, percentage of selling price over and above the total cost, margin on selling price, and difference between cost and retail" predominating.

Buyers stated that their firms had a mark-up objective. Nevertheless, they sometimes would accept lower margins on new products for specific reasons. "The Black and Decker Workmate does not give a good mark-up, but because the item is important to our national image as a full-line department store, that product is carried. Thus, our markup plan represents an overall average across several product lines."

Coinciding with the markup plan many buyers stated that they did not have a minimum markup, but did have guidelines, depending on the product. One guideline for markups is the objective the firm seeks to achieve with the product. For example, a firm about to sell "Care Bear" items indicated: "Even though the markup is very low, we will still sell them, because of the strong consumer demand and the high volume traffic they are likely to generate.

Firms may look at markup and "key price points" (such as offering a watch at $9.95) together. A typical statement to their supplier might be: "This is how much we will pay. Now, can you come up with a product?"

A minimum or "keystone" markup was used by some firms in this study. "We must achieve a 40% markup for this product line." As a result, those new products which do not meet such a standard were screened out immediately. The thought was expressed that "retailer/dealer markup" meant the same as "expected profit contribution" and if a certain minimum wasn't forthcoming, the buyer wasn't interested. Nevertheless, other buyers stated that their firms did not have minimum markups and charged what the market will bear for new items. "Return on investment", or "turnover" were seen by some buyers as more important than retailer or dealer markup. A common conclusion was that very few decisions were based on gross margin alone.

Firms that did have minimums for specific product groups generally had a mix of high and low margins among products within each group.

PRODUCT MEETS GOVERNMENT REGULATIONS included CSA (Canadian Standards Association) approval (on electrical products), labeling (bilingual, metric), safety standards, and truth-in-advertising, among others. Most buyers saw government regulations as a non-negotiable item where a new product required government approval; if it didn't have it, they would not buy it. Meeting regulations meant that the product had passed the minimal standard for acceptability.

Although buyers put the responsibility on the manufacturer to ensure that his products conformed to required government regulations, retailers felt moral and legal responsibilities to the consumer for the products they were selling. They believed that the public looks to the retailer for protection. Stated a discount department store chain purchasing executive: "I do not think as a person or a corporation you could accept buying something like plastic bags where you know there is even a miniscule chance that some kid is going to suffocate."

Without hesitation, buyers stated that there was no choice with new products - they must meet government regulations, and this usually is stipulated in purchasing agreements.

COMPETITIVE PRICE was seen as the prevalent price in the market for the specific item, or something very similar. It was viewed as the "fair" price. With it, a retailer could compete with the firm next door. However, it did not necessarily mean the identical price.

On the other hand, buyers look unfavourably upon suppliers who tried to buy their way into a market with short-term low pricing tactics. Said a discount department store executive: "If you were to come in to sell me this ashtray for 50¢, and I already display 12 feet of Anchor Hocking glassware in my stores, you could try and buy your way in with that ashtray, but is not worth it financially for me. That one ashtray is not worthwhile opening up a new supplier. I would rather pay 10-15¢ more, and stay with my current supplier."

What the competition was doing with price was viewed as being of paramount importance, with some responsibility being put on the supplier to keep the buyer informed. Most buyers didn't aim at their chains having the lowest price on each item, every day of the year. They realized that this would be futile.

Setting competitive prices presented a challenge for buyers. Few new items were viewed as being totally new, but rather simply variations of what already was on the market. Thus, these latter items often were used as benchmarks. A discount department store executive believed that new products are really modifications of old ones. "In general there is a fair amount of choice in the marketplace," he said. "For example, in the small appliance business, you have a number of suppliers to choose from. We would compare a new product to similar types of products and gauge whether the price was proper. A typical situation would be a new popcorn popper. I would ask these questions: What are the additional features? Are they worth the increase in price? Would customers buy it at our required retail price rather than buy our old model?"

If the item is exclusive to one chain, or represents new technology, "What the market will bear" pricing is often used. If it is a "Me too" product, then the prevailing prices in the marketplace are the benchmarks.

SUPPLIER'S KNOWN TRACK RECORD was seen as including a supplier's ability to be reliable, provide quality products or the quality promised, deal with defective products promptly, deliver on time, have the financial backing to support the product and assume part of the risk, and have the appearance of remaining in the business for a long time. One buyer defined the issue with the following question: "Did our association with a particular supplier produce the kind of profit we felt it should?" Supplier reliability, consistent quality, and delivery when promised were other criteria in a supplier's known track record mentioned by buyers.

Most firms rated their suppliers quantitatively in terms of performance, financial capabilities (including Dunn & Bradstreet reports), and management background. Some buyers flagged suppliers when there were problems and notified them to "shape up or be dropped." Those buyers who didn't use a quantitative measurement of supplier performance kept a mental record. All firms watched their suppliers' delivery times, product sales, stock movements, percentages of product returned, quality control, etc. Because a good track record takes many years to develop, many buyers didn't branch out to new suppliers very often, preferring to deal with those with whom they had a long-term relationship. Buyers often stated that they knew most of the suppliers in the industry and were more receptive to new products from old familiar reputable suppliers than new ones.

New suppliers without a track record were given a chance for new business, but their background was checked out very thoroughly. Buyers giving a new supplier a break hoped this would be remembered when the new supplier became successful. "I have on occasion made decisions for some fairly big buys with people who were nobodies. They developed into somebodies. We helped put them on the map," said a large national department store buyer. "I took a chance. It was a gamble; and it worked. For example, in stationery products, I bought $30,000 worth of school bags from a woman. This order just put her into the business. She had a great model which I hadn't seen before anywhere except at Holt Renfrews (an upscale store). That store was selling a similar one at $35, and I retailed it for $14."

On the whole buyers felt that supplier track record was a key issue and preferred to deal with suppliers which had a good one. A camera store chain executive pointed out: "With a new product from Canon or Kodak, you know from their past performance that they will put advertising support behind it. Recent examples include the Kodak disc camera and Canon AE1 camera. You know there will be customer demand and that the firm is reputable." From past experience buyers know such companies' products sell well, so they patronize the supplier with a good track record.

MANUFACTURER'S INITIAL SUPPLY CAPABILITIES were perceived as the ability to deliver the product on time, in required quantity, and at the specified quality level. The manufacturer's timing was considered crucial. Often if a new supplier missed delivering the initial order on time, no further orders were received.

The buying firm investigated a manufacturer's capabilities through visits to the factory, checking the supplier's financial resources, investigating his reputation in the industry, and through feedback from his other customers. Some buyers would not purchase anything until they saw the potential supplier's plant and judged for themselves. An intangible criterion was almost always used: Does the buyer have a good feeling about the new product and the supplier?

In discussing small new suppliers, buyers in this study were very critical. The buyer felt that small suppliers typically come up with something new and unique, but are overly optimistic about their initial supply capabilities. They usually couldn't provide the sheer volume in the required time frame. Many cases were cited where a supplier, although excited about landing a substantial order, subsequently could not deliver.

Some suppliers were criticized for taking orders for a new product before production began. Stated a large drug chain buyer: "In Canada you have a problem where many manufacturers will go out and book orders three months before they release the product. Then they manufacture. Suppose they book 30,000 units in orders and they manufacture 40,000. If the reserve of 10,000 goes quickly and they can't get back in production, you have a lot of unhappy customers." Some buyers intimated that the product item was seen as being less important than trustworthiness of the supplier or his ability to fill repeat orders.

POTENTIAL MARKET VOLUME for a new product was typically defined as the total unit sales. The goal of each company interviewed was to attain a maximum share of these total unit sales.

Some buyers associated the term with what their chain could do with the item if it is properly promoted, both by themselves and by the supplier; in other words, the total market potential of the item. They expected the manufacturer to present to them projections for the total potential market volume. Although buyer judgement was based on total potential market volume, the incremental volume for the retailer was considered important. A typical question considered by the buyer concerned cannibalism: "Is the new product going to replace something for which we have 90 percent share of the market, or is it so new that it will generate additional sales above our current offering?"

Thus the meaning of potential market volume was actually equated with how much of the new product one could sell (in units and dollars) as opposed to what total potential market might be. Discount department store buyers gave many examples of promotional goods which sold very well, but when economic circumstances caused the price to go beyond a certain point, volume fell tremendously. The sale of motor oil by the case is one such situation. "We used to sell a lot of it; but when the price went above 99¢ per litre, the volume dropped by 50%. Today, we sell it for $1.69, and sales are down."

Most buyers did not require a minimum potential volume for a product to be accepted. For example, a new product may be needed to round out a line, regardless of the sales volume. However, other firms insisted on a minimum potential market volume to make the introduction of the new product worth the effort.

Some buyers tried to formulate a long-range strategy with new products (say, a five-year plan). When they launched a new product on the market, they had a good idea of how large the market was, and what their percentage of it should be.

Of various techniques used to estimate market potential, marketing research studies are most often used. Test market results were considered important to give signals concerning the potential of a product. Buyers often used their larger volume centres (say, a particular store or group of stores in a large urban area) as a test market, feeling that new product trends gradually filter down, and that there would be a time lag in acceptability in other regions.

PRODUCT FITS NEW TRENDS IN MARKET means that the retailer/dealer can respond to consumer demand, can be responsive to the market and can choose products from growth areas to ensure increased volume. Buyers were concerned that what the supplier offered should fit with the way fashions, styles and preferences in the market were moving. If it didn't, they would not be interested in buying the new product.

A critical element they considered when choosing a new product was timing. Many retailers would turn down gimmicks or short-term fad items because they couldn't respond quickly enough, or the product was unsuitable for their image. Most buyers were looking for longevity in new products. Consequently, those which fitted with a trend and were part of a growing field of new products were favoured. With designer jeans, a discount department store chain saw a trend taking off. "But our store isn't the Calvin Klein type. So we used our own brand "Michelle," with our own stitching. The item was very successful, and it outsold the brand names for us."

Buyers were concerned that a need for the new product was developing and that it was not simply a "flash in the pan." A national drug chain used Nielsen's consumer surveys to a great extent to assess this. In shampoos, for example, the leaders would be identified (such as Vidal Sassoon). "If we notice one which has moved from #10 to #3 in the consumer preference, this might be an indication of a new trend. We usually wait a year or so to make sure it is staying in the market; then move in."

Current trends were discovered by Canadian buyers through studying shifts in consumer demand, new items at the manufacturer level (especially design/style changes), trade shows, changes in trend-setting areas of the world (Europe, New York, California), consumer surveys (A.C. Nielsen Company), by visiting the competition and through buyer intuition. Sometimes intuition fails: a large drug chain operation bought an item called "The Screamer," a pressurized whistle in a can that a woman can use in case of attack. It came from Montreal, Quebec and was very popular in the East. "We bought 25,000 pieces on a 100% guarantee of sale. We put up tremendous displays in our stores, and ran big advertisements on it. We sold seven or eight. It was a different market in the province of British Columbia. Women were not afraid of being mugged. We misread the market."

New trends are often used to market existing products in a new way, such as through changes in style, colour, and fashion. Buyers felt that it was the supplier's responsibility to make certain that the product fits the trends before it is presented to the corporate central buying unit.

IMAGE of the new product being congruent with the firm's image means that the product must fit the marketing strategy developed by the company. Buyers insisted that the new product should be compatible with their stores. It must fit into the environment they have created. They knew viscerally whether this is the case. "If any particular product does not meet our image," said a national clothing chain buyer, "it stands out in our stores - becomes a markdown. I could take you around our stores and show you what does not belong. It does not fit in, and the customer recognizes this."

"Does the new product have our look?" was a common phrase used in assessing whether the product would fit the store's image. Buyers believe their stores have set a certain standard, and this standard is reflected in their image. Buyers stated that image is purely qualitative. Some items are suitable and some are not. From experience, they know what their customers expect.

Retail chains invest heavily to create a particular "look". This is intended to attract a certain group of customers. The new product's image must fit this "look" and be consistent with the firm's marketing strategy. Buyers felt that their customers expect certain things (atmosphere, price levels, type and quality of products carried, service offered etc.) from them and they can't disappoint them.

Also the new product must be one which the firm itself is satisfied in selling. "Is it a product we are comfortable in selling?" was a typical way of stating this. "We will not take on products even though we know they will sell very well, if they conflict with the company's image. An important aspect of our image is not to offend certain groups, either religious or ethnic. A good example is vibrators. We could sell 10,000 or 12,000 of them per year. But we don't touch them! The book The Joy of Sex is another case in point. We could sell 25,000 - 50,000 copies, but we don't carry it. It is not worth the hassle. It turns off too many people." -a large drug chain.

Buyers, of course, try to buy to fit the store's image. All respondents claimed they could immediately recognize products which fit this image. They stated that they frequently reject new items which are not compatible, even if they know such products will sell.

TRUSTWORTHINESS in suppliers means that they live up to their commitments and that everything they tell the buyer can be carried out. Trustworthiness also means that suppliers aren't cheating with their products. It is imperative that suppliers provide what they promise, and that they do not import brand-name products without going through approved channels. Buyers for reputable chains avoided the grey market. Buyers felt that closely linked to trustworthiness, honesty and reliability is the supplier's financial capability to live up to his commitments. "It is not good for me to buy from a company on a guaranteed sale, pay for the product, then try to return it 3 months later, only to find out he does not have the money to give back. Trustworthiness means trustworthiness plus financial background," said a buyer for a large drug chain. Suppliers were expected to make promises sparingly and keep them no matter what the cost.

Many buyers explained that, since it is very difficult to evaluate a new supplier and product, their first purchase with a new supplier might be supported by only a cursory assessment of the supplier's integrity. Thus, the onus was on the supplier's salesman to be persuasive, convincing and appear honest.

Although it was expected that the new supplier would be honest and reliable, most buyers track their suppliers' performance quantitatively, ranking them on delivery, quality, returns and regularity of communication. Some buyers regularly sent their products, randomly picked, to an independent research lab for testing as an audit on supplier's reliability.

CONCLUSION: Common terminology often has different connotations to different people. One of the difficulties in the developing discipline of marketing is the standardization of terms and the general acceptance of standardized terminology. Another difficulty, particularly for the supplier, is making general concepts operational. It is the authors' hope that research will continue toward a more standardized terminology in retail buying.

REFERENCES

Alford, C.L. and Mason, J.B. (1975), "Generating New Product Ideas", Journal of Advertising Research, (December), pp. 27-32.

Banting, Peter M. and Blenkhorn, David L., "New Product Criteria in Retail Chains", The Academy of Marketing Science 1982 Annual Conference Proceedings. Academy of Marketing Science.

Banting, Peter M. and Blenkhorn, David L., "What Does the Buyer Mean When He Says Profit?" Industrial Marketing and Purchasing, forthcoming in 1986.

Borden, Neil H., Jr. Acceptance of New Food Products by Supermarkets (1968). Boston: Graduate School of Business Admin., Harvard University.

Doyle, Peter, & Weinburg, Charles (1973), "Effective New Product Decisions for Supermarkets", Operational Research Quarterly, XXIV, No. 1 (March), 45-54.

Gordon, Howard L. (1961), "How Important is the Chain Store Buying Committee?" Journal of Marketing, Vol. 25, No. 3 (January), pp. 56-60.

Heeler, Roger M., Kearney, Michael J. & Mahaffey, Bruce J. (1973), "Modelling Supermarket Product Selection", Journal of Marketing Research, X (February), 34-37.

Hileman, Donald G., and Rosenstein, Leonard A. (1961), "Deliberations of a Chain Grocery Buying Committee", Journal of Marketing, Vol. 25, No. 3 (January) 52-55.

Montgomery, David B. (1975), "New Product Distribution: An Analysis of Supermarket Buyer Decisions", Journal of Marketing Research XII (August), 255-264.

AN INTEGRATIVE MODEL OF MARKET EVOLUTION

Jerry Kirkpatrick, Northeastern University

Abstract

A conceptual model of market evolution is developed by blending together several related notions from the fields of marketing, consumer behavior, retailing, and economics. The model offers answers to questions that have for years plagued proponents of the "wheel of retailing" hypothesis, as well as answers to questions of cause and motive power concerning the process of market evolution. The source of these answers is argued to lie in the work of marketing theorist, Alderson, and in the Mises/Kirzner school of "Austrian" economics.

Introduction

The aim of this paper is to suggest a theoretical framework which incorporates both the product life cycle and the wheel of retailing into a broader model of market evolution. The foundation of the model is based on the work of Kotler, Alderson, and, especially, the economists of the "Austrian" school.

The impetus for the model is the wheel-of-retailing hypothesis. This theory, however, has been severely criticized by many writers. Its scope, for example, is said to be too narrow (Hollander 1960) and in some of its assertions it is said to be flatly wrong (Goldman 1978). These criticisms have led some writers to adopt a broader framework within which to explain institutional change. Davidson, Bates, and Bass (1976), for example, modified the concept of the product life cycle and developed a model of the retail life cycle. This more generalized framework, the authors argue, permits both measurability and explanation of high-price entrants into the retail market (which the wheel hypothesis does not).

Hollander (1977) points out that although the broader theory is more useful than the wheel of retailing, the retail life cycle notion fails to answer two major questions:

1. "Why have the innovators of most new types of retailing . . . chosen price as a major competitive weapon?" That is, why do the owners of most new forms of retailing enter the market on a low-price basis?

2. "Why, once, having entered at a low-price, low margin basis position, do the proprietors or managers ultimately fail to maintain that position?" I.e., why do they trade up?

The wheel theory, further, suggests that trading up is the cause of institutional change. Goldman (1978) and others, however, have found no evidence for this. Consequently, a third question can be added to Hollander's two above:

3. What causes the appearance of new institutional innovations in retailing?

The answer to this question implies a theory of retail or market evolution. McNair & May (1976) broached the broader subject of retail evolution. Kotler (1984, pp. 375-381) has broadened the life cycle concept into a theory of market evolution. It is suggested in this paper that a theory of market evolution incorporates the better explanatory and predictive aspects of both the wheel of retailing and the product life cycle, and eliminates their respective disadvantages.

When discussing the notion of market evolution, however, two additional questions arise:

4. What drives the process of market evolution?

5. Why and how do "strategic windows" open and close? I.e., what causes opportunities to arise in the market and then to disappear?

It is suggested here that a an integrative model of market evolution, rooted specifically in Austrian economic theory (as opposed to the more popular, neoclassical equilibrium theory), can answer these five questions.

The Components of the Model

The model of market evolution can be formulated by integrating the principles of several related models.

Broadening the PLC Concept

Kotler (1984, pp. 375-381) calls for a concept of market evolution that broadens the narrower product life cycle. The focus of Kotler's notion is on how overall markets, rather than products, unfold or evolve over time. Kotler divides his theory into five stages that exactly parallel the stages of the product life cycle. The evolution of markets, says Kotler, is a process of attribute or benefit competition; it is "the history of competitors coming out with new benefits to offer to buyers" (p. 379).

The process begins with the market-crystallization stage where some product champion or entrepreneur identifies a latent need among the consumers which is not presently being satisfied. This product champion or entrepreneur develops and introduces a new product to meet the latent need. The product is a bundle of attributes or benefits that did not exist before. With these new attributes, the market thus crystallizes.

During the market expansion stage, competition enters, offering essentially the same bundle of attributes. Attributes, however, are quantitative variables, meaning that the competition can vary the actual combination of attributes or the quantity of a specific attribute (in order to differentiate themselves from the innovator), or it can compete head-on with the innovator by offering the same bundle.

Market fragmentation occurs when the market is saturated; the abundance of competitors splits the market into fragments and fragmentation erodes both profits and market shares of all competitors. This results from the existence of several competitors in each market segment offering essentially the same bundle of attributes.

Extensive competition fragments the market, but innovation reconsolidates it. The market reconsolidation stage, then, occurs when a new attribute or benefit is introduced and is accepted by the consumer. (Crest promptly emerged leader in a previously fragmented market when fluoride was added to it.) Shortly after reconsolidation, however, the competition imitates the new attributes and moves the market once again toward fragmentation. The market, in fact, may go through several fragmentation and reconsolidation stages, as competition erodes the advantage of a new attribute and as innovation creates still newer attributes. (Note that innovation here means attribute innovation within a product category; a major innovation, such as the establishment of a new product category, would bring about market crystallization.)

Market termination occurs when a radically new innovation takes customers away from the old market and crystallizes a new one. "Thus a product form ends when a new form emerges that meets consumer needs in a superior way" (p. 378).

The Product Life Cycle

The similarities between Kotler's stages of market evolution and the stages of the product life cycle should be obvious. The maturity stage in the product life cycle, for example, occurs when markets fragment and reconsolidate. In fact, Kotler's reconsolidation stage may offer an explanation of some of the quirks found in empirical studies of life cycles. That is, the emergence of new attributes could well explain Levitt's (1965) life-extending scalloped curve and Cox's (1967) cycle-recycle curves.

To elaborate fully a model of market evolution, a few points from the PLC concept should be mentioned. The theory usually cited to support the life cycle concept is diffusion theory (Polli & Cook 1969, p. 386; Rogers and Shoemaker 1971). The S-shaped PLC sales curve from introduction to growth and maturity is explained by the S-shaped cumulative distribution curve of innovation adopters in diffusion theory. The maturity and decline stages of the product life cycle, however, are frequently left without strong theoretical support. Maturity, usually, is explained as saturation of the market; that is, a market matures when the product is adopted by all consumers who have a need for that product. Decline is explained by the introduction and diffusion of a new product which takes customers away from the old market. This, the present writer submits, is not sufficient to explain the back half of the life cycle curve.

Wasson (1968), in attempting to explain swings in the fashion cycle, holds that the consumer's tendency toward overadoption leads him to seek social approval by buying fashions that ultimately do not satisfy him. Consequently, an avoidance reaction sets in and sales of the product decline when the consumer seeks satisfaction elsewhere. More preciseley, the present writer suggests, decline sets in in accordance with the law of diminishing marginal utility; the unsatisfied want of the consumer that initially was satisfied nicely by the innovation becomes satiated or oversatisfied. The value of the product to the consumer declines; the consumer becomes uneasy about having to buy the same product over and over (see Mises 1966, pp. 119-127). It is at this point that a perceptive product champion or entrepreneur seizes the opportunity to offer a new product to satisfy the emerging unsatisfied wants of the consumer. The new product takes customers away from the older product; eventually, sales of the older product decline and the product dies.

Much has been written on the marketing implications of each stage in the product life cycle. For purposes of a model of market evolution, a few comments about product- and price-implications are in order. During the introductory stage of the product life cycle, it seems that the new product--the new bundle of attributes or benefits--is introduced either as a continuous, dynamically continuous, or discontinuous innovation (Robertson 1967) at a price that is set at either a penetration level or a skimming level (Dean 1950). It is suggested here that continuous innovations are introduced at penetration levels, whereas discontinous innovations are introduced at skimming levels. Dynamically continuous innovations can and do seem to go either way. A continuous innovation is essentially a product modification, package change, or other minor attribute addition or change. A dynamically continuous innovation is one that establishes a new product <u>form</u>. A discontinuous innovation establishes a new product <u>category</u>.

Two further points should be mentioned: as a product moves through the life cycle, its real price declines (Day 1981, p. 62)--this is true even for initially penetration-priced products--and the product continually is improved by its producer, by making continuous or dynamically continuous innovations.

The Uniformity-of-Profit Principle

The sales curve of the product life cycle is usually accompanied by a profit curve which rises to a peak during growth, then slowly declines throughout the rest of the cycle. This profit curve is the concrete expression of the profit-motive principle of classical economic theory. Reisman (1979) designated this phenomenom the "uniformity-of-profit principle," which holds that in a market economy there is a tendency toward the establishment of a uniform rate of profit in all branches of industry.

> . . .In other words, there is a tendency for capital invested to yield the same percentage rate of profit whether it is invested in the steel industry, the oil industry, the shoe business, or whatever.

> The reason is that investors naturally prefer to earn a higher rate of profit rather than a lower one. As a result, wherever the rate of profit is higher, they tend to invest additional capital. And where it is lower, they tend to withdraw capital they have previously invested . . . . (p. 5)

The additional capital invested in the more profitable industry increases production and, consequently, tends to drive down the selling price of the products in that industry and the industry's profits. The capital withdrawn from the less profitable industry tends to reduce production and thus raise the selling price of the industry's products and increase its profits. "Initially higher rates of profit are brought down and initially lower rates of profit are raised up. The logical stopping point is a uniform rate of profit in all the various industries." (p. 6).

In other words, the product champion or entrepreneur who perceives an opportunity to make a profit, develops and introduces his new product during the first stage of the product life cycle. During growth, the innovator shows a profit that either climbs to or is expected to climb to above-average levels. The above-average profit attracts investors away from other industries; the investors produce their own competitive products, which eventually causes profits for the industry to peak and then to decline. When the profits fall below the average level of other industries, investors start looking for other, more profitable areas to put their money in, hence the products enter the decline stage of the product life cycle.

The Wheel of Retailing

The incorporation of the wheel of retailing into a model of market evolution is accomplished by viewing the wheel hypothesis as a special case of the product life cycle. (This is not unlike viewing Newtonian physics as a special case of Einsteinian theory; the broader theory defines the appropriate context of the narrower.) The store, according to this viewpoint, is the product (Hisrich, Dornoff, & Kernan 1972; Davidson et al. 1976; Davidson & Johnson 1981). All products are bundles of attributes, both tangible and intangible. Thus, the store-as-product may comprise such attributes as the goods and services mix of the store, its location, its average price level, etc.

A revised wheel of retailing theory, consequently, which treats the store as a product, holds that a perceptive entrepreneur seizes the opportunity to introduce a dynamically continuous innovation at a penetration-price level. The supermarket, for example, when first introduced, was a new product form, compared to other retail food institutions of its time, and its average price level was below market. Other retail innovations, cited in the wheel literature, also fall into this descriptive pattern. Over time, the "product" is improved by adding newer and different attributes, such as improving the goods and services mix of the store. In other words, "trading up" in retailing is the same as the product improvement process of a manufactured good that takes place over time in response to competitive pressures.

Now the wheel theory holds that trading up breeds both higher costs and higher prices. The PLC concept says prices decline. The cost issue in the life cycle literature is not clearly spelled out. Smallwood (1973, p. 31) suggests that both direct costs and gross margins (selling and administrative expenses plus profits) for manufacturing firms decline over time. The present writer suggests that there is considerable confusion between the two literatures over terminology and computational procedures; therefore, the market evolution model hypothesizes that real prices--i.e., the quantity of labor consumers must perform in order to earn money to exchange for products--decline during the retailer's trading-up period, just as real prices of manufactured products decline.

If an analogy between manufacturers and retailers can be made--namely, that directs costs roughly equal the retailer's cost of goods, that selling and administrative expenses roughly equal the retailer's operating expenses, and that gross margins are roughly equal--then the following conclusion results: during the maturity stages of both the product life cycle and the wheel of retailing, competition drives profits down and costs must inevitably rise. This, then, leads perceptive entrepreneurs to seek other, more profitable uses for their funds. Eventually, a perceptive entrepreneur seizes the opportunity to introduce a new form of retailing at higher profit levels, and thus the wheel turns.

While the wheel theory applies mainly to the evolution of large scale forms of retailing, the market evolution model allows other non-wheel-conforming retail innovations to be explained. The convenience store, as pointed out by Hollander (1960), entered the market as a high-price "product." While this form of retailing does not fit the traditional wheel pattern, it does fit the PLC pattern as a skimming-priced product.

By viewing the retail store from this macro or strategic level, the marketing literature which, traditionally, has been written for the manufacturing firm becomes applicable to retail marketing. And the major differences that do exist at the micro or tactical level between manufacturers and retailers fall by the wayside at the macro or strategic level.

The Model

If, then, the life-cycle concepts and the wheel of retailing can be integrated into a model of market evolution, the literature of strategic planning and strategic marketing can be applied to retailing.

Since strategic planning "involves the management of any business unit in the dual tasks of anticipating and responding to changes which affect the marketplace for their products" (Abell 1978, p. 21, emphasis his) and aims at developing a "strategy for long-run survival and growth" (Kotler 1984, p. 35) which matches the distinctive competencies of the firm to the "strategic windows" that open up in the evolutionary unfolding of the market, then strategic marketing aims at defining the bundles of product attributes and benefits that can fit into the niches of the changing market. A model of market evolution, then, tries to explain why and how these "strategic windows" open and close. In principle, there is no reason why these ideas cannot be applied to the field of retailing, which would give retailing a theoretical foundation it presently seems to lack.

The Meaning of Market Evolution

"Market evolution" refers to the process of gradual change that occurs in the consumer's needs and wants over a period of time and to the competitive response of marketers to those changes. As new needs in the consumer emerge, opportunities for an enterprising product champion or entrepreneur arise to develop products to satisfy the needs. When the new product is made available to the consumer, a new market is born. Over time, the needs of the consumer and competitive responses to those needs gradually change; this, in turn, causes the occurrence of the stages of an evolving market.

Market evolution, to put it another way, is the evolution or unfolding of consumer needs and wants and the unfolding of competitive reactions to those needs and wants. A market is essentially people; it consists of consumers and entrepreneurs. Hence, market evolution consists of changes that occur in consumers and the perception of those changes by entrepreneurs. Without products to satisfy the consumer's needs, there would be no market. The various products offered, in turn, influence further changes in the consumer's needs. The whole market-evolution process, more realistically, might be called "product-market evolution" or "marketplace evolution." In any event, market evolution is a broader concept than any of the life cycle concepts because it places greater emphasis on the consumer than on the product; a market evolution model, that is, is a "consumer-oriented" theory.

Alderson and the Austrian Economists

The above description of market evolution is nearly the same as market descriptions given by the economists of the Austrian school (Mises 1966; Kirzner 1973) and marketing theorist Wroe Alderson (1957 & 1965). The similarities between Alderson and the Austrians have been pointed out by Reekie (1984, pp. 107-117), Reekie and Savitt (1982) and Kirkpatrick (1982). It is the entrepreneur's perception of or alertness to the consumer's changing needs that drives the evolving market. Mises states (p. 299):

> The entrepreneurial function, the striving of entrepreneurs after profits, is the driving power in the market economy. Profit and loss are the devices by means of which the consumers exercise their supremacy on the market. The behavior of the consumers makes profits and losses appear and thereby shifts ownership of the means of production from the hands of the less efficient into those of the more efficient. It makes a man the more influential in the direction of business activities the better he succeeds in serving the consumers. In the absence of profit and loss the entrepreneurs would not know what the most urgent needs of the consumers are. . . .

It is competition among entrepreneurs for differential advantage in discrepant (i.e., less-than-perfectly-informed), heterogeneous markets--a competition which aims at satisfying the heterogeneous needs and wants of consumers--that is at the core of the market process.

As Reekie and Savitt (1982, pp. 61-62) point out, however, Alderson stops short of adopting a full Austrian position. His notion that a business firm seeks to discover its own ecological niche, for example, is too passive for the Austrians. The entrepreneur of the Austrian economists not only seeks to occupy a niche within the kaleidic market, but also to create it and to expand it as the consumer's needs and wants present the perceptive entrepreneur with the opportunity. Market evolution (the market process, as the Austrians put it) is an active process, driven by entrepreneur-marketers and their perceptions of need-satisfying opportunities in consumers.

Conclusion

The five questions asked at the beginning of this paper can now be answered, based on the integrative model of market evolution.

1. Why do many new retail forms enter on a price basis? As continuous or dynamically continuous innovations, new retail forms do not have the protection from competition that a discontinous innovation would have. In the competition for differential advantage, low price is frequently the most effective tactic to adopt.

2. Why do they trade up? As the heterogeneous market changes, consumers need and want more and better value for their money. To maintain and expand their niches in the marketplace, retail entrepreneurs must "improve" their "products" or else lose out to the competition.

3. What causes the appearance of new forms of retailing? Below average profits of mature retail forms combined with the "overadoption" of the mature retail form (the satiation of wants) by consumers leads perceptive entrepreneurs to innovate new forms of retailing to better serve the consumers' needs and wants.

4. What drives the market evolution process? It is the entrepreneur-marketer's awareness (ahead of others) of unsatisfied consumer needs and wants and his ability and willingness to do something about them.

5. What causes "strategic windows" to open and close? Most market participants are ignorant of the unmet consumer needs and wants (or are ignorant of how to satisfy the needs and wants). This ignorance opens the windows of opportunity for entrepreneurs because

entrepreneurs--who are more alert and perceptive than others--innovate and develop new technologies to meet the unmet needs. Consequently, the entrepreneurs take advantage of the opportunity--and, eventually, by meeting the needs and wants of consumers contribute to the closing of the strategic window. In a dynamic setting, however, the technological innovation, in turn, influences the market by making consumers aware of other needs that remain unsatisfied; consequently, this leads to more open windows of opportunity.

Thus, entrepreneurship, the search for differential advantage in the face of an uncertain and discrepant, heterogeneous consumer demand--guided by anticipations of profit and avoidance-reactions against loss--is the essence of market evolution. It is the matching and sorting process of entrepreneurs and their responses to consumers that constitutes the market. It is entrepreneurs who determine the product life cycle curves, the stages of the wheel of retailing, and the stages of market evolution. According to the Austrian economists (and, to a great extent, Alderson), the market is a dynamic process and the entrepreneur is the at its center.

REFERENCES

Abell, D. F. 1978. "Strategic Windows," Journal of Marketing 42 (July) 21-26.

Alderson, W. 1957. Marketing Behavior and Executive Action. Homewood, Ill.: Richard D. Irwin, Inc.

Alderson, W. 1965. Dynamic Marketing Behavior. Homewood, Ill.: Richard D. Irwin, Inc.

Cox, W. E., Jr. 1967. "Product Life Cycles as Marketing Models," Journal of Business 40 (October) 375-384.

Davidson, W. R., A. D. Bates, and S. J. Bass 1976. "The Retail Life Cycle," Harvard Business Review 48 (November-December) 89-96.

Davidson, W. R. and N. E. Johnson 1981. "Portfolio Theory and the Retailing Life Cycle." In R. W. Stampfl and E. C. Hirschman (Eds.), Theory in Retailing: Traditional and Nontraditional Sources. Chicago: American Marketing Association, Proceedings Series.

Day, G. S. 1981. "The Product Life Cycle: Analysis and Applications Issues," Journal of Marketing 45 (Fall) 60-67.

Dean, J. 1950. "Pricing Policies for New Products," Harvard Business Review 28 (November) 45-53.

Goldman, A. 1978. "Institutional Changes in Retailing: An Updated 'Wheel of Retailing Theory." In A. G. Woodside, J. T. Sims, D. M. Lewison, & I. F. Wilkinson (Eds.), Foundations of Marketing Channels. Austin, Texas: Lone Star Publishers.

Hisrich, R. D., R. J. Dornoff, and J. B. Kernan 1972. "Perceived Risk in Store Selection," Journal of Marketing Research 9 (November) 435-439.

Hollander, S. C. 1960. "The Wheel of Retailing," Journal of Marketing 25 (July) 37-42.

Hollander, S. C. 1977. "Review of 'The Retail Life Cycle: by Davidson, Bates, & Bass,'" Journal of Retailing 53 (Spring).

Kirkpatrick, J. 1982. "Theory and History in Marketing." In R. F. Bush and S. D. Hunt (Eds.), Marketing Theory: Philosophy of Science Perspectives. Chicago: American Marketing Association, Proceedings Series.

Kirzner, I. M. 1973. Competition and Entrepreneurship. Chicago: University of Chicago Press.

Kotler, P. 1984. Marketing Management: Analysis, Planning, and Control (5th ed.). Englewood Cliffs, N. J.: Prentice-Hall, Inc.

Levitt, T. 1965. "Exploit the Product Life Cycle Concept," Harvard Business Review 37 (November-December) 81-94.

McNair, M. P. and E. G. May 1976. "The Evolution of Retail Institutions in the United States." Report No. 76-100 (April). Cambridge, Mass.: Marketing Science Institute.

Mises, L. V. 1966. Human Action: A Treatise on Economics (3rd revised ed.). Chicago: Henry Regnery Co.

Polli, R. and V. Cook 1969. "Validity and the Product Life Cycle," Journal of Business 42 (October) 385-400.

Reekie, W. D. 1984. Markets, Entrepreneurs and Liberty: An Austrian View of Capitalism. New York: St. Martin's Press, Inc.

Reekie, W. D. and R. Savitt 1982. "Marketing Behaviour and Entrepreneurship: A Synthesis of Alderson and Austrian Economics," European Journal of Marketing 16 (7) 55-66.

Reisman, G. 1979. The Government Against the Economy. Ottawa, Ill.: Caroline House Publishers, Inc.

Robertson, T. S. 1967. "The Process of Innovation and the Diffusion of Innovation," Journal of Marketing 31 (January) 14-19.

Rogers, E. M. and F. F. Shoemaker 1971. Communication of Innovations: A Cross Cultural Approach (2nd ed.). New York: The Free Press.

Smallwood, J. E. 1973. "The Product Life Cycle: A Key to Strategic Marketing Planning," MSU Business Topics," 21 (Winter) 29-35.

Wasson, C. R. 1968. "How Predictable Are Fashion and Other Product Life Cycles?," Journal of Marketing 32 (July) 36-43.

NEW OPPORTUNITIES AND STRATEGIES FOR BUSINESSES

A. Tansu Barker, University of Saskatchewan
Martin L. Gimpl, University of Canterbury
A. Coskun Samli, VPI and State University

Abstract

Entrepreneurs and firms continuously seek opportunities for new businesses which may be exploited when a market and a product are matched with their capabilities to produce desired results (Tregoe and Zimmerman 1979). Although finding and recognizing an opportunity is largely a creative act, some strategies in pursuing opportunities are better than others. This article examines strategies for finding and evaluating opportunities by looking at newness of products, markets and technology.

Dimensions of Newness

Before evaluating an opportunity, ideas must first be located or generated for screening. One basis for a potential opportunity is newness. The basis for the new business may be one or more of the following:

1) product, 2) market, 3) technology of manufacturing, 4) distribution channel, 5) promotional and selling techniques, 6) organizational and 7) financial structure of a firm.

Each of these dimensions of newness has a range of possibilities from the traditional and the state of the art to the radical.

Robertson (1971) has classified new products according to their effect on established consumption patterns by examining innovation as follows:

(1) A <u>continuous</u> innovation has the least disrupting influence on established consumption patterns. Alteration of a product is almost always involved, rather than the creation of a new product.
(2) A <u>dynamically continuous</u> innovation has more disrupting effects than a continuous innovation. Although it still generally does not involve new consumption patterns, it involves the creation of a new product or the alteration of an existing one.
(3) A <u>discontinuous</u> innovation establishes new consumption patterns and results in previously unknown products.

Technology of manufacturing ranges from minor variations of existing processes yielding greater productivity such as new work methods, or sources of cheaper labour, through new materials or machinery to processes that are in no way related to the previous technology. For example, advances in tooling materials resulted in improvements to conventional lathes that permit greater precision and speed. However, the use of spark erosive machinery is a technique completely unrelated to conventional rotating machinery which represents a discontinuous innovation in technology. Although some products are merely improvements on present products and do not represent discontinuous innovation, they may require manufacturing technology that is a discontinuous innovation such as quartz watches. Newness spans a spectrum from imitation through modification to truly creative innovation.

The chief distinguishing feature in considering newness is that the spectrum is not continuous. Variations on a theme based on imitation can only be carried so far but then improvement of a product and technology reaches a limit. To achieve further improvement requires a major thrust forward which is a discontinuous creative innovation not related to the previous ones. Major differences in strategy occur when we move from continuous to discontinuous innovation.

One way of classifying and thinking about opportunities is to look at newness by constructing an n-dimensional matrix for each dimension of newness. If we consider <u>only</u> two points labelled continuous and discontinuous on the scale, we will then have 2^n cells to examine which is obviously very difficult to visualize depending on the value of n.

Many authors (Kotler 1976) have considered a simpler 2x2 matrix by looking at only products and markets. In examining a 2x2 matrix we find that we can develop new businesses by (1) following traditional lines and relying on minor changes in markets and/or products, (2) developing new markets for existing products, (3) developing new products for existing markets, or (4) developing new products for new markets. In each case, new implies discontinuous change. One of the earliest examples of this two-dimensional approach (Johnson and Jones 1957) actually treated the two variables, market and product-technology, by dividing the axis into "no change", "improvements" and "new"; thereby moving towards a more realistic description.

The product-market approach to growth strategies was first outlined by Ansoff (1957) who outlined strategies for market penetration, market development, product development and diversification. Since Ansoff's analysis, more detailed classifications of product-market growth strategies have been made. These strategies are reviewed and extended by Varadarajan (1983) who has superimposed upon Ansoff's 2x2 matrix Levitt's (1980) prescription for increasing sales by:

(1) Promoting more frequent uses among current users.
(2) Promoting new uses among current users.
(3) Creating new users by expanding the market.
(4) Finding new uses in new markets.

Many opportunities are formed around new manufacturing technologies or new marketing techniques and/or a new financial structure of the firm. Taking the newness matrix one step further than the 2x2 product-market matrix, this paper focuses on markets, products and technology of manufacturing and considers a 2x2x2 matrix where

P_C = continuous product usage

P_D = discontinuous product usage

M_C = present market/users

M_D = new market/users

T_C = existing manufacturing technology

T_D = new manufacturing technology

In the opportunity matrix (Figure 1), the cell with the least amount of uncertainty is cell 1 where we consider continuous improvements in the product and technology of production, and known markets. Cell 8 with its radical discontinuous changes in technology, a new product that represents new discontinuous usage patterns and unknown markets, represents a very ambiguous region with high potential payoffs or losses.

Searching for Opportunities

In this section we investigate the advantages and of each one of the 8 cells in Figure 1. The key features of each cell are presented in Figure 2.

Case 1 M_C P_C T_C

In this case, no change in consumption or usage patterns or the product is required by the consumer. The markets are understood and the technology of manufacturing is state of the art or an incremental improvement of the state of the art.

Strategies for entering this cell depend on finding some advantages over incumbents and finding an industry where retaliation is likely to be minimal. The emphasis is on market penetration through manipulation of the elements of the marketing mix. Strategies that can be used here include:

(1) Development of a cheaper method of production thus offering greater economies. This usually means a large investment in plant to produce greater economies of scale. Reduced cost of production usually helps the producer penetrate the market by either lowering prices to attract customers or by increasing the profit margin given to the members of the channel of distribution. Under normal circumstances, the strategy of spending more money on advertising is hindered by loyalty to the existing brands.

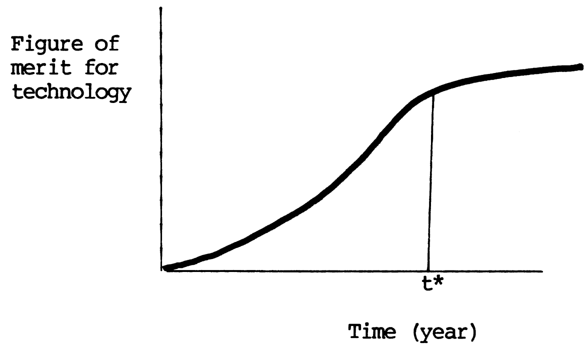
(2) Product differentiation. Higher quality (as perceived by the customer) is always a good way to carve out a niche in any large oligopolistic industry. Development of a higher quality product seems to be a sound strategy for developing new business without vast capital resources.

Other strategies for developing opportunities based on little change in product, market or technology include seeking government protection against competition from imports.

Case 2 M_C P_C T_D

In this case we have a revolutionary new technology capable of making a previous product or improved product. The technology will permit us to develop either a much cheaper product and/or a vastly superior product. The conditions for pursuing a strategy of product line extension are prevalent. The product will not require any changes in user behaviour and the market is well developed in the sense that consumer needs/wants as well as consumer <u>readiness</u> is established. To enter this cell of the matrix a superior technology of production must have been developed. Discontinuous and innovative designs such as the jet plane, rotary engine and electronic ignition represent examples of this case.

These are solutions to well-known product-market problems. These breakthrough technologies are more viable whenever we have reached a plateau in the technology vs time curve.



At times before t*, a new technology has limited possibilities for acceptance as the present technology is on a linear or exponential growth curve. When the growth curve begins to flatten, then the industry is ripe for a breakthrough technology.

A firm looking at the M_C P_C T_D cell for opportunities should concentrate on the shape of the figure of merit vs time curve for the technology involved. Examples of figures of merit include kilometer per hour for air travel, lumens per watt for illumination, and kilowatt-hours of electricity per ton of aluminium in aluminium refining.

There are several pitfalls in examining such curves. When a plateau (knee) of the curve is reached, breakthrough in technology may occur in many ways. A plot of the efficiency of thermal power stations against time would show that in the 1950s we were at a knee of the curve. The amount of electrical energy derivable from a similar amount of thermal energy was stuck at a certain percent. This could mean that efficiencies based on fuel price (nuclear power) or generating technique (magnetohydrodynamics) could be at a takeoff point. Actually breakthroughs in metallurgy took place that permitted higher temperatures in fossil fuel stations that resulted in a significant growth in efficiency of conventional fossil fuel plants. This set back the acceptance of nuclear power.

M_C P_C T_D strategies usually require significant amounts of basic research and large development expenses as the technology is progressing from laboratory to pilot plant to full-scale production. With patent protection and proprietory knowledge, retaliation by incumbents is limited and entry barriers are raised. The key point is to develop a technology that offers significant advantages over the presently available technology that is stuck at a knee on the curve.

It also seems that development of a significant technology at the right time is still no guarantee of being able to sell it to users of the old technology - especially if there is a significant investment in the previous technology, e.g. BOF steel making could not be sold to U.S. steel producers who continued to rely on the open hearth process because they had a significant investment in existing technology.

To be accepted, new technology has to be introduced (1) at a time where the existing technology has reached a plateau in its efficiency vs time curve, i.e. further improvements are marginal at best, and (2) by someone who does not have a large investment in the previous technology. Introduction will be slow in a monopolistic situation, in a more competitive market the new technology will be introduced by a newcomer to the industry or by the weakest competitors who have the least to lose and the most to gain.

Case 3 M_C P_D T_C

In this case, we start with a given market and technology and are asked to develop new products. The basic strategy is one of replacement and a certain amount of product line extension.

Market research is not particularly helpful before test marketing radically new products. In fact, test marketing may be disappointing if we have a long diffusion time. This criticism has been developed by Tauber (1977, 1979).

Marketing's task in this cell is to find and develop an innovative segment of the market. In fact, Kerby (1972) suggests that:

> If sound reasons for a lack of interest are not discovered, the marketer is justified in repudiating the research findings and proceeding under the assumption sufficient demand exists but is awaiting development.

Products developed using this strategy usually require consumer education. A large segment of innovators must be found if the product is to be viable. It helps when the product that is being replaced has reached a plateau in its improvement over time. Color TV might have been more quickly accepted if it were introduced when perfect black and white reception was available.

Timing of products is important, as the product being replaced is more acceptable when there has been a steady history of incremental improvements. For example, an alternative to the family car would find a bigger "innovators segment" now than in say 1920 or 1930. Therefore breakthroughs may be earmarked by looking at the history of the present products.

More innovators are likely to be found when technology is stuck on its productivity curve. We also find consumers resistant to major changes when they have a significant investment in the previous technology. A firm or industry tied to a given manufacturing technology and product configuration will usually not retaliate to a new product that will eventually replace it.

Case 4 M_C P_D T_D

This situation calls for the development of truly new products (P_D) by employing discontinuous technology (T_D) which are to be offered to an established market. From the point of view of the consumer, the difference between this case and Case 3 may not be significant or even perceivable because the consumer, unlike the manufacturer, does not really care whether the new product is the result of existing or new technology.

The introduction of refrigerators when ice boxes were still quite popular represents an example of this case. The revolutionary acceptance of the micro and mini computers in the business world and home entertainment domain are further examples.

From the entrepreneur's point of view, especially the profit implications of Case 3 versus Case 4 are significant. In the latter case, both the investment requirements of the discontinuous technology (T_D) and the synergy and co-ordination needed between the technical and production capabilities far outweigh what is required in Case 3. For those firms that can make the necessary investment and sustain the innovative spirit to provide a series of new products, this is likely to be the most profitable position. According to a study of 177 companies (Cooper 1979), the single most important dimension leading to new product success is product uniqueness and superiority followed by market knowledge. The potential to be ranked very high on both of these criteria exists for this cell. Any other combination of product and technology attributes is likely to be ranked lower in terms of uniqueness as imitation becomes easier and moving away from M_C towards M_D is likely to affect the risk factor adversely without necessarily improving the profit potential.

This may be the ultimate example of the classic situation exemplified by the proverbial "mousetrap." In this case, marketers should not be overwhelmed by the marketing concept to the extent that they wait until a need is expressed by the consumer before the new product is launched (Kerby 1972). As consumers do not always know what they want or are not articulate enough or willing to state their reasons and marketing research techniques in attitude measurement are not yet foolproof, marketing should concentrate more on finding ways of creating demand and having the product accepted rather than judging it a failure too quickly merely on the basis of consumer surveys.

Case 5 M_D P_C T_C

As illustrated in Figure 1, market extension is the key factor in cell V. The general strategy implies product repositioning or modification to encourage new uses for the product. Selling baking soda as a refrigerator deodorant to those who did not purchase it for baking purposes would come under this heading. The strategic emphasis is on finding new consumer segments who use current products of the firm.

The key characteristics of this strategy (Figure 2) are low R & D and technology related investments and high marketing expenditures so that the new positioning efforts will be successful. This is more of a marketing activity than many of the other alternatives. The literature indicates that if the product is not doing well and if it would be difficult to vitalise it, the company may do better by positioning it in a new market than eliminating it completely. Of course, the opportunity costs for the firm and existing alternatives will play an extremely important role if this strategy is really viable.

Case 6 M_D P_D T_C

Many companies in their regular R & D activities develop new products which are by-products of other R & D activities. As cell VI indicates, there could be new opportunities for the firm in new markets for this product. Of course, the most attractive feature of this strategy is the fact that it does not call for new technology related investments (Figure 2). Although a very attractive profit picture may not be associated with this strategy, since the product was developed completely in a vacuum, it does not posit a high risk situation and, hence, it may be quite attractive for the firm to pursue if it is prepared to invest in marketing and fine-tune its production and technology interface. In many cases, barriers to entry are more likely to be marketing factors due to a lack of knowledge by the would-be competitors than manufacturing considerations as the situation represented by P_D T_C is very highly prone to imitation since current technology is being used in offering a product which is not as unique as P_D T_D.

Case 7 M_D P_C T_D

In this situation we look for opportunities for products produced by unconventional technology for new markets. Products that fit this category include laboratory curiosities where new technology produces a by-product. An example in the chemical industry is Teflon which was produced like this. TCNQ is an organic crystalline substance that is a conductor of electricity in one direction, a semiconductor in another and an insulator in the third direction. No real market has yet been found for this class of interesting materials. Rollemite bearings and Mobius strip resistors are other examples of products for new markets.

Looking for opportunities in this cell requires creative thinking about uses and markets. Unlike Case 6 above, many new opportunities are detected through new technologies for new markets. Here the firm keeps its products but uses the benefits of new technology in the production of its products and markets the products in new markets. With the development of micro chips it became very easy for the home electronics manufacturers to produce TV sets and sound systems substantially cheaper than before. They therefore started marketing these products in lower income domestic markets as well as international markets. While the R & D expenditures may be rather low, marketing and technical investment costs are high (Figure 2).

Case 8 M_D P_D T_D

This cell may yield opportunities but we are unsure of any positive strategy that will improve one's productivity. The development of radically new products requiring a new technology and to be used in an unknown market is not something that is amenable to rational decision-making.

If the product and technology exist then the burden is on marketing to somehow locate innovators. Thinking about opportunities in this cell is not very helpful. We can dream up first avant garde products, or technologies, or new markets. Starting with markets - imagine a new world where life is based on ammonia rather than water - what products and technologies must we develop?

Primarily this case implies breakthroughs as all the costs are high but profit potential is very attractive. Additionally, this situation indicates that the opportunities both in the long run and the short run are very attractive. When IBM developed the <u>first</u> computer it was facing this particular situation. While the uniqueness aspect of this cell matches that of Case 4, more caution must be exercised in judging marketing aspects of the situation due to the fact that the market is not known.

Discussion

This paper examined strategy using newness of products, markets and technology as the variables. An understanding of newness with reference to the concept of continuous versus discontinuous innovation along these three dimensions could facilitate determination of various expected costs, profit potential and the risk factor. Furthermore, it is expected that this classification may suggest new business opportunities by indicating gaps in the market and pointing out the critical factor(s) associated with that opportunity.

References

Ansoff, Igor, "Strategies for Diversification," <u>HBR</u>, Sept.-Oct. 1957, pp. 113-124.

Cooper, R. G., "The Dimensions of Industrial New Product Success and Failure, <u>Journal of Marketing</u>, Summer 1979, pp. 93-103.

Johnson, Samuel C. and Conrad Jones, "How to Organize for New Products," <u>HBR</u>, May-June 1957, p. 52.

Kerby, J. K., "The Marketing Concept: Suitable Guide to Product Strategy," <u>Business Quarterly</u>, Summer 1972, pp. 31-35.

Kotler, Philip, <u>Marketing Management</u>, 3rd ed. (Prentice-Hall, 1976), p. 14.

Levitt, Theodore, "Marketing Success Through Differentiation of Anything," <u>HBR</u>, January-February 1980, pp. 83-91.

Robertson, <u>Innovative Behavior and Communications</u> (Holt, Reinhardt and Winston, 1971).

Tauber, Edward M., "Forecasting Sales Prior to Test Marketing," Journal of Marketing, January 1977, pp. 80-84.

________, "How Marketing Research Discourages Major Innovation," Business Horizons, June 1979, pp. 22-26.

Tregoe, Benjamin B. and John W. Zimmerman, "Strategic Thinking: Key to Corporate Survival," Management Review, February 1979, pp. 9-14.

Varadarajan, Poondi, "Intensive Growth Opportunities: An Extended Classification," California Management Review, Spring 1983, pp. 118-132.

Figure 1

THE OPPORTUNITY MATRIX

		Existing market	Market development
Existing Technology	Existing Product	New opportunities for existing conditions. I	New opportunities through new markets. V
Existing Technology	Product Development	New opportunities through extension of product lines. III	New opportunities through new products for new markets. VI
Technology Development	Existing Product	New opportunities through new technology. II	New opportunities through new technology for new markets. VII
Technology Development	Product Development	New opportunities through new products developed by new technology. IV	New opportunities through new products developed by new technology for new markets. VIII

Figure 2

THE KEY FEATURES OF THE OPPORTUNITY MATRIX CELLS

	R & D Costs	Marketing Costs	Technology Related Investments	Profit Potential	Risk Factor
Case 1	low	low	low	low	low
Case 2	low	medium	high	medium	medium
Case 3	high	medium	low	medium	low
Case 4	high	medium	high	high	high
Case 5	low	high	low	medium	low
Case 6	high	high	low	medium	medium
Case 7	low	high	high	medium	medium
Case 8	high	high	high	high	high

IDENTIFYING COMPETITIVE BOUNDARIES:
AN ANALYSIS OF THE IMPACT OF COMPETITIVE SITUATIONS
ON CONSUMER'S PERCEPTIONS OF RETAIL STORES

J. Joseph Cronin, Jr., University of Kentucky
Scott W. Kelley, University of Kentucky

Abstract

This paper reports the results of a survey designed to assess how consumers' perception of a retail store is affected by its competitive position. Specifically, two questions were addressed: (1) does the traditional assumption that retail competition tends to be intertype appear to be true in practice? and (2) what advantages are gained by a retailer positioned in a "competition free" environment? Managerial implications are presented.

Introduction

The environment in which retailers are operating is extremely competitive. The intense competition retailers face is generally considered to be of two types, intertype competition (between dissimilar stores; e.g., traditional department versus discount department stores) or intratype competition (between similar stores; e.g., traditional department stores versus traditional department stores). Within this competitive environment, however, the notion of competition-free retailing has been identified as an emerging concept in retail management (Bates, 1977). Competition-free retailing occurs when a retailer is positioned in markets in which competitors are either limited in number or poorly organized. Aside from the obvious economic advantages a relatively noncompetitive environment offers, a number of strategic ramifications exist for retailers selection of markets in which to compete. In particular, the identification of actual competitors is of importance. Knowledge of who their competition is allows retailers to better position themselves to compete.

The study presented was designed to answer two important questions. First, is the traditional assumption that retail competition tends to be intratype (Hirschman, 1978) correct? Second, what advantages (or disadvantages) does a retailer gain from being positioned in a "competition-free" environment?

Background

The intent of this paper is to investigate how the basis of competition affects the advantage gained by the retailers involved. More specifically, the intent was to identify the actual domain of competition within the department store retail sector and to ascertain how the level of competition affects consumers' perceptions of competing retailers.

Department store types have been distinguished by Hirschman. The classification system developed and empirically tested by Hirschman recognizes three types of department stores (Hirschman, 1978):

1. traditional department stores
2. national chain department stores
3. full-line discount department stores

Traditional department stores are locally owned full-line department stores whereas the national chains are similar stores such as J. C. Penny's, which operate on a national basis. The discount department stores are differentiated from the national chain department stores on the basis of their price structure. Typically, the discount department store competes for the lower price - higher volume business.

Hirschman (Hirschman, 1978) states that competition tends to be intratype, rather than intertype. For example, traditional department stores tend to compete mainly with other national chain department stores; and discount department stores compete with other discount department stores. Based upon the three department store types, this study evaluates the competitive enviornment in two cities to determine the impact on consumers' perceptions of stores.

The perceptions of the stores were based upon seven attributes. These included (1) quality of sales people, (2) size of merchandise selection, (3) prices, (4) quality of merchandise, (5) merchandise display, (6) customer services; such as credit availability and return policies, and (7) special services; such as home decorating services. The selection of these attributes was based on several earlier studies (c.f. Arnold, Oum, and Tigert, 1983; Hansen and Deutscher, 1980). These studies, use the same basic criteria utilized in this study for evaluating retail image and patronage patterns.

The Competitive Situation

Because the investigation presented is designed to ascertain whether the assumption that retail competition tends to be intratype is correct and to analyze how consumers' perceptions of stores are influenced by the level of competition within a market, a description of the competitive situation in the market examined is necessary. In analyzing the competitive environment which is summarized in Table 1, it is apparent that the traditional department store market in $City_1$ is "competition-free." There is only one traditional department store (TDS_1 four outlets) operating in this market. On the other hand, the competitive environment for traditional department stores (TDS's) in $City_2$ can be considered highly competitive. There are four TDS_1 outlets operating, which is identical to the situation in $City_1$; however, there are eighteen outlets of three other TDS's in $City_2$. Therefore, $City_1$ fits the definition of Bates' (1977) competition-free environment, if the assumption that competition is intratype is accepted.

The competitive situation in the national chain department store (NC) market can be considered similar in $City_1$ and $City_2$. In addition, the competitive environment in the full-line discount department store (DDS) market is also quite similar in $City_1$ and $City_2$.

Based upon the earlier findings of Bates (1977), one would expect consumers to evaluate a specific store differently when the competitive environment was different. For instance, TDS_1 is in a "competition-free" environment in $City_1$ but a very competitive environment in $City_2$. Therefore, you would expect the store to be evaluated differently by consumers in the two cities on the seven attributes investigated. Because no research has been published to date which addresses the impact of the competitive situation on consumers' perceptions of retailers, no directionality can be hypothesized for this difference.

One is also lead to believe that department stores of the same type in similar competitive environments will be evaluated similarly. In this study, it was expected that stores of the first national department store (NC_1) in $City_1$ and $City_2$ would be evaluated similarly as would stores of the second national department store chain (NC_2) which also had outlets in both cities. There was also one full-line discount department store (DDS_1) which had stores located in both cities. The expectation was that these outlets would be equivalently perceived in $City_1$ and $City_2$.

TABLE 1
AN ANALYSIS OF COMPETITIVE ENVIRONMENTS UTILIZING STORE TYPE[a]

	Traditional Department Stores		National Chain Department Stores		Full line Discount Department Stores	Total Department Stores
	TDS_1	Others	NC_1	NC_2	Inclusive	
City 1	4	0	3	8	39	54
City 2	4	18	4	5	37	68

[a] Based upon an actual count of the Yellow Pages listings of the respective cities.

The Research Setting

The data used in this study was collected as part of a larger research project conducted for a traditional department store organization with locations in three midwestern states. A random telephone survey of 313 women was taken. There was an approximately equal representation between the two cities; 159 cases from $City_1$, 154 cases from $City_2$. An analysis of the demographics of the two cities reveal that they are very similar. The populations of the SMSA's in which $City_1$ and $City_2$ are located are 1,093,316 and 1,166,575 respectively. The population is 84 percent urban in $City_1$ and 82 percent urban in $City_2$. Females fifteen years or older make up forty percent of the population in both cities. Fifty-four percent of the females over sixteen are in the labor force in both cities. The median household income in $City_1$ is \$17,316, in $City_2$ it is \$18,674. The median ages of $City_1$ and $City_2$ are 28 and 29 respectively (Census of the Population, 1980). At the time of this study, total retail sales were \$5,314,682,000 in $City_1$ and \$5,832,336,000 in $City_2$. This ranked these two cities 37th and 34th nationally in total retail sales, respectively. General merchandise sales were \$823,484,000 in $City_1$ and \$816,561,000 in $City_2$, ranking the cities 34th and 35th nationally. Retail sales per household were \$12,893 in $City_1$ and \$13,538 in $City_2$ (Sales and Marketing Management: 1982 Survey of Buying Power). Given the similarities in the demographics of each city, it is reasonable to assume that any differences in the ratings of attributes between cities should not be credited to differences in the characteristics of the two cities' populations.

Summary of Findings

As discussed earlier, it was anticipated that our findings would support the results of a previous study conducted by Hirschman (1978). She found that within the department store industry there was a tendency toward intratype competition as opposed to intertype competition. In the context of the present study, this would lead one to believe that given similar competitive environments for a specific department store type there should be no significant differences between the rankings of attributes in the two cities. Conversely, when there are differences between the competitive environments of specific department store types in the two cities, the attributes of the store in the competitive environment should be perceived differently than the store in the "competition-free" environment. The results are summarized in Table 2.

TABLE 2
STORE ATTRIBUTE VALUES

	NC 1 City 1M	NC 1 City 2M	NC 1 T-Value Two Tailed Probability	NC 2 City 1M	NC 2 City 2M	NC 2 T-Value Two Tailed Probability	Discount Stores City 1M	Discount Stores City 2M	Discount Stores T-Value Two Tailed Probability	TDS City 1M	TDS City 2M	TDS T-Value Two Tailed Probability
Quality of Sales People	3.18 (n=158)	3.54 (n=132)	-3.23 p=.001	3.44 (n=156)	3.64 (n=129)	-1.88 p=.061	1.282 (n=157)	2.60 (n=131)	-2.53 p=.012	3.89 (n=159)	4.21 (n=125)	-3.20 p=.002
Size of Merchandise Selection	3.34 (n=133)	3.97 (n=138)	-4.68 p=.000	3.60 (n=157)	3.98 (n=133)	-3.36 p=.001	2.83 (n=158)	3.16 (n=130)	-2.75 p=.006	4.21 (n=159)	4.28 (n=123)	-.78 p=.436
Prices	3.31 (n=156)	3.44 (n=136)	-1.39 p=.166	3.37 (n=158)	3.52 (n=133)	-1.67 p=.096	3.87 (n=158)	3.72 (n=132	1.37 p=.171	2.89 (n=158)	3.13 (n=137)	-1.79 p=.075
Quality of Merchandise	3.52 (n=135)	3.99 (n=137)	-5.07 p=.000	3.69 (n=157)	3.91 (n=132)	-2.48 p=.014	2.72 (n=158)	2.98 (n=136)	-2.45 p=.015	4.29 (n=159)	4.44 (n=138)	-1.86 p=.064
Merchandise Display	3.25 (n=135)	3.75 (n=136)	-4.90 p=.000	3.47 (n=156)	3.75 (n=131)	-2.86 p=.005	2.45 (n=157)	2.85 (n=138)	-3.37 p=.001	4.35 (n=158)	4.30 (n=127)	-.61 p=.543
Customer Services	3.72 (n=154)	3.98 (n=132)	-2.47 p=.014	3.84 (n=155)	3.94 (n=126)	-1.12 p=.265	3.09 (n=155)	3.36 (n=127)	-1.94 p=.053	4.35 (n=158)	4.13 (n=131)	2.16 p=.032
Special Services	3.01 (n=146)	3.52 (n=120)	-4.32 p=.000	3.11 (n=147)	3.43 (n=113)	-2.82 p=.005	1.74 (n=146)	2.42 (n=113)	-5.02 p=.000	4.83 (n=148)	4.81 (n=111)	.16 p=.875

Our findings indicated the following:

- Traditional department stores in the "competition-free" environment of $City_1$ were generally ranked lower on the seven attributes studied than traditional department stores in the competitive environment of $City_2$.

- National chain department stores in $City_1$ were ranked significantly lower than national chain department stores in $City_2$ on the seven attributes studied, even though the competitive environments of the national chain department stores were viewed as similar between cities.

- Full line discount department stores in $City_1$ were ranked significantly lower than full line discount department stores in $City_2$ on the seven attributes studied, even though the competitive environments of the full line discount department stores were viewed as similar between cities.

- Department stores in general were ranked lower on the seven attributes studied in the less competitive environment of $City_1$ than in the more competitive environment of $City_2$.

Traditional Department Stores

The traditional department store (TDS_1) investigated operates in a "competition-free" environment in $City_2$. The expectation was that the differences in the "competitiveness" of the two markets would lead to different perceptions of the store between the cities. A difference was found; however, consumers' perception of the store was lower in the "competition-free" market of $City_1$. This finding was surprising especially considering that the firm is based in $City_1$ and is considered an intregal part of that community.

Several possible explanations for this finding were considered. First, the result could be due to conceptual differences in the store outlets from city-to-city. After interviewing managers of TDS_1, this possibility was rejected because the four outlets in $City_1$ are each approximately the same size as the four outlets in $City_2$, and the store layouts and merchandise assortments are also nearly identical.

A second possible explanation considered was possible variations in the demographic and attitudinal characteristics of consumers. This was also rejected. Demographically the cities are very similar, as was indicated earlier in the paper. An attitude survey was not incorporated in the study, but intuitively the cities appear very similar. The cities are 150 miles apart and are both typical midwestern cities with dominant service -oriented economies. Extreme differences in attitudes between the pair of cities is not likely.

The explanation which seems most likely in the context of this study centers on the nature of the competition encountered by TDS_1 in the two markets. In the more competitive environment of $City_2$, TDS_1's outlets are generally rated higher because they are forced to perform more efficiently than their outlets in the "competition-free" environment of $City_1$.

National Chain Department Stores

In the two markets examined, there were two national department store chains which had outlets located in both cities; NC_1, and NC_2. There are a total of eleven national chain department stores in $City_1$ (three NC_1's and eight NC_2's). In $City_2$, nine national chain outlets were in operation (four NC_1's and five NC_2's). This would appear to suggest similar ratings between cities for the national chain outlets due to their relatively similar intratype competitive environments. However, the perceptual ratings of the stores based upon the seven attributes measured found the national chains in $City_1$ rated consistenly lower than those in $City_2$. These comparisons were conducted within chains, so the differences cannot be explained by dissimilarities between NC_1, and NC_2 outlets.

The consistenly lower ratings of the national chain department stores in $City_1$ (see Table 2) might be explained by intertype competition rather than intratype competition. As mentioned earlier, the intratype competitive environments are very similar in each city; however, the intertype environment (as indicated by the difference in the total number of stores in each city) is more competitive in $City_2$ than in $City_1$. The lower level of competition among department stores in general in $City_1$ might explain the lower rankings for the national chain department stores there. These findings seem to indicate that the intertype competitive environment may be a more important factor than the intratype competitive environment when evaluating retailing opportunities.

Full-Line Discount Department Stores

The findings concerning discount department stores are similar to those of the national chain department stores. It was anticipated that there would be little difference in the ratings in the discount department stores between cities due to the similar intratype competitive environments (see Table 1; 39 discount outlets in $City_1$, 37 in $City_2$). Even though the intratype competitive environments for the discount department stores were similar in both markets, discounters in $City_1$, were again rated lower on all seven attributes under consideration. This would seem to indicate that intertype competition may again be a more important consideration than intratype competition.

"Competition-Free" Retailing

The results indicate that "competition-free" retailing does not enhance the market strength of retailers. In the "competition-free" market (traditional department stores) investigated, the retailer performance was perceived lower than in the competitive environment. This seems to indicate that if the consideration of retail competition is limited to the intratype dimension, "competition-free" positioning does not enhance consumer perceptions. Rather, it appears to be associated with less efficient performance, which could invite competitors to enter the market.

Intratype--Intertype Competition

An alternative explanation for the "competition-free" position effect on retail perceptions may be that retail competition is actually intertype. The data investigated suggests that this is the case. In every intratype comparison, significant differences were found between the two cities even though none were expected because there were no differences in the level of intratype competition. In each case the direction of the difference was the same; the more competitive intertype market ($City_2$) was perceived to have better performance. This would appear to suggest that the proper competitive comparison level is intertype. Thus, "competition-free" retail markets can exist, but only where there are no or only poorly organized intertype competitors.

Managerial Implications

"Competition-free" retailing and the level of competition within the industry (intratype versus intertype) are concepts which have had wide exposure in the retail literature (Bates, 1977). The success of a "competition-free" positioning strategy depends a great deal upon the retailers definition of their competitive boundaries. It appears that two alternatives exist. Retailers might define their competitive boundaries to be intratype as recommended by Hirschman (1978), or alternatively the relevant competitive boundaries can be considered to be intertype. The findings presented in this study indicate that an intertype definition may be more appropriate because consumers appear to consider competition to exist across store types.

If the relevant competitive boundaries in retailing are defined to be intertype as indicated, there are several implications for retail managers. When a new retail market is under consideration, all current competitors should be examined. For example, a full-line discount department store which is contemplating entry into a new market should examine all facets of the department store market in the proposed environment not just the intratype discount sector. When establishing a new retail outlet, it is reasonable to assume that their are a finite number of consumer dollars to be spent. It is, therefore, imperative that retailers properly define their competitive boundaries. Consumers spend their dollars based upon their own set of criteria, not according to how someone else defines their options. Thus, retailers must define the boundaries of competition according to consumers' perceptions of their alternatives. This study suggests that consumers perceptions do not delineate the level of competition to a narrow basis. Rather, they appear to seek their own "best value."

A second implication of this study involves consumers perceptions of the efficiency of retail outlets. The results presented suggest that the retailers operating in the less competitive environment of $City_1$ were perceived as less efficient than those in $City_2$. In only one case (out of a total of 28) was the performance of a retailer in the less competitive $City_1$ perceived as better than the performance of retailers in $City_2$. This again stresses the importance of intertype competition. It would seem that a new retail outlet which defined its competitive boundaries to be intertype could be successful in $City_1$ with an efficient performance level. In the more competitive environment of $City_2$, where the current market entries are perceived to be relatively efficient, it would be more difficult to launch a successful outlet.

It is obvious from these results that the proper definition of competitive boundaries is not only important in identifying potential market opportunities, but also in the designation of appropriate retail strategies. Retailers' product lines, store hours, credit policies, price structure, advertising, etc., should be influenced by the intertype competitive environment, as well as the intratype. An inadequate definition of competitive boundaries may cause a retailer to miss potential opportunities. Knowing ones competition from the viewpoint of consumers can help a retailer to avoid such mistakes as overpricing, inadequate services, and misspecified product assortments. Proper definition of competitive boundaries helps stores position themselves to effectively compete against their "real" competition.

Conclusion

It was anticipated that this study of consumers' perceptions of retail establishments would verify the intratype nature of retail competition. Instead, the findings suggest that competitive boundaries in retailing should be defined as intertype. The study indicates that retail managers should consider the intertype competitive environment when contemplating strategic alternatives, when evaluating new markets, and when choosing positioning strategies. It is also suggested that "competition-free" environments be evaluated on an intertype rather than an intratype basis.

Limitations

While this study did not rule out all the plausible alternative explanations for its findings, reasonable care was taken to focus the investigation on differences in the competitive environment. Therefore, this work should not be taken as conclusive proof that a "competition-free" environment is nonexistent or that the basis of retail competition is strictly intertype. Rather, it suggests that the concept of "competition-free" retailing and limiting the analysis of retail competition to an intratype basis do not appear applicable to all retail markets. Retail managers, thus, should exercise care in their employment of these concepts.

References

Arnold, Stephen J., Tae H. Oum, and Douglas J. Tigert (1983), "Determinat Attributes in Retail Patronage: Season, Temporal, Regional and International Comparisons," Journal of Marketing Research, 20 (May), 149-57.

Bates, Albert D. (1977), "Ahead - The Retrenchment Era," Journal of Retailing, 53(Fall), 29-46.

Census of the Population (1980). Volume I Characteristics of the Population. U. S. Department of Commerce Bureau of the Census 1983.

Hansen, Robert A., and Terry Deutscher (1977), "An Empirical Investigation of Attribute Importance in Retail Store Selection," Journal of Retailing, 53(Winter), 59-72.

Hirschman, Elizabeth C. (1978), "A Descriptive Theory of Retail Market Structure," Journal of Retailing, 54(Winter), 29-48.

Pessemier, Edgar A. (1980), "Store Image and Positioning," Journal of Retailing, 56(Spring), 94-106.

Sales and Marketing Management: 1982 Survey of Buying Power, vol. 129, no. 2, July 26, 1982.

AN ANALYSIS OF THE IMPACT OF THE MOTOR CARRIER ACT OF 1980 ON THE USE OF ADVERTISING BY GENERAL MOTOR FREIGHT CARRIERS

Steven G. Greene, University of Southern Mississippi
John R. Tanner, Southeastern Louisiana University
Peter Wright, Southeastern Louisiana University

Abstract

The purpose of this paper is to determine if advertising in the motor carrier industry has increased since the passage of the Motor Carrier Act of 1980. A census of sixty-five common carriers was conducted through the use of a mail survey. Simple, but meaningful, dependent and independent variables were established to test several hypotheses.

Overall, the results indicate that deregulation has had very little effect on the use of advertising in the motor carrier industry. Even within a deregulated environment, demand for transportation remains a derived demand. Apparently, advertising efforts are not likely to stimulate primary demand for motor carrier service.

Introduction

Prior to congressional enactment of the landmark Motor Carrier Act of 1980,[1] motor carriers basically marketed their freight services through personal sales efforts.[2] Carrier marketing programs were, in effect, personal sales efforts directed toward end-use market segmentation; a practice which at best can be euphemistically termed "marketing." Obviously, this pervasive industry practice fails to conform with the conceptual framework of marketing found in the literature.

Carrier marketing efforts were narrowly constricted for a variety of sensible institutional reasons. First, operating routes and rates were for the most part fixed. Secondly, freight service is essentially a "wholesale" activity as opposed to passenger service which is essentially a "retail" activity.[3] Thirdly, transportation demand is a derived demand functionally dependent upon changes in industrial production and ergo, is relatively price inelastic when examined on an aggregrate basis.[4] Fourth, transportation output is homogenous[5] - a ton-mile - and hence, difficult to differentiate.[6] Fifth, and lastly, transportation decision-makers are difficult if not impossible to identify relative to carrier selection.[7] In short, the common carrier segment of trucking was treated as a classical public utility even though its economic characteristics were somewhat incongruent with other public utility enterprises.[8]

Since 1980, the motor carrier industry has undergone rather dramatic restructuring, a process continuing to this day. Liberalized entry and route restriction elimination has resulted in a plethora of new carriers - over 12,000[9] - entering this finite market, but the majority of these new firms are special commodity truckload carriers or subsidiaries of existing carriers. Rates still have to be published in tariffs and complied with, and no price changes can be made in less than 30 days except under special circumstances.[10] Even though the industry is undergoing dramatic

---

[1] U.S. Congress, Public Law 96-296 (July, 1980).

[2] See Grant M. Davis, Martin T. Farris, and Jack J. Holder, Jr., Management of Transportation Carriers (New York: Praeger Publishers, Inc., 1978), p. 160.

[3] Roy J. Sampson, Martin T. Farris, and David L. Shrock, Domestic Transportation: Practice, Theory, and Policy, 5th ed., (Houghton-Mifflin Co., 1985), p. 109.

[4] A majority of empirical studies reveal that transportation demand is relatively price inelastic when examined on an industry basis. See George W. Wilson, Transportation Economics Analysis of Intercity Freight Transportation (Bloomington, IN: Indiana University Press, 1980), chapter 1.

[5] For an indepth analysis of the putative homogeneity of the "ton-mile," consult George W. Wilson, Essays on Some Unsettled Questions in the Economics of Transportation (Bloomington, IN: Foundation for Economics and Business Studies, 1962), chapter 2.

[6] Third degree price discrimination is one of many methods employed that differentiate ton-mile for individual consignments; see Grant M. Davis and Linda J. Combs, "Some Observations Regarding Value of Service Pricing," Transportation Journal, Vol. 14, No. 3 (Spring, 1975), pp. 49-55.

[7] Why shippers selected a given carrier is difficult to quantify. In many instances, difficulty is encountered when attempting to truly determine the individual in a given organization who actually makes this decision. Tardiff, and Bram Johnson, "Shippers' Preferences for Trucking Services: An Application of the Ordered Logit Model," Proceedings - 23rd Annual Meeting Transportation Research Forum, Vol. XXIII, No. 1 (Oxford, IN: The Richard B. Cross, Co., Inc., 1982), pp. 195-201.

[8] See Alfred Kahn, Economics of Transportation, Vol. 11 (New York: John Wiley and Sons, 1970), pp. 178-186.

[9] U.S. Congress, House of Representatives, Subcommittee on Surface Transportation of the Committee on Public Works, Motor Carrier Act of 1980 - Oversight, hearings, (October 23, 1983), pp. 1-40.

[10] 49 CFR 1307.45.

restructuring and earnings are presently low,[11] carrier marketing strategies continue focusing on market coverage and terminal placement, with primary emphasis remaining on personal sales service efforts rather than any careful integration of price, promotion, and distribution strategies.[12]

Given the climatic impact of regulatory reform on the industry, one would expect firms to employ strategies other than price discounting, market coverage, and terminal placement in the freight industries. Obviously, advertising has not been employed extensively by the industry prior to 1980. Even though the product appears homogenous, the presence of an almost infinite number of published prices suggests massive and successful attempts to achieve product uniqueness.[13] Informative advertising, moreover, would appear to be appropriate in the case of motor freight service because it not only increases competition, but if successful can inject elasticity in the demand curve, reduce prices, and increase revenues for the successful practitioner.[14]

Purpose of the Study

Because of the dynamic nature of trucking brought about by liberalized market entry and price freedom, the primary purpose of this paper is to tentatively evaluate the use of advertising by motor carriers in the new market environment. Unfortunately, as the reader will note, the results were not promising, i.e., the extent of widespread product advertising in the wholesale freight markets is questionable. To be more precise, the specific purpose of this paper is to determine if carrier advertising has increased since the passage of the Motor Carrier Act of 1980.

With all of the regulatory changes which have occurred in the motor carrier industry, it is important to determine the effect that deregulation has had upon the firm's marketing efforts. Of particular interest to marketing executives would be changes in the use of advertising since deregulation.

The demographic and attitudinal variables to be examined include frequency of freight service advertising, whether or not an advertising agency is employed, perceived importance of the available various advertising media used,[15] and, more importantly, whether or not a carrier's advertising practices have changed since regulatory reform. Other important marketing constructs such as personal sales are ignored, for the purpose of this paper as previously stated focuses upon carrier use of advertising. No attempt is made, moreover, to classify advertising per se either on a manipulative or informative basis.[16] Lastly, these carriers' primary businesses are in the wholesale freight area, not the retail passenger segment of the domestic transportation industry where the use of advertising is pervasive.

Methodology Employed

Since the purpose of this analysis is to identify and profile the use of advertising by firms in the motor carrier industry, a basic research instrument sufficient to accumulate the necessary data was essential. In this regard, simple but meaningful dependent and independent variables were concurrently employed to constitute a base for the subsequent research methodology and subsequent tests of hypotheses.

In order to test certain hypotheses, a census was taken of common carriers listed in the Standard and Poors Directory.[17] In this particular census sixty-five common carriers are listed in the directory and, hence were selected to form a census for examination and testing of hypotheses regarding carrier reliance or emphasis upon the use of advertising.

One dependent variable of the study was established as "perceived effectiveness of the firm's advertising efforts," while a second dependent variable was established as the "respondent's perceived change in the use of advertising since the passage of the Motor Carrier Act of 1980." The independent variables which were measured in the study included both demographic and attitudinal variables. More specifically, the independent variables were: (1) frequency of advertising; (2) use of an advertising agency; and, (3) media preferences. From a pure classification perspective, moreover, advertising was considered to be informative in nature.

Hypotheses and Results

In order to facilitate presentation, the hypotheses to be tested in this manuscript are stated in the null form, and each statement of the hypothesis is followed by a pithy explanation of the findings. Lastly, the .05 level of significance was employed for all testing of statistical significance.

> H^1 There is no significant difference between those freight companies which perceive freight service advertising as being effective and those companies which perceive it as being ineffective, with respect to how often freight service advertising is used.

---

[11] Irvin Silberman, statement before the House Subcommittee on Surface Transportation of the Committee on Public Works, U.S. Congress (October 23, 1983).

[12] Davis, et.al., loc.cit.

[13] Davis and Combs, loc.cit.

[14] See William J. Stanton, Fundamentals of Marketing, 3rd ed. (New York: McGraw-Hill Book Co., 1971), p. 535.

[15] Supra, note 12.

[16] All carrier advertising efforts were assumed to be of the informative type.

[17] Although other listings of carriers are available for sampling purposes, Trincs, ad infinitum, Standard and Poor's grouping provides a census of different types of motor carrier rather than just common, contract, exempt, and private; a classification schema that is not as important as before 1980.

The t-test revealed that at the .05 level, there was no significant difference between freight companies perceiving advertising as being effective and those perceiving it as being ineffective, with respect to frequency of advertising. On the average, both groups advertised more on a monthly or quarterly basis, but neither advertised more frequently or less frequently than the other. These observations are reflected in Table 1.

TABLE 1
FREQUENCY OF ADVERTISING PLACEMENT

FREQUENCY OF ADVERTISING PLACEMENT	TOTAL PERCENT OF OCCURRENCES
Weekly	3.8
Monthly	38.5
Quarterly	23.1
Other	34.6
	100.0

2 Tail T-Test Probability = .335*

*This is the 2-tail t-test probability when comparing those freight companies which perceive freight service advertising as being effective and those which perceive it as being ineffective.

H^2 There is no significant difference between those freight companies which perceive freight service advertising as being effective and those which perceive it as being ineffective, with respect to whether or not an advertising agency is commissioned to develop and place the advertising.

Table 2, moreover, reveals in the t-test that there was a significant difference between the two groups at the .05 level. Those freight companies that perceived freight service as being effective used advertising agencies significantly more than those who did not perceive advertising to be effective. This might indicate that advertising agencies do a better job of freight service advertising than "in-house" advertising given the general industry feelings that "wholesale" advertising has little if any impact on revenues; hence, the usage of outside agencies is more prevalent than in-house advertising. This particular finding is not surprising simply because freight carriers that use advertising are more apt to seek "outside" assistance because of an inability or perceived luxury of maintaining an "in-house" advertising capability. Arkansas Best Freight, for example, has one executive responsible for public relations and one of his many responsibilities is advertising. This firm, an inordinately large advertiser by motor freight carrier standards, uses outside agencies for all advertising programs.

TABLE 2
EMPLOYMENT OF ADVERTISING AGENCIES
BY FREIGHT COMPANIES

ADVERTISING AGENCY IS EMPLOYED	TOTAL PERCENT OF OCCURRENCES
Yes	61.5
No	38.5
	100.0

2-Tail T-Test Probability = .001*

*This is a 2-tail t-test probability when comparing those freight companies that perceive freight service advertising as being effective and those that perceive it as being ineffective.

H^3 There is no significant difference between those freight companies who perceive freight service advertising as being effective and those that perceive it as being ineffective, with respect to the importance of the newspaper as a medium for advertising.

The t-test revealed that those freight companies having a favorable perception of the effectiveness of advertising had a significantly stronger preference for newspaper advertising than did those companies having an unfavorable perception of the effectiveness of freight advertising. In other words, newspapers were significantly more important to the companies perceiving freight advertising as being effective as an advertising medium; an observation is illustrated in Table 3.

TABLE 3
MEDIA PREFERENCE OF FREIGHT SERVICE ADVERTISERS

MEDIA PREFERENCE	TOTAL PERCENT* OF OCCURRENCES	2-TAIL* T-TEST PROBABILITY
Newspaper	50.1	.034
Magazine (General)	47.2	.461
Spot Radio	24.1	.457
Television	19.2	.215
Direct Mail	89.5	.156
Trade Journals	96.2	.009

*All freight service advertisers use multiple media.

**This is the 2-tail t-test probability when comparing those freight companies that perceive freight service advertising as being effective and those that perceived advertising as being ineffective.

H^4 There is no significant difference between those freight companies which perceive freight service advertising as being effective and those which perceive it as being ineffective, with respect to the importance of magazines, radio, television and direct mail, as media for advertising.

As shown in Table 3, the t-tests on magazines, radio spots, and networks all revealed no significant difference between freight companies who perceived advertising as being effective and those who perceived it as being ineffective, with respect to the preference of each of the above mentioned advertising media. That is, neither group attached any more importance to the use of magazines, the use of radio, the use of television or the use of direct mail for advertising purposes than did the other group. Newspaper and magazine preference reveals the industrial goods nature of trucking rather than any strong perception of the effectiveness of any given medium. Many of these media efforts, moreover, are more public relations measures than any serious attempt to gain product uniqueness.

> H^5 There is no significant difference between those freight companies which perceive freight service advertising as being effective and those which perceive it as being ineffective, with respect to the importance of the use of trade journals as an advertising medium.

The t-test revealed that freight companies perceiving freight service advertising as being effective attached a significantly stronger preference for the use of trade journals than those companies who perceived freight advertising as being ineffective. Again, as was found with newspapers, the companies perceiving freight service advertising as being effective attached more importance to the use of trade journals than the other group of companies; an observation revealed in Table 3. Trade journal advertising moreover, would be expected given the intangible nature of products sold and its market, i.e., ton-miles and wholesale markets.

> H^6 There is no significant difference between those freight companies which perceive freight service advertising as being effective and those which perceive it as being ineffective, with respect to the effect of deregulation.

Table 4 data reveals that the t-test showed no significant difference between the companies having a favorable impression of advertising effectiveness in the freight service industry and those with an unfavorable impression of advertising effectiveness, with respect to the effect of deregulation. That is to say, a majority of both groups were forced to change their advertising practices since deregulation, but neither group changed significantly more than the other. One partial explanation to this observation may be the administrative deregulation by the ICC that occurred from 1978 until 1980[18], a trend that ultimately resulted in the Motor Carrier Act of 1980.

TABLE 4
PERCEIVED CHANGES IN USE OF ADVERTISING SINCE DEREGULATION OF MOTOR CARRIER INDUSTRY

PERCEIVED CHANGES IN ADVERTISING SINCE DEREGULATION	TOTAL PERCENT OF OCCURRENCES
Definite Change	73.1
No Change	26.9
	100.0

2-Tail T-Test Probability = .609*

*This is the 2-tail t-test probability when comparing those freight companies that perceive freight service advertising as being effective and those that perceive it as being ineffective.

The remaining hypotheses and accompanying tables are analyzed to determine if a statistically significant difference exists between those freight service companies which have changed their advertising practices since 1980 and those companies which have not changed their advertising practices, with respect to selected demographic and attitudinal factors.

> H^7 There is no significant difference between those freight service companies which changed their advertising practices after deregulation and those companies which did not change, with respect to how often they advertise.

As shown in Table 5, the t-tests revealed no significant differences between companies which had changed their advertising practices since deregulation and those which had made no such changes, with respect to frequency of advertising (p=.657). That is, both groups advertised mostly either monthly or quarterly, and neither group used one advertising period significantly more (less) than the other.

> H^8 There is no significant difference between those freight service companies which changed their advertising practices after deregulation and those which made no such changes, with respect to whether or not an advertising agency was commissioned to develop and place company advertising.

The t-test revealed no significant difference between the two groups with respect to whether or not an advertising agency was used (p=.252). The group of companies which had changed advertising practices since 1980 showed a slightly stronger tendency to use advertising agencies, but not a significantly stronger preference.

> H^9 There is no significant difference between those freight service companies which changed their advertising practices since deregulation and those which did not change, with respect to media preference.

The t-test revealed no significant difference between the two groups of companies with respect to the importance of preference of advertising media. This means that both groups attached the same

---

[18] Between 1975 and 1980, the motor carrier industry was partially deregulated through a series of <u>Ex Parte</u> decisions rendered by the U.S. Interstate Commerce Commission. For evaluation of these Ex Parte activities, see Grant M. Davis, <u>Motor Carrier Economics, Regulation, and Operation</u> (Washington, DC: The University Press of America, 1981, chapter 6.

amount of importance to the use of newspapers (p=.925), magazines (p=.079), radio (p=.207), television (p=.076), trade journals (p=.229), and direct mail (p=.097) as advertising media. Thus, regardless of whether a company changed advertising practices since 1980, the various media used to advertise did not change in importance. These results support earlier observations regarding homogeneity of products produced by members of the motor carrier industry, as well as the existing dichotomy in the industry between those firms committed to advertising and those refraining from the practice.

H^{10} There is no significant difference between those freight service companies which changed their advertising practices since deregulation and those which have not changed, with respect to perceived effectiveness of freight service advertising.

As shown in Table 5, the t-test revealed no significant difference between the two groups of freight service companies, with respect to perceived effectiveness of advertising. More specifically, the group of companies which had increased advertising practices since 1980 perceived freight service advertising to be slightly more effective than the group which had not changed advertising practices, but not significantly more effective. In short, deregulation has levied only a miniscule effect on perceived advertising effectiveness.

TABLE 5
PERCEIVED EFFECTIVENESS OF FREIGHT SERVICE ADVERTISING

PERCEIVED EFFECTIVENESS OF FREIGHT SERVICE ADVERTISING	TOTAL PERCENT OF OCCURRENCE
Effective	.654
Ineffective	.346

2-Tail T-Test Probability = .425

Summary of Findings

Advertising by motor carriers before 1980 was not used extensively except by a minority of carriers in the industry. Industry members relied almost entirely upon personal sales efforts in lieu of advertising simply because of the nature of the product produced and marketed: a perceived homogenous ton-mile. Most advertising was and remains institutional because of the "wholesale" nature of the business, i.e., industrial goods market. The primary purpose of this research effort was to measure the impact of the Motor Carrier Act of 1980 on carrier advertising efforts, a landmark act that liberalized market entry, route structure, and price. Not surprisingly, given the restructured industry, advertising effectiveness has not appreciated in terms of acceptance or usage by carriers.

When comparing freight companies respondents who perceive freight service advertising as being effective to those companies perceiving freight service advertising as being ineffective, relatively few differences were discovered. Companies perceiving freight service advertising as being effective were found to make greater use of advertising agencies to develop and place their advertising. With respect to advertising media, this same group had stronger preference for newspaper and trade journals, but neither group had stronger preferences for the use of magazines, radio, networks, or direct mail.

Also, neither group had a stronger preference for how many times freight service advertising was used (both advertised more on a monthly or quarterly basis). Finally, both groups had changed their advertising practices since deregulation, but neither group had changed significantly more than the other. When those freight service companies which had changed their advertising practices since deregulation were compared to those freight service companies which had made no changes with respect to selected demographic and attitudinal factors, no significant differences were found between the two groups.

Overall, it would appear that deregulation has had very little effect on the use of advertising in the motor carrier industry. Even with deregulation, the demand for transportation remains a derived demand and focuses upon industrial goods, and advertising efforts are not likely to stimulate primary demand for motor carrier service. Continued research in this area, may, however, reveal more extensive use of advertising by general freight carriers as restructuring of the industry intensifies during the next five years.

References available upon request from authors.

THE COOPERATION-CONTROL RELATIONSHIP IN A FRANCHISE CHANNEL

Stanley D. Sibley, University of Wisconsin Oshkosh

ABSTRACT

The relationship between cooperation in the distribution channel and member control over business policies was investigated in a franchise channel for farm implements. The results indicated that control over pricing and terms and over service capability were positively related to the perceptions of cooperation and that control over dealer operations was negatively related to cooperation. In specific, as dealers perceive to have greater (less) control over the relevant decision issues, their perceptions of cooperation increase (decrease).

PURPOSE OF STUDY

In distribution channels, cooperation is a requisite for firms to function smoothly and effectively in performing the necessary tasks (Robicheaux and El-Ansary 1976-1977). Yet, other than for a few studies cooperation has received relatively minor attention by channel researchers. The purpose of this study is to investigate the relationship between cooperation and control of major decision areas in the channel.

COOPERATION

The research on cooperation in distribution channels has focused on relationships with performance, satisfaction, and the sources of power. One study indicated that cooperation outperformed conflict in explaining differences in performance by channel members (Pearson and Monoky 1976). However, the relationship between cooperation and performance can be modified by the type of performance measure, resulting either in a positive function or a U-shaped function (Brown 1979). Limited evidence suggested that perceptions of cooperation can lead to feelings of satisfaction (Dwyer 1980). Other research provided support that the noncoercive power sources are related positively to cooperation, and the coercive power sources were unrelated to it (Sibley and Michie 1982.)

CONTROL

The control over business policies in the distribution channel has been hypothesized to be the major contributing factor in explaining the level of cooperation existing in member relationships (Robicheaux and El-Ansary 1976-1977). Very little attention has focused on the control over issues of another channel member as an explanatory variable; instead, channel researchers have tended to use the sources of power as explanatory variables (Hunt and Nevin 1974; Lusch 1976; Wilkinson 1979; Sibley and Michie 1981). Two studies supported the relationship between control and some of the sources of power (Etgar 1978; Wilkinson 1979).

THE PROBLEM

The problem investigated is whether indeed the control over business policies in the channel contributes to explaining the level of cooperation existing in the channel. In specific, the greater the control over the issues by dealers, the greater the perceived cooperation will be found in the channel. The rationale for this hypothesis is that the autonomy from having control over one's destiny would result in greater perceived cooperation than in those situations whereby another channel member would have control.

THE SAMPLE

The data to test the hypothesis were collected from a national survey of franchised dealers of a farm implement manufacturer. A mail questionnaire with a cover letter was sent to 419 dealers with a follow-up mailing to nonrespondents in 1983. For this analysis, 203 questionnaires were usable.

METHODOLOGY

The level of cooperation in the channel as perceived by the dealers was measured on a 5-point scale with the points designated as "No Cooperation," "Little Cooperation," "Some Cooperation," "Much Cooperation," and "Great Cooperation." A high score indicated "Great Cooperation." This scale was used to measure the cooperation for each of 20 business policies found through a literature review, interviews with representatives from the manufacturers and dealers, and a pretest with dealers. These items are given in Figure 1. The scores across the 20 items were summated to derive an overall cooperation score. An item analysis correlating each item with the overall score showed correlations of .60 or better. The alpha coefficient was .977. The correlation between the cooperation index and a single measure of general cooperation was .538.

Control was measured on a 5-point scale with the points described as "Manufacturer Has Almost Complete Control," "Manufacturer Has More Control Than the Dealer," "Manufacturer and Dealer Share Control About Equally," "Dealer Has More Control Than The Manufacturer," and "Dealer Has Almost Complete Control." The higher score was representative of the "Dealer Has Almost Complete Control." Control was measured over the same business policies since it was hypothesized to be issue specific (Robicheaux and El-Ansary 1976-1977). These measures were then subjected to a varimax rotated factor analysis resulting in three major factors. The items and corresponding factor descriptors are given in Figure 1.

FIGURE 1

THE ITEMS INCORPORATED INTO EACH VARIABLE*

COOPERATION

- Office recordkeeping system
- Local advertising expenditures
- Inventory requirements for new machinery
- Inventory requirements for parts for servicing
- Stocking of competing lines
- Stocking of complementary lines
- Sales calls on customers
- Service calls on customers
- Working capital requirements
- Credit policies
- Pricing policies for new machinery
- Pricing policies for parts
- Pricing policies for service work (nonwarranty)
- Pricing policies for warranty service work
- Space allocation within the business facility
- Sales promotion displays
- No. of salespeople
- No. of mechanics
- Hours of operation
- Remodeling and expansion of the business facility

OPERATIONS

- Office recordkeeping system
- Space allocation within the business facility
- No. of salespeople
- No. of mechanics
- Hours of operation
- Remodeling and expansion of the business facility
- Pricing policies for service work (non-warranty)

SERVICING CAPABILITY

- Inventory requirements for new farm machinery
- Inventory requirements for parts
- Stocking of competing lines
- Stocking of complementary lines
- Sales calls on customers

PRICING AND TERMS

- Pricing policies for new farm machinery
- Pricing policies for parts
- Pricing policies for warranty service work
- Credit policies
- Sales promotion displays

*Control items excluded because of loading at .40 or higher on more than one factor were local advertising expenditures, service calls on customers, and working capital requirements.

THE RESULTS

The purpose of this research was to study the level of cooperation in the channel and the control over business policies of the dealer as perceived by the dealer. One appropriate method is regression analysis. The results are given in Table 1. The regression equation is significant beyond the .001 level, accounting for nearly 15 percent of the variation in cooperation.

TABLE 1

THE RESULTS FROM THE REGRESSION MODEL

COOPERATION = (OPERATIONS, SERVICE CAPABILITY, PRICING/TERMS)*

Explanatory Variables	Unstandardized Regression Coefficients	Standardized Regression Coefficients	"t" Values	Sign. Level #
Constant	2.491			
Pricing and Terms	.056	.345	4.95	.001
Service Capability	.039	.157	1.91	.050
Operations	-.031	-.145	1.80	.100

*Multiple R = .383; R-Squared = .146
Significance level is for a one-tail if the sign were in the hypothesized direction; otherwise a two-tail test was used.

The test of the hypothesis was whether there was a positive sign and a statistically significant standardized regression coefficient for each of the explanatory variables. The two variables on pricing and terms and on service capability were significant at the .01 and .05 levels, respectively. The final variable on operations had a negative sign and a significance level of .10.

CONCLUSIONS

The regression results support a modest relationship between the control over issues by a channel member and the cooperation level perceived in the channel. Control over pricing and terms and over service capability by the dealer contributed to the perceptions by the dealer of greater cooperation in the channel. From the dealer's perspective, the dealers controlled pricing and terms and service capability which have a strong influence on the profitability and competitiveness of the dealers in selling farm machinery.

The control over operations, however, was perceived to be the manufacturer rather than the dealer and acted as adverse affect on the perceived level of cooperation in this channel. One reason for this finding might be the loss of autonomy felt by the dealer from the manufacturer requiring specific standards to be met in the dealer's operations. One channel member model (Robicheaux and El-Ansary 1976-1977) suggests that both control over issues and autonomy can be influencers on the degree and nature of cooperation in the channel. Another reason for this finding might be the dealers' perceptions of forced cooperation which is inconsistent with the spirit of cooperation and working together toward mutually desired goals.

The results to the manufacturer in this channel provide useful insight on the management of cooperation and its level in the channel context. If the manufacturer seeks less (more) control over the business policies of the dealers, the manufacturer can increase (decrease) the perceived cooperation in the channel. Whether the manufacturer desired to increase or decrease its control over the issues might well be determined by the existing level of cooperation found in the channel, by competitive intensity found in the industry, general industry conditions, and the opportunities to gain an advantage over its dealers or other channel systems. Generally, when the level of cooperation in the channel is low to moderate, the strategy to increase channel cooperation could be considered theoretically best since it would be hypothesized that greater cooperation would be associated with greater channel member satisfaction and higher channel system performance. However, if the manufacturer had a narrow perspective of the channel and viewed its dealers as simply buyers, it might attempt to use its position to take greater control over their business policies in attempting to enhance its own profitability while disregarding the profitability of the dealers. Also, competitive intensity in the channel and adverse economic conditions might force the manufacturer to become more involved in dealer problems and to control more business policies for the purpose of helping its dealers to survive.

This study has several limitations. The findings are limited to one manufacturer and its dealer network, to franchised dealers, and to the farm implement industry. Also, only the perceptions of dealers were analyzed on the perceived cooperation and control over business policies in the channel. The dealers' perceptions, particularly on control over issues, may not reflect reality due to personal bias or to the lack of perceiving the methods the manufacturer might be using for exercising control.

In the future, more research should be centered on the degree and nature of cooperation in the distribution channel as they affect behavioral relationships since cooperation appears to be a valuable variable in helping to undersand channels and their members but needs further confirmation across different channel situation and industry structures. Also, the managing of the level of channel cooperation by one or more members, given the channel situation and industry structure, needs investigation to determine how it influences channel system performance and member performance. Future research on channel control could focus on the control measurement in trying to derive a better operational measurement or on the issues controlled by either or neither party in the relationship. The operational measure of asking "who controls to what degree on a business policy" may not capture the true relationship existing between two channel members concerning the channel issues affecting customer relations and channel performance. A different research undertaking is to challenge the concept of business policies as the focal point for control and seek a more relevant set of variables for measurement. One or both of these approaches might be fruitful since the research findings on the control over channel issues have provided modest results and insight at best.

REFERENCES

Brown, James R. 1979. "Channel Cooperation: Its Relationship to Channel Performance," in Contemporary Issues in Marketing Channels, Robert F. Lusch and Paul H. Zinszer, eds. Norman: The University of Oklahoma, 87-101.

Dwyer, R. Robert 1980. "Channel-Member Satisfaction: Laboratory Insights," Journal of Retailing 56 (Summer) 45-65.

Etgar, Michael 1978. "Selection of an Effective Channel Control Mix," Journal of Marketing 42 (July) 53-58.

Hunt, Shelby D. and Nevin, John R. 1974. "Power in Channels of Distribution: Sources and Consequences," Journal of Marketing Research 11 (May) 186-193.

Lusch, Robert F. 1976. "Sources of Power: Their Impact on Intrachannel Conflict," Journal of Marketing Research 13 (November) 382-390.

Pearson, Michael M. and Monoky, John F. 1976. "The Role of Conflict and Cooperation in Channel Performance," Proceedings, The American Marketing Association, 240-244.

Robicheaux, Robert A. and El-Ansary, Adel I. 1976-1977. "A General Model for Understanding Channel Member Behavior," Journal of Retailing 52 (Winter) 13-30, 93-94.

Sibley, Stanley D. and Michie, Donald A. 1981. "Distribution Performance and Power Sources," Industrial Marketing Management 10 (February) 59-65.

Sibley, Stanley D. and Michie, Donald A. 1982. "An Exploratory Investigation of Cooperation in a Franchise Channel," Journal of Retailing 58 (Winter) 23-45.

Wilkinson, Ian F. 1979. "Power and Satisfaction in Channels of Distribution," Journal of Retailing 55 (Summer) 79-94.

STRATEGIC INTERORGANIZATION MANAGEMENT: AN APPROACH FOR EVALUATING THE IMPACT OF NEW TECHNOLOGIES ON DISTRIBUTION CHANNEL STRUCTURES AND RELATIONSHIPS

Adel I. El-Ansary, The George Washington University
Patricia B. Fox, SRA Technologies, Inc.

Abstract

Members of distribution channels for goods and services are facing a major technology-based upheaval caused by the computer and telecommunications revolution of the 1980s. So far, many of the effects of the new technologies have not been fully capitalized on by distributive institutions. Indeed, channel members lack a systematic framework for assessing new technologies and assimilating them into the vertical marketing structure, i.e., the marketing channel. The objective of this paper is to provide channel members with a framework that will allow them to assess emerging technologies from their own unique positions and perspectives. The approach is Strategic Interorganization Management, an analytic technique developed to improve the performance of vertical marketing systems in the delivery of service outputs desired by organizational users and final consumers. The Strategic Interorganization Management Approach involves three processes or stages.

I. Environmental Scanning: at this stage a channel member must:
   (a) Monitor and scan the environment to determine changing customer, user, and consumer requirements, competitive trends, and emerging technologies.
   (b) Define evolving synergies as a result of the emerging trends and classify these synergies as environmental opportunities and threats.

II. Intraorganizational Assessment: at this stage a channel member must examine the mission, strengths, weaknesses, and values of the key executives in the organization to articulate the organization's potential in:
   (a) Capitalizing on opportunities,
   (b) Fending off threats, and
   (c) Transforming threats into opportunities.

III. Interorganizational Linkage Development: at this stage the channel member must examine the interorganizational linkages and synergies that may lead to enhancement of the intraorganizational mission by enabling the organization to capitalize on opportunities and fend off threats by joining other channel members in new or modified channel arrangements designed to enhance its effectiveness and efficiency in the delivery of outputs desired by users, customers, and final consumers.

In this paper, the authors illustrate the application of the Strategic Interorganization Management Approach to the evaluation and assimilation of the new communication technologies of videotex and teletext.

Introduction

The computer and telecommunications revolution of the past 10 to 15 years has affected virtually every area of modern commerce and, along with it, the structures, relationships, and functions of distribution channels. Yet, with all the changes that have occurred but, by and large, the changes have been ones of degree rather than of kind.

In the near future, however, distribution channel members may be facing a major technology-based upheaval. This upheaval will be caused by the ability of the consumer to shop from home via computer terminal for virtually any product or service available in the marketplace. This development, in fact, is upon us. A number of services already exist that enable the consumer to purchase anything from airline tickets to stock to lawn mowers from his easy chair. Many services also permit easy comparison of price and features among products and retailers.

Widespread acceptance of computer-based at-home shopping has the potential to cause major changes in channel structures and relationships. The function and resulting compensation of channel members could alter drastically or permanently shift to new institutions.

It is beyond the scope of this paper to foretell every combination and permutation of channel relationship and structure that could result from widespread electronic shopping. Even if we attempted to do so, we undoubtly would miss many and be wrong about others. Our purpose is to provide a framework that will allow channel members to assess emerging technologies from their own unique positions and perspective. The approach is strategic interorganization management, an analytic technique developed to improve the effectiveness and efficiency of the vertical marketing system in the delivery of service outputs desired by organizational users or the final consumer.[1]

We also do not attempt to predict exactly the structure and ultimate shape of computer-based home-shopping services. There are a number of systems in use but the ultimate configuration of this new technology is not yet clear. However, we do provide a primer to the basic characteristics of the industry and an outline of possible future scenarios, along with the reasons why we believe these services will account for a large and growing proportion of consumer sales in the years to come.

The Impetus for Electronic Shopping

The authors believe that consumer shopping is on the threshold of major changes. These changes have been predicted for almost 20 years, but never before has there been the necessary synergy in consumer behavior trends and ready availability technology and consumer sophistication that is evident today. (Doody and Davidson 1967)

Manufacturers, wholesalers, and retailers have always responded to changes in consumer behavior. To survive, all members of the distribution channel must adapt to cultural trends. In the past 15 years, these industries have undergone significant change. Ownership has become more concentrated. Primary location preference of retail outlets has shifted from the cities to the suburbs. Shopping centers have replaced downtown areas as principal shopping meccas. Franchising has provided a new type of vertical integration.

Many of the trends may appear contradictory. There has been a tremendous growth of retail stores and approaches emphasizing low cost. At the same time, consumers today seem more prepared that ever to spend premium amounts for quality merchandise. There has been an increase in huge hypermarkets and discount stores at the same time that boutiques catering to specific targeted segments of consumers have prospered. (Sheth 1977)

A major impetus for all these changes has been demographics and life style realignments. During the 1970s and 1980s, the baby boom consumer came of age. This group is the most educated and sophisticated generation in history. It also has an enormous disposable income. Its values include consumerism, women's liberation, and self-fulfillment.

One price this generation is paying for its beliefs is known as the "poverty of time." The large number of women in the work-force are in the forefront of the growing group of consumers who believe there never is enough time. Studies have shown that working wives devote less time to child rearing, household chores, and shopping than do non-working wives.(Strober and Weinberg 1980) The second factor contributing to the poverty of time is the increasing importance placed on personal interests and hobbies.

These trends have already been reflected in changes in retailing. The growth in convenience stores, in-home catalog shopping, and direct-response marketing has been tremendous in the past decade. ("Catalogue Cornucopia," Time Nov. 8, 1982) In a related change, many consumers have enthusiastically adopted electronic banking.(Welch 1983)

The leisure time interests of consumers have resulted in the growth of specialty stores dealing with tennis, hiking, bicycling, or other sports. Special stores cater to the working woman, the pregnant working woman, and other specific segments.

Today's more sophisticated consumer also appreciates value. Thus we see the increase in generic brands, warehouse retailing, and catalog stores. The flip side is the consumer's willingness to pay for value. Examples are evident in the switch to imports and an emphasis on product longevity.(Blackwell and Talarzyk 1983)

Moreover, today's consumer has been raised on credit. Payment in cash is the exception, rather than the rule.

These trends in consumer behavior are paralled by the increasing availability and consumer familiarty with computer technology. Many of today's consumers used computers in school and use them frequently in their work, According to the Yankee Group, a Boston-based consulting and market research firm, there are about 13.1 million homes in America with computers. By 1988, the Yankee Group believes these numbers will double.(Siglin 1984)

Emergence of New Shopping Technologies

Recognizing the potential for electronic shopping, a number of diverse organizations have developed systems that link the consumer via computer terminal to an array of services including in-home shopping, banking, news, stock market information, and games. A variety of technologies have emerged. These include on-line data bases, teletext, and videotex.

On-line data bases allow consumers to use their personal computers to tap into centralized information files via telephone lines. The best known services are The Source and CompuServe. The services allow interactive communication but generally use few if any graphics. So far these services do not permit in-home shopping but may provide comparative price information. The services are supported by user fees.

Teletext broadcasts information over the air waves and can be picked up by any TV equipped with the necessary decoder. The information is continually transmitted and the consumer selects what he wants to see using a special keypad. A consumer cannot interact so would be unable to make a purchase directly from a teletext system. In addition, the capacity of the system is limited to the transmittal of a small amount of information.

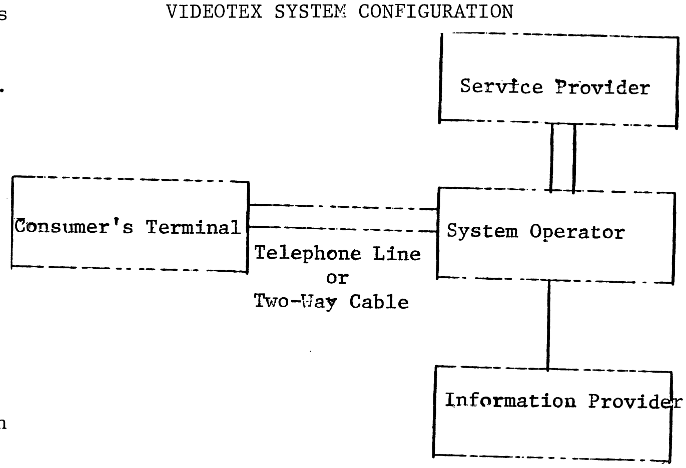
Videotex is an interactive system similar to the on-line data bases except that the graphics are much improved. The consumer uses a personal computer or a special terminal to tap into information files through telephone wires or two-way cable.

Since the system is interactive, the consumer may request information on a specific product, see a representation of the product on the screen, order the product electronically, and pay for it by providing credit card information.

Videotex currently holds the greatest potential for electronic shopping, and is generating considerable interest from some major U.S. retailers.

FIGURE 1

VIDEOTEX SYSTEM CONFIGURATION



An illustration of how a videotex system is configured is shown in **Figure 1**. At the heart of the system is the "system operator." This is the firm or venture that is responsible for packaging the service to the consumer. The operator has a large data base that includes both its own information and that of different "information providers." The system operator also can link consumers through to "service providers." These are companies that provide interactive services, such as transaction processing.

The size and financial resources of either a system operator or a service provider necessarily are great. Currently, in the U.S., system operators include newspapers, banks, large retailers, and joint ventures. Newspapers operating systems include Knight Ridder and the Times Mirror Company, banks include Chemical and Citibank. The most substantial joint venture is that of IBM, CBS, and Sears, announced in the spring of 1984. It will be a number of years before this venture is operational, but the sophistication and power of the members has caused excitement throughout the industry. ("Joint Venture Rejuvenates Videotex Industry," Direct Marketing June 1984) Many major firms not only are operating a system or considering the operation of a system, but also are participating in other ventures as a service provider. J.C. Penney is beginning its own system but also is participating in the Knight Ridder, Times Mirror, and other systems.

Outside the United States, notable in France, England, and Canada, the government is supporting development of videotex services. The governments, in effect, act as the system operators and provide information or a link to other systems just as do the privately controlled systems in the U.S. ("A Transatlantic Videotex Ferror," Business Week March 22, 1982)

Before any of these systems really take off, a number of troubling issues must be resolved. The major ones are directly related: first, will consumers adopt and use the services, and second, who will pay for the services--the consumer or advertisers. Currently, the systems in use have met with mixed results. Many have been subsidized by the systems' operators so there are few true tests of their popularity. Many observers believe that ultimately the cost must be borne by advertising, because consumers will be unwilling to pay what the service costs. (Abrams 1983 and Hecht 1983)

The authors believe that the services will be used because of consumer trends and increasing consumer technological sophistication. However, widespread adoption may have to wait until graphics capability is improved. The images transmitted now are not true video. They resemble sophisticated cartoons. This is a considerable handicap to product sales and advertising support. Solution to this problem, however, is a matter of time. The results of the Sears, IBM, and CBS joint venture will be eagerly awaited by industry observers.

Impact on Distribution Channels

As can be surmised, the potential impact of videotex or related systems on distribution channel structures and relationships could be profound. Videotex and related technologies set up an alternate channel that could replace current channels, develop alongside them, or redesign existing relationships.

There are an almost unlimited number of channel permutations that could develop. Manufacturers could bypass traditional channel members altogether and rely totally on videotex-type systems to reach the ultimate consumer. A manufacturer would need only a small office to process orders, a warehouse, and a shipping facility. Alternately, retailers-- or wholesalers-- could continue to assemble assortments which they would offer to consumers through a videotex system, much as catalog retailers do today, reducing the need for retail floor space. One can also envision the development of new "traditional" retail establishments that serve those "technologically underprivileged" consumers. Other retail and corresponding wholesaling organizations could develop that provide only those goods that are either so individualized or expensive that consumers will continue to want to see and touch them personally. Or less drastic changes might occur.

Manufacturers could use videotex primarily as an advertising, ordering, and payment mechanism. Consumers would be referred to local retailing establishments where they would pick up their purchases or who would deliver the purchases to them. These retailers would become a type of hybrid organization that would continue to sell directly to some consumers, serve as a pick up and delivery point for others, and continue to provide service to both classes of customers.

Sorting out the potential functions, structures, and compensation mechanisms will be a difficult process, and a potentially costly one to any channel system member who ignores technological developments. To understand the effects of these new technologies on distribution channel structures and relationships, we propose the strategic interorganization management approach introduced briefly earlier. This approach enables any distribution channel member to assess new technology and manage emerging relationships in the vertical marketing system.

The Concept of Strategic Interorganization Management

Strategic interorganization management is the marriage between interorganization management and strategic management.

The objective of interorganization management is to structure the channel, establish its policies, and organize the behavior of its members in a manner that leads to improved performance of the entire channel system. The focus of interorganization management is on improving channel system performance.

Strategic management related the organization to its environment. Strategy formulation involves establishing long-term plans for the organization, capitalizing on environmental opportunities and strengths. It includes a definition of the mission of the organization, specification of its objectives, and the development of strategies and policies necessary for their implementation.

Strategic interorganization management, as the linking of these two concepts, involves strategic management of the interorganizational or vertical marketing system. This approach requires the establishment of systemwide performance standards and the planning, organization, coordination, and control of member relationships in such a way as to achieve the entire system's mission and objectives.

What is new and exciting about the strategic interorganization management approach is its explicit recognition that individual organizations are not the focus of competition, entire channels compete to provide service outputs to consumers. The systems develop as potentially optimal vehicles to reach particular consumer segments. As a distribution channel member, individual retailers, wholesalers, and manufacturers are only one part of the entire system designed to reach the ultimate end users of a particular product or service. As old channel systems become ineffective or inefficient in reaching a target group, new channel systems develop with the aim of delivering improved performance. These channels may be entirely under the control of one member, who may absorb all the functions of the channel, or they may be made up of a new configuration of autonomous organizations.

As a channel member, organizations need to audit their own performance and that of the channel as a whole against environmental developments to assess how well the system is performing. This audit process includes an assessment of treats and opportunities that must be dealt with or capitalized on.

This analysis must be accomplished in terms of the principal functions, participants, and other elements that define the interorganizational system. Before even attempting to assess the impact of a technological or other change on the interorganizational system, each distribution channel member should attempt to conduct a current situation analysis, i.e., to assess its won role in the channel. Who performs what functions? What are members compensated for? Is the compensation fair? Who commands the resources? A framework for organizing this type of analysis is presented in Table 1, which lists both the elements that define the system and the flows that occur.

TABLE 1

DEFINING THE INTERORGANIZATION SYSTEM

System Flows / System Dimensions	Communication	Negotiation	Financing	Physical Distribution	Payment
1. Functions					
2. Participants					
3. Resources - Human - Financial - Physical (a) Hardware (b) Software (c) Interface - Communication (a) Hardware (b) Software (c) Interface					
4. Cost Structures					
5. Compensation - Structure - Mechanism					

With this type of analysis complete, a channel member can proceed to examine the effect of an environmental or technological change. Strategic interorganization management comprises three processes which follow the logic of the strategic interorganization management approach.

Because the interorganization system must compete against other channel systems within the context of the environment, Process I is to monitor and scan the environment to determine changing consumer/customer requirements, what the competition is doing, and the emergence of new technologies. In this process the organization should look outward to determine emerging trends and synergies and to classify them in terms of opportunities and threats.

Process II is to look inward at the organization and to articulate the organization's potential in terms of capitalizing on opportunities, fending off threats, and transforming threats into opportunities.

In Process III, the organization should determine what interorganizational linkages and synergies might enable it to captialize on opportunities and fend off threats. It needs to determine what vertcial arrangements would enhance its ability to deliver outputs to users and final consumers.

In the next section of the paper, we will look at how these processes may be applied to consideration of a new technology such as videotex.

Process I: Determine Environmental Opportunities and Threats

In determining environmental opportunities and threats, a member of a distribution channel needs to be continually aware of demographic, psychographic, and cultural trends affecting its strategic business unit.

But this is not enough. A firm also needs to scan its environment to determine what new technologies, products, and services are developing that better meet consumer needs and also what competing distribution channels are emerging.

A scan of the current environment reveals an atmosphere that appears to be favorable for the emergence of electronic shopping. As we discussed earlier, this new technology could develop into a substantial revolution affecting distribution channels. To recap, the trends that are contributing to this new atmosphere include:

* The poverty of time, contributing to the development of convenience shopping and at-home shopping,

* Extensive use of credit and the vast financial networking of communications and financial services,

* Proliferation of home computer systems and increasing sophistication of a large segment of consumers about computers and other technological innovations, and

* The high income and education level of baby boom consumers.

In these trends, we see a synergy in the cultural, behavioral, technological, and tinancial environment that suggests a strong potential for widespread adoption of at-home computer-based shopping.

These environmental developments also suggest the emergence of new market segmentation criteria that may or may not overlap with traditional ones. The new segments may be defined as the technologically priviledged and the technologically underprivileged. We can surmise that the technologically privileged will tend to be young, well educated, and upper middle class. In the short term, the markets may consist primarily of innovators in a range of age and income groups. We simply do not know for certain at this time.

Beyond these considerations, distribution channel members need to watch closely how the systems develop, who is participating in them, technological innovations that make the systems more attractive to consumers, the types of products and services that are being sold through the systems, and other factors that could affect the overall channel and the relative prosition of its members.

Clearly, the emergence of a new technology such as video tex poses significant opportunities and just as significant threats to almost any organization and interorganizational system. The opportunity is to expand distribution through an exciting and potentially enormous new link to the market. The threats are many and varied: missing the opportunity or recognizing it too late, becoming involved too early and neglecting the principal link or distribution channel to market, investing too heavily in the new channel, and erroneous market segmentation, to name just a few.

Process II: Determine Internal Threats, Opportunities, and Synergies

Each individual firm considering a new technology such as videotex needs to examine its own internal situation in terms of the needs of its end users, its mission, strength, weaknesses, and values, and its ability to fend off threats and capitalize on strengths. Even with videotex and related systems still in the early stages, a firm can address basic issues. A major one is whether it believes its markets are potentially technologically privileged or underprivileged and the implications of this for its product or assortment. A firm also can address the potential role it could play in a videotex or related system, looking at possible scenarios, their requirements and consequences. This type of analysis requires the firm to look at its financial and management abilities.

The scenarios that should be developed at this stage of the analysis should focus specifically on the firm, its individual requirements, and the potential consequences of its actions. Since what is potentially being considered is the realignment of an existing distribution channel or the development of new ones, the firm should consider its situation not only in the context of its current channel but in terms of what other firms in its same competitive situation might do, and the effect these changes might have on their relative ability to compete.

This map of possibilities should held a firm develop its own internal strategy or list of potential strategies for competing in a new technological environment. The requirements of each scenario that could be considered include:

* Changes in market definition,
* Changes in product assortments,
* Captial investment requriements in research and development, marketing programming, hardware, software, and infrastructure,
* Changes in compensation mechanisms allowing cost sharing and fair price for services rendered; and
* Adjustments in existing channel structures with particular attention to impact on physical and communication interfaces with other channel members.

The consequences of each scenario could involve:

* The realignment of existing function, cost structures, and compensation mechanisms within current channels,
* The realignment of power and dependence structures,
* The potential for better serving existing markets or the reaching of new markets, and
* Gaining an edge over competing firms.

These are only a few of the possible requirements and consequences. Each firm must examine its own situation, given the overall environment and the peculiarities of its own competitive situation.

Process III: Examine Interorganiztional Linkages and Synergies

In the final stage of the process, distribution channel system members need to analyze how they can improve overall performance in the vertical marketing system by examining synergies, applications, benefits, and role definition of each participant in a new technological environment.

After completing Process II, a channel system member should have reached conclusions about whether it can or should participate in a videotex or related system. In Process III, it needs to determine what type of system or systems it will participate in, the benefits of that participation, and the definition of roles of all the system members who are participating.

In this phase, a channel system member needs to work out the details of its participation in a new system and at the same time take steps to deal with whatever effects participation in a new channel will have on existing channels. Of course, the entire channel might be involved in the new system, or, quite possible, the existing channel will coexist with the new technology based system. In either case, channel members should attempt to predict the effects of the new technology on relationships, roles, and benefits. A framework for this assessment is presented in **Table 2**.

Conclusion

It seems highly possible that technology at long last is going to have a profound effect on consumer shopping patterns. Although still embryonic, computerized at-home shopping technologies are gathering momentum. Consumer behavior trends suggest that the new services will meet with wide spread acceptance.

This new technology could affect distribution systems by adding new competing distribution channels or changing the structures and relationships of existing ones. Channel system members can use the strategic interorganization management approach to assess whether and how to adapt to the new environment to improve the performance of the vertical marketing system and provide desired outputs to consumers.

TABLE 2
APPLICATIONS, BENEFITS, AND ROLE DEFINITION OF VARIOUS PARTICIPANTS IN THE VERTICAL MARKETING SYSTEM

A/B/R Analysis / VMS Participant	Applications	Benefits & Compensation Structure	Liabilities and Cost Structure	Role Definition
Manufacturers				
Marketing Research Agencies				
Advertising Agencies				
Media				
Sales Force Sales Mgt.				
Agents/ Brokers				
Whole-Salers				
Financial Institutions				
Title Companies				
Distribution Center				
Common Carriers				

REFERENCES

Abrams, Bill, "Electronic Shopping is Called Imminent, but Doubts Persist," The Wall Street Journal (June 23, 1983), p. 33.

"American Retailing: New Fangled Stores for Fussy Buyers," Economist (April 30, 1983).

Berry, Leonard L., "The Time-Buying Consumer," Journal of Retailing (Winter 1979).

Blackwell, R.D. and W.W. Talarzyk, "Life-Style Retailing: Competitive Strategies for the 1980s," Journal of Retailing (Winter 1983).

"Catalogue Cornucopia," Time (November 8, 1982).

Copyright 1984 International Management Advisory Services, Inc., Adel I. El-Ansary, President.

"The Deep Discontent of the Working Woman," Business Week (March 21, 1979).

Doody, Alton F., and William R. Davidson, "Next Revolution in Retailing," Harvard Business Review (May-June, 1967).

Hecht, Jeff, "Information Services Search for an Identity," High Technology (May 1983), pp.58-65.

"Joint Venture Refuvenates Videotex Industry," Direct Marketing (June 1984).

Sheth, Jagdish N., "Emerging Trends for the Retailing Industry," Journal of Retailing (Fall 1983).

Sigel, Efram, "Is Videotex Vendible?" Datamation (July 1983), pp. 209-222.

Siglin, Jeffrey L., "Screen Test," Inc., (July 1984).

Strober, Myra H. and Charles B. Weinberg, "Strategies Used by Working and Nonworking Wives to Reduce Time Pressures," Journal of Consumer Research (March 1980).

"A Transatlantic Videotex Ferror," Business Week (March 22, 1982).

Welch, Eric, "Videotex: A Potent Weapon in Struggle with Nonbanks." ABA Banking Journal (February 1983).

COMMON INFORMATION NEEDS FOR MARKETING DECISIONS: FOUNDATION FOR PLANNING OF INFORMATION RESOURCES

Nancy A. Haskell, Laval University
James R. Taylor, University of Michigan

Abstract

Faced with the task of discovering ways of improving marketing decision making, many marketers have turned to marketing information systems and marketing decision support systems. However, the efficient and effective planning of such systems requires a foundation of knowledge concerning which characteristics of the information available need to be improved, which information is most important for marketing decisions, and which information may have an impact on several products. This study explored these issues. Results suggest that common information needs do exist across products and industries, and the the information which is most important to marketing decision makers is most deficient.

Introduction

The recent growth in the scope and sophistication of marketing research activities, including the proliferation of marketing information systems and marketing decision support systems, is a clear indication of the felt need to improve the formal information-to-intuition ratio in marketing decisions. This has closely followed the trend to treat information as a corporate resource, to be managed in its own right. This proliferation is based on the implicit belief that computerized manipulation of relevant information, coupled with skilled analysis and managerial experience, will lead to better decisions through more informed managerial judgment. Since the introduction of the concept of a marketing information center (e.g. Kotler, 1966), the belief that computers can leverage decision making has been echoed by numerous authors. For example, Little et al (1982) in discussion of the impact of marketing decision support systems states:

> "Marketing managers can and should obtain better analytic help for their planning and operations. It's essential, furthermore, that they get control over their own data."

But which data? Many practical concerns enter into decisions surrounding the design and implementation of such systems: Where can we have the greatest impact on decision quality? How can we plan the use of corporate information sources efficiently across products? How can we get the fastest payback on information resources?

To answer these questions is to develop a foundation for a strategy of intervention. To be efficient, this strategy must be based upon an understanding of the common information needs of marketing decision makers within product clusters and across products. To be effective, it must focus on information relating to marketing decisions which leverage the business.

One current stream of research has attempted to shed light on the factors which affect the use of research results. The debate concerning knowledge utilization stems from the two-communities theory (Caplan 1979) and the bureaucratization theory (Rich 1979), focusing on factors which may inhibit or encourage the instrumental use of specific research results. Marketing researchers have also turned their attention to the problem of nonuse or misuse (see, for example, Deshpande and Zaltman 1982; Massy, Greyser and Myers 1978).

However, our concern in this study is the information that is commonly used by marketing decision makers, regardless of its source.

Furthermore, we do not wish to focus uniquely on instrumental use. The unstructured nature of most marketing decisions requires a broad information base; therefore, designers of decision support systems must not focus uniquely on information which has a clear impact on specific decisions.

However, little is known about the information that is commonly used by marketing decision makers or about important information gaps which may constitute a serious competitive disadvantage. Therefore, research questions which need to be addressed include: (1) whether there are common types of information used by decision makers (across industries and products) for similar marketing decision areas; (2) which information areas are most important for the largest number of marketing decision areas; (3) how timely, accurate, and complete these information sources are in the perception of decision makers.

The literature is silent concerning these issues, and no specific research methodology has been developed in this regard. Therefore, exploratory research is appropriate to formulate a base of knowledge which may suggest hypotheses to be more specifically investigated. Furthermore, since information is a very personal resource, exploratory research at this stage needs to investigate the information environment of marketing decision makers as they perceive it. This research was designed to provide such a base of information. Specifically, we measured the perceptions of marketing decision makers, across industries and products, concerning their formal information environment along several dimensions and the kinds of information which they consider most important for major marketing decision areas.

Methodology

Respondents represented fifty-five firms. Twenty-three were marketing managers, seven were product managers, twelve were essentially involved in product or marketing planning/development, six were principally involved in sales, and seven were in general management. Eighty-seven percent had past or current responsibilities in marketing, forty-four percent in planning, and sixty-one percent in marketing research and/or product development. All displayed (1) an active interest in strategic market planning which involves heavy reliance on marketing information, (2) a high degree of participation in marketing decision making, and (3) were very knowledgeable concerning the characteristics and use of information for marketing decisions within their firm.

In order to obtain more specific responses than would be possible were respondents to answer questions globally, that is, relating to all of the firm's products, respondents were requested to focus on a single product or product line which was very important or critical to their firm and to answer questions in relation to this product/product line only.

Within the context of a specific product or product line, respondents then described the characteristics of ten categories of information and their relative importance for six major areas of marketing decision making. Information categories included economic, financial, distribution, social, technological, buyer characteristics, buyer response, market characteristics, competitive, and legal/regulatory. The six major decision areas were: pricing, advertising, personal selling, promotion (other than personal selling), distribution, and product decisions.

Respondents first rated the ten information categories on timeliness, accuracy, completeness, and effort or cost to obtain the information on a scale of 1 to 5 (very low to very high). They then indicated, of the ten types of information, the five which were most important for each major decision area and their relative importance for each area.

Analysis and Results

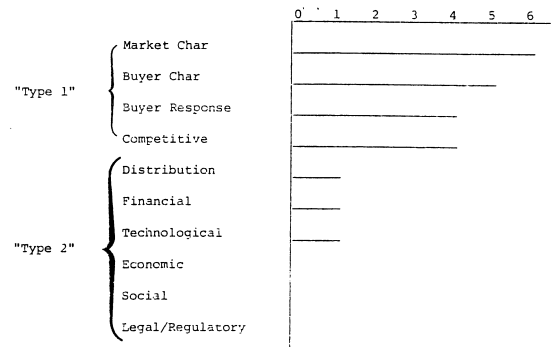
Due to the exploratory nature of the research, descriptive statistics were used to respond to the research questions. Specifically, results suggest that information needs tend to be relatively common across products and industries, since a large percentage of respondents rated the same types of information as very important for particular decision areas. Furthermore, certain information is judged to be very important for several different decision areas (among product, advertising, promotion, personal selling, distribution, and pricing decisions). Figure 1 lists each category of information and the number of decision areas (among the six) for which the information was judged as very important (i.e., either most important or second most important) by a large percentage of respondents. Four of the ten types of information are perceived as essential for a large number of decisions. These are (in order of importance): market characteristics, buyer characteristics, buyer response, and competitive information.

We have labeled these four important categories as "Type 1" information based upon their similarities. Such information focuses on events and objects outside the firm which specifically relate to the firm's markets, customers, and competitors. Likewise, the remaining information categories share certain similarities and have been grouped as "Type 2" information. This information focuses on either internal states of the firm or on general events or objects in the environment. Type 1 information must usually be obtained through market research or market intelligence activities, and it is often future oriented. Type 2 information is usually obtained from internal operations, from corporate sources, from syndicated or other secondary sources, and it is most often historical. During our analysis of the data, the four categories of information which comprise Type 1 consistently emerged as a group with relatively high or low ratings, depending on the variable being investigated, compared to Type 2 categories. As will become evident in the following paragraphs, this is of great importance in describing the information environment of marketing decision makers. Figure 2 shows the specific decision areas for which the different information categories were most important.

FIGURE 1

MOST IMPORTANT INFORMATION FOR MARKETING DECISIONS

Number of key marketing decision areas of six[1] for which the information was judged by respondents as very important[2]:



[1]Product, advertising, promotion, personal selling, distribution, and pricing.

[2]Very important means that respondents ranked the information as most important or second most important for the type of decision mentioned.

FIGURE 2

Information Judged Very Important By Decision Area

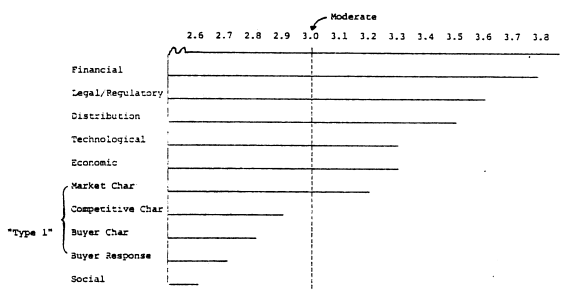
DECISION AREAS

	Pricing	Advertising	Promotion	Personal Selling	Distribution	Product
Market Characteristics	x	x	x	x	x	x
Buyer Characteristics	x	x	x	x	x	
Buyer Response	x	x	x	x		
Competitive	x	x	x			x
Financial	x				x	
Distribution					x	
Technological						x
Economic						
Social						
Legal/Regulatory						

The strategic importance of Type 1 information would lead one to expect that this information would be available to marketing decision makers on a timely, accurate, and complete basis. However, despite its perceived importance, Type 1 information was also judged by respondents to be among the least timely, accurate, and complete of the ten information categories. Since responses did not differ significantly among judgments of timeliness, accuracy and completeness for any category of information, an index was formed using the average on these three scales. This was designated a TAC rating. Information categories were then ranked on "TAC" ratings as illustrated in Figure 3. The four Type 1 information categories stand out among the five categories perceived as worst along these dimensions. Only market characteristics was judged above moderate on the TAC index.

FIGURE 3

TAC[1] RANKINGS[2]



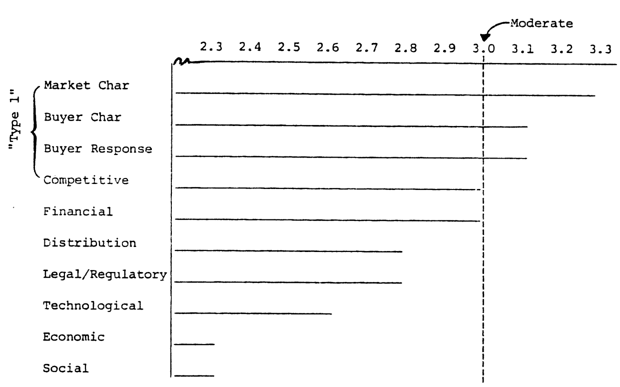
[1]Calculated as an average score on Timeliness, Accuracy, and Completeness, since these three evaluations did not differ substantially for any information category.

[2]1 - very low to 5 - very high

Type 1 information also rated as most costly in terms of dollars or effort to obtain, compared with other categories of information. Figure 4 illustrates this situation. Market characteristics, buyer characteristics, and buyer response data are all perceived as more than moderately costly in terms of effort or cost. Only competitive information was judged as moderate in this regard. The fact that competitive information may be only moderate in terms of cost or effort is most likely due to the various secondary sources of competitive information available. These sources more rarely provide market characteristics, buyer characteristics, or buyer response data.

FIGURE 4

RELATIVE COST/EFFORT TO OBTAIN INFORMATION[1]

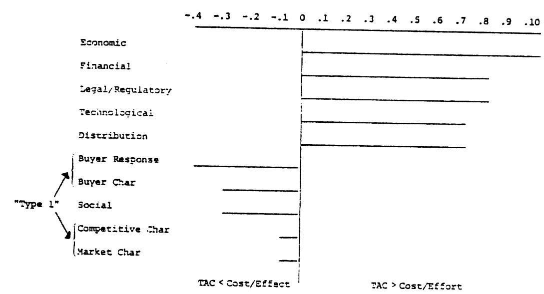


[1]1 -very low to 5 - very high

We can intuitively compare the perceived characteristics of information with the relative cost or effort to obtain it by juxtaposing the TAC ratings with the cost/effort ratings. This has been done in Figure 5. Type 1 information appears as having

FIGURE 5

RELATIVE TAC - COST/EFFORT GAPS[1]



[1]Obtained by subtracting the average effort/cost score from the TAC index (see footnote for Figure 3 for a definition of the TAC index).

the greatest gap between TAC and cost/effort. Thus, the cost or effort to obtain the information is perceived as greater than the timeliness, accuracy and completeness of the information. On the other hand, those information categories which are perceived as less important are relatively more efficient to obtain, since the TAC rating outstrips the cost/effort rating (except for social data).

Limitations

This study is exploratory in nature. Its purpose is to describe the perceived information environment of marketing decision makers. As such, results may not be extrapolated beyond the immediate sample. Furthermore, the study has attempted to describe information characteristics and needs which are common across industries and products. Therefore, unique information needs, i.e., those particular to an industry or product, have not been the focus of this study and may have been lost in the aggregation of data. An adequate plan for information resource development requires the assessment of both common and unique information needs within a multi-product firm. This study represents the first step in such an assessment. Finally, given the exploratory nature of this research, we did not specifically investigate managers' perception of information for long-term versus short-term decisions. Although Type 1 information is intuitively important for long-term decisions, more conclusive research should incorporate decision horizon as an explicit dimension.

Conclusions

The volatile environment of marketing decisions creates a critical need to set and modify strategies based on increased knowledge and more informed judgment. The proliferation of marketing information systems and decision support systems has been the response to this need. However, we still lack the basic knowledge about the use of information in marketing decisions to properly plan the implementation of these systems. Where do we begin to improve a decision maker's information environment? One obvious starting point is to invest where we stand the most to gain -- on improvement of information that is the most important to key marketing decisions.

Our study suggests that improvement of Type 1 information (market characteristics, competitive characteristics, buyer characteristics, and buyer response) may represent a clear opportunity to increase ROI on scarce resources due to its importance in key marketing decisions and its less-than-adequate characteristics at present. New data sources, collection methods, processing, storage, and analytical techniques for this information will need to be analyzed to determine whether these may lead to a higher return than other potential investment projects. Unfortunately, there is an inherent difficulty in evaluating the benefit side of the equation, since it is difficult to relate the use of specific information to particular decisions. Furthermore, tangible results are often not directly traceable to specific decision inputs. Yet an evaluation of the value of information inputs must be made, and an information strategy must be planned and implemented. Not to do so would result in a competitive disadvantage.

This study suggests that academic research should (1) delve further into the commonalities and uniqueness of information needs which may exist among products and industries in order to provide guidelines for the implementation of computerized support and (2) develop methodologies for structuring the information into a readily usable form. For the practitioner, results suggest a point of departure, or reflection, in the development of an information strategy which leverages both corporate resources and marketing decision making.

References

Caplan, Nathan, "The Two-Communities Theory of Knowledge Utilization," American Behavioral Scientist, Vol. 22, No. 3, Jan.-Feb. 1979, pp. 459-470.

Deshpande, Rohit and Gerald Zaltman. 1982. "Factors Affecting the Use of Market Research Information: A Path Analysis," Journal of Marketing Research, Vol. XIX, Feb., pp. 14-31.

Kotler, Philip. 1966. "A Design For the Firm's Marketing Nerve Center," Business Horizons, Vol. 9, No. 3 (Fall), p. 63-74.

Little, John D.C., L. Mohan and A. Hatoun. 1982. "Yanking Knowledge From the Numbers: How Marketing Decision Support Systems Can Work For You," Industrial Marketing (March) p. 46-56.

Massy, W.F., S.A. Greyser, and J.G. Myers. 1978. "Report of the Commission on the Effectiveness of Research and Development for Marketing Management," Chicago, Il: American Marketing Association.

Rich, Robert F. 1979. "Editor's Introduction," American Behavioral Scientist, Vol. 22, No. 3, Jan. Feb., pp. 327-338.

STRATEGIC MARKET EVALUATION OF TWO RETAIL ELECTRONIC FUNDS TRANSFER SYSTEMS (EFTS)

Stanley Arbeit, Canisius College
Joseph G. Glynn, Canisius College

ABSTRACT

This paper deals with research that was used to develop a strategic plan for the evaluation of two off-site electronic funds transfer systems (EFTS). Faced with a choice between automatic teller machines (ATM) or an in-store banking system (ISB), management must determine which approach will provide them with the greatest opportunity to penetrate selected target markets. Mapping the attitudinal and personal characteristics of four consumer segments by means of discriminant analysis contributed significantly to the assessment of the two systems with respect to the bank's marketing objectives.

INTRODUCTION

Bankers have long anticipated the time when the bulk of routine consumer transactions would be done electronically through conveniently located remote computer terminals at off-site locations. The benefits would be manifold. Expensive brick and mortar branches would be substituted by substantially less costly kiosks or service counters, and investment in real estate or long-term lease commitments would be eliminated. The cost and delays associated with handling paper transactions would be reduced by electronic transfers and customer convenience and accessibility to bank services would be increased many times over.

The rush to establish off-site banking systems has been further accelerated by recent rulings that allow banks to compete for a share of the deposits held by the money market mutual funds. By offering their account holders up to 24 hours, seven-day access to their deposits through an off-site system, many bankers feel they can establish a clear advantage over the limited telephone or mail-in redemption methods of the mutual funds.

This paper will focus on research used in the development of a strategic plan for the evaluation of alternative electronic delivery systems. Faced with a choice between two major systems, ATM or ISB[1], management must determine which has: (1) The greatest potential for attracting particular target markets as well as (2) Assessing the difficulty associated with moving the non-users of any off-site system or users of a competitive system over to the one selected.

The information on which this paper is based was drawn from a recent study of a major nothereastern bank market in which the two electronic systems were widely available. The three largest commercial banks in the area offered ATM service; there were 40 separate locations at the time. Six thrift institutions were served by two ISB franchise systems with facilities at 200 retail locations. In the study area, the ATM services were all proprietary, while most of the ISB outlets were shared.

These nine banks had better than 90 percent penetration of the retail bank market. They aggressively promoted their off-site facilities as part of their total product/service offer by use of billboards, television spots, newspaper and magazine advertising, point-of-purchase displays and statement-stuffers. It would be reasonable to conclude that consumer awareness of the availability of ATM and ISB services was very high.

While most research of the market area studied was of a proprietary nature, the best estimates of the extent of the systems' penetration was 5 percent for the ATM's and 20 percent for ISB. Consequently, non-users of any off-site system probably ranged between 75-80 percent of the total market. Because of the intensely competitive market environment of the area studied, there was reason to believe that usage of off-site services was higher there than elsewhere. While the uncommitted segment was large, these customers were quickly aligning themselves with one or another of the services. To postpone action on off-site services on the part of management meant that the uncommitted portion of the market would become smaller, less attractive, and be comprised of the segment most resistant to changing behaviors relative to new methods of banking.

METHODOLOGY

Data Collection

A sample of 301 usable responses was obtained by telephone interviewing. Users were defined as persons who had made use of the specific system in the past six month period. Because of the relatively low frequency of ATM users in the market area and the resulting high cost of attempting to procure a sample through any truly random selection process, the ATM users were drawn from a customer list supplied by one of the banks in the market. The remaining sample was chosen randomly from the area telephone directory. The individual interviewed was "The person in the house who does most of the banking for the home and personal accounts."

Earlier bank patronage studies in this market area by Arbeit and Sawyer (1974) indicated that customers did not differ significantly in terms of education, income, household size, ethnic background, residential mobility, religion, and only slightly in terms of age across those institutions offering ATM services. The authors also compared the proportional amounts of transaction activities the respondents in this sample made of the ATM's with those reported by Van der Velde (1982) for a national sample for the same year, 1980, and there were no statistically significant differences. Consequently, there was no reason to believe that the users drawn from the bank's list differed materially from ATM users generally. The sample was divided into four groups: (1) users of both ATM and ISB off-site services, (2) exclusive ATM users, (3) exclusive ISB users, and (4) non-users of either off-site system. See Figure 1 below:

(FIGURE 1)

SURVEY SAMPLE BY TYPE OF USER

	A T M		
I S B	User	Non-User	Totals
User	78	73	151
Non-user	73	77	150
Totals	151*	150**	301

* Drawn from a list provided by an area bank.

** Drawn from the area telephone directory.

Analytical Approach

As depicted in Figure 1, the 301 respondents comprised four mutually exclusive groups: #1 - users of both ATM and ISB (n=78), #2 - users of only ATM (n=73), #3 - users of only ISB (n=73), #4 - non-users of either service (n=77). The group membership tendencies and characteristics were analyzed via the SPSS Multiple Discriminant Analysis (MDA) program.

Eighteen potential discriminating variables were used in the analyses. The rationale for the selection of these predictor variables stems from the general body of knowledge regarding new product adoption. Demographically, there is substantial evidence that age, education and income are associated with the rate of adoption. Also, given the potential that off-site banking has for adding temporal convenience one *ad hoc* variable was entered into the model, family size. It was used as a proxy measure for overall time demand.

The first four were the demographic variables listed below.

FAMILY SIZE - an interval variable representing all members of the household

AGE - a six category ordinal variable (The four central age groups in intervals of 10 years each)

EDUCATION - a five category ordinal variable

INCOME - a five category ordinal variable representing total family income (the three central income groups in intervals of $10,000 each)

The remaining fourteen variables were attitudinal measures toward EFTS characteristics. Product characteristics which affect the rate of adoption have been broadly summarized as; relative advantage compatibility, simplicity, observability and trialability (Ostlund 1974). The first five attitudinal items were chosen to reflect these variables. The last two items, "sufficient privacy" and "concern for personal safety" are product-specific but were also included. They addressed two major issues that consumers raised during several product concept testing panels that the senior author of this paper had moderated. Respondents were asked to rate the following seven attributes for both ATM and ISB services (making 14 ratings in all) on a scale of 1 (strongly agree) to 5 (strongly disagree): 1. Easy to Use, 2. Saves Time, 3. Accurate, 4. Locational Advantage, 5. Easy to Learn, 6. Sufficient Privacy, 7. Concern for Personal Safety.

For each discriminant analysis model, the following approaches were employed.

1. A split-halves sampling technique was achieved by means of the SPSS uniform random number generator. About one half of the data was used in parameter estimation, and the other half "held out" for assessment of classification accuracy.

2. Prior probabilities of group membership were established on the basis of relative sizes of the groups.

3. A stepwise procedure for variable selection was used. The criterion for selection was the maximization of the overall multivariate F ratio for differences among group centroids (METHOD=WILKS in SPSS).

RESULTS

Three areas of interest were surveyed: (1) Usage patterns of ATM and/or ISB, (2) socio-economic characteristics of the respondents, and (3) Attitudes toward the two competing systems. These three areas will be summarized in the descriptive sections and the discriminant analysis model results which follow.

Usage Patterns

Frequency of use of the two services, ATM and ISB, were about the same. Both yielded a median usage rate of three to four times in the most recent month examined and nine times over the previous six months. In both cases there were small segments of heavy-users who utilized the systems at about three times the median rate.

At this point the similarity of usage for the two systems stops. The dominant use of ATM was for cash withdrawal. Other uses such as line-of-credit cash advances and transfer payments were unique to the ATM system but only received limited use. However, credit lines attached to checking may have distorted the frequency of cash withdrawals reported, for if such transactions triggered a line-of-credit loan they were in effect a cash advance.

The ISB system was used principally for three basic services; cash withdrawals, deposits, and as a guarantee device for check cashing. Other potential services were not used with any appreciable frequency. Since check cashing is not possible at the ATM (the machine can only dispense money in fixed multiples) cash withdrawals undoubtedly substitute for that function. This leaves the two major differences between the systems; ISB was used more frequently for making deposits and the ATM received more varied use, such as account payments, transfer payments, and balance inquiries.

User Characteristics

Socio-economically, the ATM user group ranked highest. They were the best educated, and had the highest median family income of any respondent group. At the other end of the socio-economic order were the non-users. Comparisons of the three user groups to the non-user group also shows that users tended to have larger families and be markedly younger in age. Refer to Figures 2. and 3.

Figure 2

EDUCATION LEVEL OF USER GROUP

User Group	High School or less	Some College	College Graduate or P.G. Study
ATM	33%	27%	40%
ISB	44%	37%	19%
ATM/ISB	40%	28%	32%
Non-users	67%	19%	14%

Figure 3

MEDIAN DEMOGRAPHIC VALUES BY GROUP (RANK)

User Group	Family Size	Age	Income
ATM	3.57(2)	37.39(3)	$21,730(1)
ISB	3.39(3)	35.45(2)	$18,040(3)
ATM/ISB	3.92(1)	34.50(1)	$18,910(2)
Non-User	2.54(4)	51.17(4)	$15,230(4)

In the opinion of these authors, off-site system users, as evidenced by their higher levels of formal education, income and family size are very much like the early-adopter groups associated with most new product categories, they have the skills, the resources and the needs to utilize the advantages of the new system.

Four Group MDA Model

In this four group MDA model, a maximum of three discriminant functions may be derived. A comparison of eigenvalues by discriminant function (see Figure 4 below), and considerations of interpretability as represented by the location of group centroids (group means) on each discriminant function (see Figure 5 below) resulted in the retention of two functions for further analysis.

Figure 4

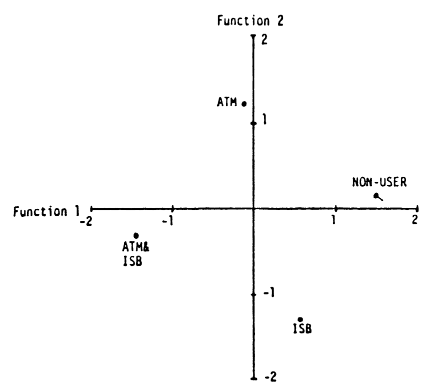
CANONICAL DISCRIMINANT FUNCTIONS

FUNCTION	EIGENVALUE	PERCENT OF VARIANCE*	CUMULATIVE PERCENT OF VARIANCE
1	1.179	52.84	52.84
2	0.783	35.07	87.91
3	0.269	12.09	100.00

*Percent of discriminating power in the battery of predictors which is attributable to each discriminant function.

Figure 5

DISCRIMINANT ANALYSIS MAP OF FOUR USER GROUPS



Discriminant Functions Evaluated At Group Centroids

	ATM & ISB	ATM	ISB	NON-USER
Function 1	-1.402	-0.113	0.489	1.461
Function 2	-0.279	1.218	-1.295	0.143

Stepwise analysis resulted in a model with the twelve discriminating variables listed in Figure 6 below. Also listed are the standardized discriminant coefficients, the rank of the magnitude of the five largest of these coefficients in parenthese for each function, and the mean values for each variable by group.[2]

The discriminating power of these variables is depicted in Figures 5 and 6. Function 1 distinguishes ATM - ISB users from non-users and displays almost no separation, between exclusive ATM users and exclusive ISB users. Function 2 does just the opposite, it distinguishes exclusive ATM users from exclusive ISB users and does not differentiate between users of both systems and the non-users.

Figure 6

SUMMARY OF STANDARDIZED DISCRIMINANT COEFFICIENTS AND MEAN VALUES

VARIABLE	Std. Disc. Coeffs. Funct. 1	Funct. 2	Mean Values* ATM/ISB	ATM	ISB	NON-USER
ATM:Easy to use	.447(1)**	-.392(2)	1.38	1.53	2.33	2.52
ATM:Accurate	.268	-.369(4)	1.72	2.24	2.96	2.71
ATM:Easy to Learn	.264	-.380(3)	1.44	1.71	2.33	2.52
ATM:Privacy	.354(3)	.143	1.87	2.47	2.63	2.68
ATM:Concern Safety	-.181	.030	2.62	2.41	2.30	2.55
ISB:Easy to Use	.447(1)	.366(5)	1.28	2.35	1.63	2.13
ISB:Accurate	.251	.214	2.08	2.74	2.22	2.77
ISB:Easy to Learn	.092	.715(1)	1.38	2.21	1.56	2.23
ISB:Concern Safety	-.165	-.270	3.00	2.91	2.96	2.45
Family Size	-.305(5)	.113	3.77	3.44	3.44	2.77
Age	.224	.255	2.79	2.91	2.66	4.00
Education	-.309(4)	.160	3.15	3.26	2.85	2.23

*The reader is reminded that for the perceptual variables concerning ATM and ISB use, higher scores mean less agreement.

**The number in the parentheses is the rank order of the discriminating power of the item in the specific function.

The ranking of the standardized discriminant coefficients, in Figure 6 shows that for Function 1, the key variable which discriminates between users of both systems and non-users are the "Ease of Use" variables. The ATM Privacy, and to a lesser extent, the ATM and ISB Accuracy variables also tended to differentiate users from non-users. For each of these perceptual variables, the user group clearly displayed more agreement than the non-user group. A couple of demographic variables also displayed strong discriminating power on Function 1. Users of both systems had larger families, were more educated, and younger than the non-users.

The strongest discriminating variable on Function 2 was ISB Easy to Learn, and this variable tended to dominate all of the others. Three ATM variables - Easy to Use, Easy to Learn, and Accurate - also displayed discriminating power on Function 2, as did the ISB Easy to Use variable. It is apparent that exclusive users of each EFTS simply view the system of their choice to be easier to learn and use.

The final results of this MDA model are summarized in Figure 7, the Classification Matrix. Results are presented both for the analysis sample and the hold-out sample. Percents correctly classified and percents which could be expected to be correctly classified by the proportional chance criterion (% Chance) are reported (Morrison, 1969).

Figure 7

CLASSIFICATION RESULTS

1. ANALYSIS SAMPLE

Predicted Group

Actual Group	ATM&ISB	ATM	ISB	Non-User			
ATM & ISB	37 (80.4%)	3 (6.5%)	4 (8.7%)	2 (4.3%)	46	% Correct:	70.2%
ATM	8 (20.0%)	26 (65.0%)	2 (5.0%)	4 (10.0%)	40	% Chance :	25.2%
ISB	8 (22.9%)	0 (0%)	18 (51.4%)	9 (25.7%)	35		
Non-User	4 (10.0%)	0 (0%)	4 (10.0%)	32 (80.0%)	40		
	57	29	28	47	161		

2. HOLD-OUT SAMPLE

Predicted Group

Actual Group	ATM&ISB	ATM	ISB	Non-User			
ATM&ISB	17 (53.1%)	8 (25.0%)	6 (18.8%)	1 (3.1%)	32	% Correct:	54.3%
ATM	7 (21.2%)	19 (57.6%)	2 (6.1%)	5 (15.2%)	33	% Chance:	25.1%
ISB	7 (20.6%)	4 (11.8%)	15 (44.1%)	8 (23.5%)	34		
Non-User	4 (13.3%)	3 (10.0%)	4 (13.3%)	19 (63.3%)	30		
	35	34	27	33	129		

The "Hit-Ratio" or percent correctly classified was extremely high (70.2%) in the analysis sample, and also very good (54.3%) in the hold-out sample. Though the purpose of this work is not to predict group membership, the percent correctly classified is still an important test of the validity of the discriminant structure.

CONCLUSIONS

The non-user group has been distinguished from users of both ATM and ISB services (discriminant Function 1 in the four-group MDA analysis). Figure 8 summarizes the most important discriminating variables of these analyses.

Figure 8

KEY VARIABLES WHICH DISTINGUISH THE NON-USERS FROM INDIVIDUAL USER GROUPS

Exclusive ATM Users	Exculusive ISB Users	Users of Both ATM & ISB
ATM:Easy to Use	ISB:Easy to Learn	ATM:Easy to Use
ATM:Saves Time	Age	ISB:Easy to Use
Education	ISB:Location	ATM:Privacy
Family Size	ISB:Easy to Use	Education
Age	ISB:Saves Time	Family Size

The user groups are younger and more educated, but most important, they find their systems are easy to use (learn), and recognize the time saving features. This latter point is of no little importance to developing an effective marketing strategy for an EFT system. For an economic-theoretic discussion of this point, see Guenther and White's (1979) examination of the time saving aspect of an EFT system for users as a privacy and leisure time trade-off. It would appear that the key to a successful marketing strategy for EFTS promotion is the demonstration of the simplicity of access and completion of transactions. What is clearly evident is "computer phobia" . . . a fear of the mysteries of electronic data processing . . . a reluctance to convert to a system which is perceived to be complicated. This phobia could be expected to be more prevalent in older and/or less educated consumer sectors.

A review of Figure 5 shows that the Euclidean distance between the non-user group and the exclusive ISB group is less than between non-users and the exclusive ATM group. The users of both ATM and ISB are furthest of all from the non-user group. One ad hoc explanation is that this is because the ISB service utilizes a third party "surrogate teller" to effect the transaction making it more similar to traditional bank business. This can significantly reduce any apprehension which the novice user may feel when going "one-on-one" with the ATM.

Since it does appear that the likely pattern of adoption is from non-user to ISB, and then to ATM or both, the optimum strategy should:
1. Introduce both ISB and ATM services, and
2. Provide demonstration and training at ISB sites.

To build institutional loyalty it is important to introduce both services simultaneously. Given the reluctance of most customers to change their banking relationships once they have adopted an off-site system, they will be more resistant to the lures of competing institutions and more likely to extend their usage to the second off-site service at the first bank. The net effect of such a strategy would not only achieve the benefits of shifting more consumer transactions to one of the two off-site systems but also more firmly cement the customer relationship with the provider.

BACKNOTES

[1]Briefly, the automatic-teller machine (ATM) permits the user to interact directly with the bank's computer in a machine-language mode and will perform some 80 percent of the functions normally handled by the traditional inside-the-bank teller. These machines are usually located on the outside walls of the bank, in factories, schools, hospitals and public buildings. The in-store-bank (ISB) system requires a third party, usually a retail clerk, to intercede in the transaction process between the consumer and the bank. As the name implies, ISB systems are usually located in supermarkets, drugstores, and similar types of retail settings. Use is principally for making deposits or withdrawals and to verify account balances prior to cashing checks. They are sometimes referred to as point-of-sale (POS) systems. The retail establishment supplies the personnel, the space, and even the necessary cash to facilitate the transactions. Either system has the capability of being offered on a shared or proprietary basis.

[2]There was very little collinearity among the eighteen independent variables. Of the 153 ($_{18}C_2$) pairwise correlations, only 7 were 0.40 or more, and only 2 of these were larger than 0.50; the correlation between ISB EASY TO USE and ISB SAVES TIME was 0.645, and between ATM EASY TO USE and ATM SAVES TIME was 0.513. This lack of collinearity lends credence to the discriminating coefficients, and to the comparative importance of the discriminating variables as represented by the relative sizes of these standarized coefficients.

REFERENCES

Arbeit, Stanley and Sawyer, Alan G., "Applying Psychographic Analysis to a Retail Banking Market," The Magazine of Bank Administration, (November, 1974), pp. 39-45.

Guenther, Harry and White, Joseph, "EFT System Privacy Safeguards: A Preliminary Inquiry Into The Privacy-Leisure Time Trade-off," Journal of Bank Research, 10:3 (Autumn 1979), pp. 136-144.

Harris, R. J., A Primer of Multivariate Statistics, New York: Academic Press, 1975.

Morrison, Donald G., "On the Interpretation of Discriminant Analysis," Journal of Marketing Research, (May, 1969), pp. 156-163.

Ostlund, Lynne., "Perceived Innovation Attributes as Predictors of Innovativeness,' Journal of Consumer Research, (September 1974) pp. 23-29.

Van der Velde, Marjolijn,"EFT Transactions: Growth and Direction," Magazine of Bank Administration, (December, 1982), pp. 36-38.

THE EFFECT OF PROMOTION VARIABLES AND COMPETITIVE SITUATIONS ON SMALL RETAILERS' PROFITABILITY

L. Lynn Judd, Louisiana State University in Shreveport
Garth A. Powell
Raymond E. Taylor, East Texas State University

Abstract

The primary objective of this study was to explore the relationship between a select group of promotion variables utilized by small retail grocers and five retail store performance ratios (GPM, NPM, GMROI, NPROI, and stockturn rate per year).

Introduction

With very few exceptions the strategic emphasis for retailers at the present time and on into the near future is market share management (Davidson et al 1983, p. 76). In other words if retailers are to survive it is at some other competitor's expense. One way that retailers can be competitive is through effective assortment selection. As one old saying properly states, "Goods well bought are half sold." Although assortment selection can go a long way in developing a competitive position an effective promotional program is also necessary to develop a winning game in retailing.

As the 1980's continue to evolve, small retailers are facing a period sensitive to competitive positioning and survival. To survive this period of transition, small retailers need to concentrate and specialize on core markets that they can best serve (Cox 1980). Only in this way can small retailers reduce the degree of vulnerability in which they are subjected. Retailers over the recent years have increased their advertising in an attempt to be competitive. This increase in advertising has come about as a result of the following factors:

1. The retailer's power within the marketing channel has significantly increased.
2. The retailer's brands have significantly increased in importance.
3. Site locations have increased advertising effort (Fenwick 1978).

With this increased emphasis in advertising, small retailers will need to be cautious in allocating their promotional dollars to the promotion variables that will give them the best "bottom line" results. Research in the area of effective retail promotion has been limited to results in terms of sales volume (Frank and Massey 1971; Curhan 1974). The major thrust of this study is to evaluate a select group of promotion variables utilized by small retail grocers in relation to five retail store performance ratios. These retailing indices of success are gross profit margin (GPM), net profit margin (NPM), gross margin return on inventory investment (GMROI), net profit return on inventory investment (NPROI), and stockturn rate per year. The study also examines the influence that competitive positioning has on the relations between the selected promotional variables and the performance ratios.

Sample And Methodology

Pretested questionnaires were mailed to 630 members of a grocery retailer-cooperative. The retailer-cooperative is composed of multi-type retail grocery establishments that jointly own and operate a wholesale grocery corporation. Even though the retailer-cooperative is operated by professional managers, the member stores operate as individually owned independent merchants. Since each member store employs a unique retailing mix strategy, the members of the cooperative were considered appropriate for the research study.

Eight promotion variables were selected for the research study. They were 1) newspaper, 2) pure advertising news sheet, 3) television, 4) radio, 5) circulars, 6) premiums (dishes, etc), 7) other (in-store sales promotion), and 8) "no" promotion by store. The owner/managers were asked to breakdown by percentage their business promotion efforts utilizing the indicated promotion variables. In addition, each retailer was asked to indicate the percentage usage of Price Leader Advertising within their promotion mix. Each retailer was also asked to indicate the strategy emphasis of the "Promotion Variable" within their retailing strategy mix. The retailers were asked to rate the strategy emphasis on a one through six scale (one being first in emphasis, six being last in importance within a strategy mix, etc).

The other retailing strategy mix variables used in conjunction with the Promotion Variable were Price, Customer Service, Store Location, Merchandise Assortment, and Quality of Store Personnel (Engel et al. 1978). The retailers were also asked whether they used Trading Stamps as a variable within their promotion mix. In addition, each retailer was asked to indicate their perceived competitive situation (weak or below average, moderate, strong, or vigorous). The questionnaire also obtained each retail establishment's average gross profit margin, percent operating expenses, stockturn rate per year, yearly dollar sales, and store type. Two mailings were sent out. The number of usable returns was 379, representing 60.2 percent of total questionnaires mailed. The 379 cases were analyzed by SPSS Subprogram Frequencies and Subprogram Spearman Correlation (Norman Nie et al. 1975).

To assess the success of the researched respondents, five retailing ratios of success were utilized as the dependent variables of the study. These primary ratios included percent gross profit margin (GPM), percent net profit margin (NPM), gross margin return on inventory investment (GMROI), net profit return on inventory investment (NPROI), and stockturn rate per year. Gross profit margin is defined as sales minus cost of goods sold and net profit margin is defined as gross profit margin less operating expenses. The stockturn rate is the number of times the average inventory is sold annually. Gross margin return on inventory investment is a single comprehensive ratio that allows retail management to review inventory results from a return on investment perspective (Sweeney 1973). For ease of calculation, GMROI can be obtained by mulitplying gross profit margin by the stockturn rate. Accordingly, net profit return on inventory investment (NPROI) would be a logical extension of this retail productivity ratio. This latter ratio reflects the same basic components of the classic DuPont system of return on investment (Van Voorhis 1981). These five profitability ratios were selected as representative performance measures that might reflect the operating success of the responding retail establishments.

Frequencies Analysis

As noted, each retailer was asked to indicate the perceived competitive situation of his retail establishment. For the purposes of the study, the respondents are classified into the following four competitive situation categories: 1) weak or below average, 2) moderate, 3) strong, and 4) vigorous. Table I reflects the average percentage usage of each promotion variable or average percentage emphasis of the promotion variable within the retailing strategy mix by competitive category. The table also reflects the average percentage usage of these variables for all the responding retailers.

For the strategy emphasis of the promotion variable within a retailing mix, the vigorous competition and strong competition categories indicate the high percentages for the 1/2 strategy emphasis. However, there is only a high of 26 percent for the 1/2 strategy emphasis. All of the categories reflect a high percentage for the 5/6 emphasis. The moderate category has the low 1/2 emphasis and the high 5/6 emphasis.

For the percentage of retailers who use "price leader advertising" the majority of the time, the strong and vigorous categories reflect the high percentage usage of this strategy variable. For the usage of trading stamps, once more, the strong or vigorous categories indicate the high average percentage usage.

For the "average percent of total promotion" for the responding retailers by promotion variable, the newspaper variable was reflected as the most used promotion variable. The strong or vigorous categories favored this variable more than the other competitive categories. The circular variable was the second highest utilized promotion variable by all categories. The weak or below average competitive category had the high percentage usage of "no" promotion by retail store.

Table II reflects the means of the five indices of retailing success by competition category. The table also indicates the average retailing success ratios for all the responding retailers. The table reflects that the moderate category had the high average GPM, GMROI, and stockturn rate. The weak or below average competition category had the high average NPM and NPROI ratios.

Correlation Analyses

Table III and IV reflect correlation analysis between a retailer's emphasis of a particular promotion variable and retailing success. For the emphasis of the promotion variable (in relationship with other retailing variables) within the retailing strategy mix category of the study, an inverse relationship is reflected for significant relationships within the tables. Thus, a significant positive relationship indicates that respondents who rate the promotion variable as having a high priority within their retailing strategy mix tend to have less successful store performance.

Table III reflects correlation analyses between the promotion strategy variables and the five indices of retailing success for all the responding retailers. For the retail strategy emphasis of the promotion variable within the total retailing strategy mix, the table reflects that less successful retailers of the total study emphasize the promotion variable within their strategy mix.

For the emphasis of Price Leader Advertising within the promotion mix, the table reflects that less successful retailers of the total study emphasize this

TABLE I

RETAILER USAGE OF SELECTED PROMOTION STRATEGIES BY PERCEIVED COMPETITIVE SITUATION

Retailers Grouped by Perceived Competitive Situation	Strategy Emphasis of Promotion Variable			% of Retailers Who Use Price Leader Advertising The Majority of the Time	Usage of Trading Stamps		Average Percent of Total Promotion Effort for Retailers by Retail Promotion Variable							
	% 1/2 Strategy Emphasis	% 3/4 Strategy Emphasis	% 5/6 Strategy Emphasis		% No	% Yes	Newspaper	Advertising News Sheet	Television	Radio	Circulars	Premiums	In-Store Promotion	No Promotion by Store
Weak or Below Average (N=47)	11.3	38.7	50.0	45.6	80.4	19.6	28.9	2.7	1.7	1.1	28.4	3.7	14.0	19.5
Moderate (N=75)	7.7	18.4	73.9	45.9	76.0	24.0	33.8	3.0	0.4	11.3	28.5	2.1	6.2	14.7
Strong (N=124)	23.2	27.7	49.1	59.3	70.8	29.2	38.1	3.5	2.0	2.3	24.5	3.9	13.1	12.6
Vigorous (N=129)	26.6	30.0	43.4	57.1	69.8	30.2	41.8	5.9	1.6	5.1	26.8	2.5	7.6	8.7
Means of all Retailer Respondents (N=379)	19.8	28.4	51.8	53.7	72.8	27.2	37.4	4.1	1.4	4.9	26.9	3.0	9.9	12.4

TABLE II

MEANS OF FIVE INDICES OF RETAILING SUCCESS
BY PERCEIVED COMPETITIVE SITUATION

Retailers by Perceived Competitive Situation	N	Percent GPM	Percent NPM	Stockturn Rate	Percent GMROI	Percent NPROI
Weak or Below Average Competition	47	22.9	7.1	13.780	314.3	86.4
Moderate Competition	75	23.7	6.1	16.034	353.2	75.0
Strong Competition	124	21.9	5.5	15.840	335.6	83.2
Vigorous Competition	129	22.2	4.8	15.732	341.6	75.2
Indice Means of all Retailer Respondents	379	22.5	5.6	15.561	337.9	79.2

TABLE III

CORRELATION ANALYSES BETWEEN RETAILER PROMOTION STRATEGIES AND FIVE INDICES OF RETAILING SUCCESS

Retailer Success Indices	Retail Strategy Emphasis of Promotion Variable	Emphasis of Price Leader Advertising	Usage of Trading Stamps	Usage of Newspaper	Usage of Advertising News Sheet	Usage of Television	Usage of Radio	Usage of Circulars	Usage of Premiums	Usage of In-Store Promotion	No Promotion by Store
<u>All Retailer Respondents</u> (N=379)											
GPM	# .3225**	-.3432**	-.2235**	-.1459**	.0126	-.1269**	-.0165	-.0820*	-.1965**	.1277**	.2066**
NPM	# .2296**	-.3075**	-.2975**	-.1010*	-.0664	-.0732	-.0601	-.2190**	-.2087**	.1094*	.2315**
Stockturn Rate	# -.0532	.2316**	.2377**	.0357	-.1665**	.0971*	.0067	.1542**	.1840**	-.0275	-.0956*
GMROI	# .0818	.0744	.1253*	-.0170	-.1599**	.0332	.0172	.1077*	.1119*	.0761	-.0245
NPROI	# .1753**	-.1314*	-.1332*	-.0459	-.1355**	-.0292	-.0334	-.0983*	-.0519	.0962*	.1069*

*P < .05
**P < .01
Negative Coefficients indicate a relationship of high variable importance with higher store performance

variable within their promotion strategy. For the usage of trading stamps, even though the table indicates mixed results (plus and minus), the significant relationships indicate that less successful retailers utilize trading stamps within their promotion strategy mix.

For the percentage usage of the selected promotion variables, the table indicates that less successful retailers of the total study emphasize the usage of advertising news sheets and circulars. The table further indicates that more successful retailers of the total study either emphasize the usage of in-store promotion or indicate "no" store promotion.

Table IV reflects correlation analyses between the retailer promotion strategies and the five retailing indices of success with the respondents divided by competitive situation category. For the weak or below average competition category, the table indicates that less successful retailers of this category emphasize the promotion strategy variable within their retailing strategy mix. The table further indicates that less successful retailers of this category use a high percentage of the radio variable within their promotion mix. The table does reflect that the more successful retailers of this category either emphasize the use of circulars within their promotion mix or use "no" promotion at all.

For the moderate competition category, Table IV indicates that retailers who emphasize the promotion variable within their retail strategy mix tend to be less successful. The table further reflects that retailers of this category who emphasize the newspaper variable within their promotion mix tend to be less successful. Table IV does indicate that more successful retailers of this category emphasize

TABLE IV

CORRELATION ANALYSES BETWEEN RETAILER PROMOTION STRATEGIES AND FIVE INDICES OF RETAILING SUCCESS BY PERCEIVED COMPETITIVE SITUATION

Retailers by Perceived Competitive Situation	Retail Strategy Emphasis of Promotion Variable	Emphasis of Price Leader Advertising	Usage of Trading Stamps	Usage of Newspaper	Usage of Advertising News Sheet	Usage of Television	Usage of Radio	Usage of Circulars	Usage of Premiums	Usage of In-Store Promotion	No Promotion by Store
Weak or Below Average (N= 47)											
GPM	# .2112	-.2080	-.0290	-.1522	.0564	-.0490	-.2299	.1372	-.1118	-.0588	.0961
NPM	# .4083**	-.4112**	-.2278	-.1288	-.0507	.0024	-.3889**	-.3295*	-.2763*	.0077	.4220**
Stockturn Rate	# -.0277	.3402*	.1408	-.1193	-.0362	-.0970	-.1080	.3942**	.0400	.0745	-.0643
GMROI	# .0251	.2423	.1483	-.1785	-.0387	-.1550	-.1726	.3993**	.0136	.0388	.0058
NPROI	# .3145*	-.1177	-.2367	-.2311	-.0686	-.0818	-.3972**	.0239	-.1554	.1035	.2625*
Moderate (N= 75)											
GPM	# .3408**	-.4335**	-.1723	.0018	.0948	-.1009	.3675**	-.4220**	-.1791	.1701	.2184*
NPM	# -.0906	-.3301**	-.3503**	.0029	.1508	-.1717	.2120*	-.3858**	-.3703**	.0203	.1098
Stockturn Rate	# .1528	.2551*	.3982**	-.2345*	.0195	-.0182	-.2867*	.2996*	.3973**	-.0565	.1200
GMROI	# .3072*	.1592	.3274**	-.2596*	.0000	-.0761	-.1123	.1845	.3991**	.0200	.1732
NPROI	# -.1453	-.1885	-.1408	-.0184	-.0993	-.1152	.1333	-.1372	-.1509	.0277	.0276
Strong (N=124)											
GPM	# .2701**	-.4419**	-.3291**	-.2448**	-.0673	-.0955	-.1656*	-.0404	-.1637*	.0732	.2843**
NPM	# .4303**	-.3512**	-.3589**	-.2272**	.0176	-.1554*	-.2387**	-.0403	-.0432	.1029	.2742**
Stockturn Rate	# .0390	.1061	.2942**	.1832*	-.0441	.2121*	.0102	-.0456	.1721*	-.1685*	-.1463
GMROI	# .1729*	-.0551	.1556	.0749	-.0094	.1549	-.0256	-.0642	.1298	-.1021	-.0248
NPROI	# .3820**	-.2361*	-.0881	-.0910	.0302	-.0433	-.2034*	-.0366	.0661	-.0173	.1519
Vigorous (N=129)											
GPM	# .2604**	-.2791**	-.2422**	-.1441*	.0717	-.1526*	-.0726	-.0403	-.2931**	.2202**	.1684*
NPM	# .0663	-.1351	-.2254**	.0247	-.1689*	.0038	.0349	-.2182**	-.2005*	.2040*	.1339
Stockturn Rate	# -.2430**	.2732**	.1296	.0757	-.3628**	.1706*	.1980*	.1256	.1263	.0854	-.1927*
GMROI	# -.1160	.0988	-.0114	.0436	-.3709**	.0794	.1479	.0984	.0021	.2688**	-.1390
NPROI	# -.0201	-.0067	-.1651*	.0913	-.2778**	.0177	.1693*	-.1637*	-.0418	.2371**	-.0102

*P ≤ .05
**P ≤ .01
Negative coefficients indicate a relationship of high variable importance with higher store performance

the usage of trading stamps and premiums within their promotion mix.

For the strong competition category, Table IV indicates strong significant correlations for the emphasis of the promotion variable within a retailers strategy mix. Again, as in the other reported categories, the table reflects that less successful retailers emphasize the promotion variable within their retailing strategy mix. Table IV for this competition category further indicates that less successful retailers emphasize "price leader advertising" and the use of the radio variable within their promotion mix.

For the vigorous competition category, Table IV reflects "no" bottom line results (GMROI/NPROI) for the emphasis of the promotion variable within a retailing strategy mix. The table does present positive aspects for the turnover rate but negative aspects for the GPM ratio. The table indicates that less successful retailers of this category emphasize the usage of trading stamps, advertising news sheets, and circulars within their promotion mix while more successful retailers emphasize in-store promotions.

Summary And Conclusions

A study was conducted to determine the relationship between a select group of promotion variables and retailing success. An analysis of 379 retail grocery establishments belonging to a retailer-cooperative revealed the following findings in regard to store profitability.

1. Frequencies analysis of the selected promotion strategy variables revealed the following interesting results:
   a. For the strategy emphasis of the promotion variable within a retailing strategy mix, the study revealed that the vigorous and strong competition categories had the high percentage (26 percent and 23 percent) emphasis of the 1/2 rating.

The study also revealed that all of the competitive categories reflected high percentage emphasis (45 percent to 73 percent) of the 5/6 rating.

b. The study revealed that the strong and vigorous competition categories had the high percentage usage of trading stamps and "price leader advertising".

c. For the "average percent of total promotion" for the retailers by promotion variable, the study revealed that the newspaper variable was the most utilized variable and the circular variable was the second most used promotion variable within the average promotion mix.

d. The means of the five indices of retailing success by perceived competitive situation categories revealed that the moderate category had the high average GPM, GMROI, and stockturn rate but the weak or below average competition category had the high average NPM and NPROI ratios.

2. Correlation analyses between each personnel variable and the five indices of retailing success revealed the following findings:

a. For the retail strategy emphasis of the promotion variable within the total retail strategy mix, the correlation analyses for all the retailer respondents revealed that less successful retailers emphasized the promotion variable within their retailing strategy mix.

b. Correlation analyses for all the respondents revealed that more successful retailers emphasized the usage of in-store promotion or "no" store promotion. The study revealed that less successful retailers emphasized trading stamps, advertising news sheets, circulars, and "price leader advertising" within their promotion mix.

c. For the weak or below average competition category, correlation analyses revealed that less successful retailers of this category emphasized the radio variable within their promotion mix and the promotion variable within their retailing strategy mix. The study further revealed that the more successful retailers of this category emphasized the use of circulars or "no" store promotion.

d. For the moderate competition category, correlation analyses revealed that less successful retailers of this category emphasized the newspaper variable within their promotion mix and the promotion variable within their retailing strategy mix. The study revealed that more successful retailers of this category emphasized trading stamps and premiums eithin their promotion mix.

e. For the strong competition category, correlation analyses revealed that less successful retailers of this category emphasized "price leader advertising" and the radio variable within their promotion mix. The study further reveals that less successful retailers empahsized the promotion variable within their retail strategy mix.

f. For the vigorous competition category, correlation analyses revealed that less successful retailers of this category empahsized trading stamps, advertising news sheets, and circulars within their promotion mix while more successful retailers emphasized radio and in-store promotion.

Possibly the most significant results of the study are found in the correlation analyses. One trend stands out that needs to be noted. The correlation findings for the emphasis of the promotion variable within a retailing mix are significant for all except the vigorous competition category. The retailers are correct in their high 5/6 importance ratings reflected in Table I. Another item should be noted. The newspaper and circular promotion variables were reported as the most utilized variables within the average promotion mix. Neither of these promotion variables were reported as having positive significant "bottom line" (NPROI) results in either correlation analysis table.

It is particularly important for small retailers to select the most effective promotion variables because of limited resources. The results of this study point out that small retailers need to be selective in choosing promotion variables if they are to benefit the most in their particular competitive situation. It is essential for them to evaluate the influence of promotion variables on "bottom line" measures. In this way, they can strengthen their competitive situation and reduce their vulnerability.

References

Cox, Keith K. (1980), "Marketing in the 1980's-Back to Basics," Business, Vol. 30 No. 3 (May-June), 19-23.

Curhan, Ronald C. (1974), "The Effects of Merchandising and Temporary Promotional Activities on the Sale of Fresh Fruits and Vegetables in Supermarkets," Journal of Marketing Research, Vol. 11 (August), 286-294.

Davidson, William R., Daniel J. Sweeney, and Ronald W. Stampfl (1983), Retailing Management, 5th ed., New York: John Wiley and Sons.

Engel, James R., Roger D. Blackwell, and David T. Kollat (1978), Consumer Behavior, 3rd ed., Hinsdale, Illinois, The Dryden Press.

Frank, Ronald E. and William F. Massey (1971), "The Effect of Retail Promotional Activities on Sales," Decision Sciences, Vol. 2 (October), 405-431.

Nie, Norman H., Hadlai Hull, Jean G. Jenkins, Karin Steinbrenner, and Dale H. Bent (1975), SPSS: Statistical Package for the Social Sciences, 2nd ed., New York, McGraw-Hill Book Company.

Sweeney, Daniel J. (1973), "Improving the Profitability of Retail Merchandising Decisions," Journal of Marketing, Vol. 37 (January), 60-68.

Van Voorhis, Kenneth R. (1981), "The DuPont Model Revisited: A Simplified Application to Small Business," Journal of Small Business, (April), 45-51.

AN ANALYSIS OF THE EFFECTIVENESS OF CONSUMER PREMIUM PROMOTIONS

C. P. Rao, University of Arkansas
Gerald Crawford, University of North Alabama

Abstract

The use of consumer self-liquidating premium promotions is widespread. However, little research has been published in this area. A large amount of data on actual premium promotions was obtained from a leading manufacturer of consumer packaged goods. Based on this information, several questions are addressed relating to: (1) sales response effectiveness over time, (2) effectiveness in attracting competitors' customers, (e) interactions between premium prices and required proofs of purchase, and (4) findings of follow-up surveys as a way of analyzing promotion success.

Introduction

Sales promotion has been quietly tucked away in the marketing literature for many years. Advertising and personal selling traditionally receive major emphasis in the academic community while sales promotion receives little or no real attention. There appear to be four major reasons why this should be changed. First, U.S. companies spend more on sales promotion than on advertising, and the expenditures for sales promotion are growing at a faster rate than advertising (Burnett, 1974, p. 374). Second, there appears to be a great deal of room for improvement in the entire sales promotion area (Stant, 1976). Third, sales promotion includes a set of powerful marketing tools that are especially effective in periods of rapid inflation (Kotler, 1976, p. 340) such as those experienced until recently. Last, the marketing literature void should be made less noticeable in the sales promotion area. Marketing academicians are handicapped in preparing students for marketing careers when widely used marketing techniques are not covered in depth in the classroom.

Sales promotion typically encompasses several diverse promotional activities, many of which are not related to each other. This article deals with premiums, one of many rather specialized sales promotion tools. The use of premiums in marketing is growing and was reported at more than $5 billion in 1973 (Meredith and Fried, 1977). This trend continued and, according to one estimate, the expenditures on premiums in the U.S. reached $9.74 billion in 1981 (Burnett, 1984).

Use of premiums as a sales promotion technique is widespread. The trade literature cites several advantages in using premiums to promote products and services. Consumer premium offers are normally expected to directly increase sales. But there are additional indirect benefits that may accrue such as increased brand awareness, favorable brand attitudes, dealer cooperation, and even brand switching. Despite such widespread use of premiums by marketing practitioners, very little research has been devoted to this vital area of marketing practice (Seipel, 1971). Although some research has been done on factors affecting coupon redemption rates (Reibstein and Traver, 1982), virtually no research is reported that deals with the effectiveness of consumer self-liquidating premium promotions.

Scope of the Present Study

This paper is concerned with reporting and analyzing data relating to the consumer premium programs of a major corporation that is a mass merchandiser in the consumer packaged goods field. The data came from 15 different self-liquidating premium marketing campaigns done by the company over a period of 10 years. Based on the data obtained, the authors attempted to answer, or at least address, the following analytical questions:

1. What is the nature of change over time in the sales-response effectiveness of self-liquidating premium promotions? Are there any differences in the overall sales effectiveness of various types of premium promotional campaigns?

2. How effective are premium promotions in attracting potential customers who normally patronize competitors' brands? Does competitive effectiveness of premium promotional campaigns change over a period of time? Are the competitive benefits temporary or permanent?

3. How do the interactions between various causal variables such as price of the premium offer, proof of purchase, etc., influence the response variables?

4. Finally, do consumer follow-up surveys support the conclusions reached on the basis of hard data? Are there any significant differences among the various premium promotional campaigns with regard to consumer qualitative responses?

To better discuss these questions, please refer to the data presented in Tables I, II, and III.

Overall Sales Response Effectiveness of Premium Promotions

Data relating to 15 premium promotional campaigns over a period of 10 years are presented in Table I. The price of the premium items offered ranged from 50 cents to $5.95. On the basis of price of the premium items, the fifteen campaigns are grouped under three broad categories--higher ($5.95 to $3.50), medium ($1 to $1.50), and low price (50¢ to 75¢). The proof-of-purchase requirement was related to the number of units of the company brand(s) the consumers had to buy in order to obtain the premium item. The proof-of-purchase variable was grouped under two categories--low (2) and high (10). In the last column, the multiple orders for each premium campaign were given. Multiple orders referred to the average number of premium items redeemed by the consumer.

With regard to sales-response effectiveness of premium promotions, on the basis of data presented in Tables I, II, and III, the following conclusions were drawn:

1. The overall sales-response effectiveness of premium-promotional campaigns seems to decline over a period of time. Thus the total unit sales from premium redemptions declined over a period of time. This is evident when A and B campaigns are compared with the N and O campaigns in 1969. (Table I). However, the time durations of the premium campaigns are different. While campaigns A and B (1959-60 and 1963-64) were conducted for 42 and 63 weeks respectively, N and O were conducted for 18 and 14 weeks. Despite such variation in the time duration of the campaigns, the average weekly total unit sales and the size of multiple orders clearly indicated the declining overall sales effectiveness of premium-promotional campaigns.

2. Data in Table II also indicate that promotions offering premium items at moderate prices (with exception of two items, K and N) generally proved to be more effective. Similarly, the campaigns offering premium items at low prices but coupled with high proof of purchase proved to be effective in terms of increasing unit sales from redemption.

3. Data in Table II also indicate that premium promotions with higher priced premium items with low proof of purchase are less effective.

Competitive Effectiveness of Premium Promotions

For those who already buy the company's products, premiums may act as an additional incentive to continue purchasing the products. It is doubtful whether premium offers increase sales to the company's present customers over the long run, especially in the case of products with short repurchase cycles. Premium offers, however, may reinforce already existing favorable attitudes of the company's present customers. The major benefit from the use of premium promotions may come in the form of attracting the customers of competitors' brands. Sales to competitors' brand patronizers who redeem premium offers can be considered as net additional sales to the company. Because of premium offers, some customers of the competitors' brands are likely to buy the company's product, and this facilitates trial usage among noncustomers. In a well-established, consumer, nondurable product industry, consumers' preferences for various brands are typically stable. Under these circumstances, getting the customers of competing brands to try the company's products can prove to be a difficult task. Premium offers may facilitate trial in the marketers' continuous struggle to shift brand preferences. Also such trial may result in switching to the company's product. Data on such competitive effects of premium campaigns are presented in Tables I, II, and III.

In Table I under columns 5 and 6 data relating to the competitive effectiveness of premium promotions are presented. Data under column 5 refer to the estimated unit sales to competitors' customers. The estimate is computed by the following procedure. Number of individuals who normally patronized the competitive brands is estimated from the redemption requests. This figure is multiplied by the proof of purchase in each case. To assess the competitive effectiveness of each campaign, these estimated unit sales to competitors' customers (column 5 in Table I) is expressed as percentage of "total unit sales from redemption" (column 4 in Table I), and the resulting percentage figures for each campaign are shown in column 6 in Table I. Data indicate that the competitive effectiveness is fairly stable, accounting for 30 to 45 percent of total unit sales in 11 of 15 campaigns. It became very unstable in later years. The competitive effectiveness of the last three campaigns is substantially lower than the earlier campaigns, particularly A through H. This trend may indicate that "competitive effectiveness" of premium campaigns over a period of time seems to decline. However, this conclusion should be further modified in view of the unstable nature of "competitive effectiveness" of the premium campaigns of K and L. Critical review of campaigns H through K indicates that premium campaigns with moderate or high price for the premium item will result in greater competitive effectiveness. The data presented in Table II show that the premium campaigns with high-priced premium items and low proof-of-purchase requirements are very effective in attracting competitors' customers. In campaigns E and L, 45 percent of the redemptions were by competitors' customers. The least effective campaigns were those involving low-price premiums and high proof-of-purchase requirements. In campaigns C and M only 30 and 20 percent of the respective redemptions were by competitors' customers.

Consumer Evaluation of Premium Promotions

The general conclusion that premium promotional campaigns are effective in attracting competitors' customers is further supported by data presented in Table III. Significant differences can be observed with regard to competitive brand patronizers redeeming as percentage of total respondents (item 3 in Table III). The premium campaign with a medium-price, low proof-of-purchase requirement attracted the highest percentage of competitors' brand patronizers. It is interesting to note that the corresponding percentages for free (i.e., no charge for premium item), low-proof offers are substantially lower. This finding seems to indicate that competitors' customers are likely to be attracted to a greater extent when the premium offer carries a moderate price. Here, one should note that the nature of premium item offered and the company brand promoted are the same for all the four campaigns (mentioned under "same brand" in Table III). This difference may be due to the psychological tendency of a consumer to perceive a free premium offer as something cheap and hence not worth obtaining. This is particularly so with competitors' brand patronizers. With a company's own customers, a reverse trend can be observed. This may be due to the fact that the company's own customers will be buying the product anyway and if they can get some premium item with a low proof of purchase, they are likely to jump at the opportunity. But as the price of the premium item goes up, the incentive to redeem seems to decline with the company's customers. Thus, competitive effectiveness of premium promotions and sales effectiveness to the company's customers seem to move in opposite directions when combining price of the premium item with proof of purchase for optimum effectiveness. The lower interest on the part of competitors' customers when the premium offer is free is supported by other experimental research findings. After conducting a field experiment involving three demand levels for reciprocation for premium redemption, Seipel concluded: "The results seem to strongly indicate that free premiums do not necessarily make offers more attractive. The interpretation here is that people generally resent strong obligation, especially when they suspect the motives of the person or institution with whom they are interacting or find their interaction partner unattractive." (Seipel, 1971, p. 32).

The competitive effectiveness of premium promotional campaigns with low-price and premium items and high proof-of-purchase requirements is generally lower than when a medium-price item is offered in combination with both low and high proof of purchase. Considering all the available evidence across seven different premium campaigns, one may conclude that medium-price and low-proof or medium-price and high-proof premium items may have maximum competitive effectiveness.

One more indication of competitive effectiveness of premium promotions is the repeat purchases by the competitors' customers. Data relating to the competitive brand patronizers reporting repurchase of the company brand as percent of total respondents are presented under item 4 in Table III. For each promotional campaign approximately 40 percent or more of the competitors' brand patronizers who redeemed the premium item reported repurchasing the company brand. The differences relating to different types of premium offers (price and proof combinations) are pretty much the same as in the case of premium redemptions. This seems to indicate that if a large number of competitors' brand patronizers could be persuaded to buy the company's brand through a premium offer, about half of them are likely to repurchase the brand. However, this shift in purchasing pattern, which can be attributed to a premium promotion, does not seem to bring about a permanent shift in the brand-patronage behavior of the "triers" and "repurchasers" of the company brand.

In item 5 in Table III, the percentage of the respondents reporting a switch to the company brands is either very small or zero. It is interesting to note that in the case of premium promotions with low-price, high-proof premium offers (relating to brands X, Y, and Z), none of the competitors' brand patronizers reported switching to the company brand. This is somewhat intriguing in the sense that a high-proof offer necessitates that the respondent buy more units of the company brand so as to obtain the premium. If it is assumed that the respondents have consumed the company products in such large numbers, we logically expect a shift in patronage if the company brand is more satisfactory than their customary brand. Since no such brand switching seems to have occurred in spite of some of the competitors' customers exhibiting purchase and repurchase behavior, one would suspect that the company brand involved failed to satisfy the potential customers. Such critical nature of the brand in facilitating the brand switching in the post premium-promotional period is further supported by the evidence that some competitors' customers have switched to a company brand even with a low-proof offer (which implies low levels of use). Concurrently, for the same brand when a high-proof premium offer is made, the brand switching rate is the highest. Thus, the evidence clearly indicates the critical nature of brand promoted in facilitating brand switching. If the company's premium-promotional objective is to attract additional "customers" to a specific brand, the company should pay closer attention to the product-differentiating qualities of the company brand and its ability to convince the competitors' customers of its superiority over their usual brand. This finding, to some extent, corroborates the previous research findings dealing with sales response to promotions and advertising. In this respect one of the conclusions by Brown (1974) was "promotions do not yield new long-term buyers."

Conclusions

The use of premium promotions is widespread in the real marketing world. Despite such significance to marketing practitioners, there are very few systematic studies in the marketing literature dealing with the nature and dimensions of sales response to premium promotions. In this paper, the authors had the unique opportunity to analyze data relating to 15 nationwide premium promotions of a mass merchandiser over a 10-year period. Such fine grain data enabled the authors to draw conclusions about the efficacy of the premium promotions as a promotional tool under varying conditions of premium offers. The following are some of the major conclusions based on the data presented:

1. The overall sales-response effectiveness of consumer premium promotions in terms of total unit sales from premium redemptions declined over a period of time.

2. Premium promotional campaigns offering premium items at moderate prices generally proved to be more effective.

3. In terms of total unit sales from redemption, premium-promotional campaigns with higher price premium items combined with low proof-of-purchase requirements are least effective.

4. However, the overall effectiveness of a premium-promotional campaign as reflected in total unit sales from redemption and the competitive effectiveness of the campaign as reflected in attracting the competitors' brand patronizers required different types of premium offerings. To achieve the former objective, premium offerings with low prices coupled with high proof proved to be effective. On the other hand, the latter objective can be better achieved by offering either medium-price or high-price premium items with low proof for redemption.

The research findings presented in this paper supported earlier research findings based on experimental research and on limited field research data. The research data presented in this paper is related to the experiences of one major consumer products corporation. Further research reflecting the experiences of other corporations in diverse product fields is needed so that generalizations can be drawn as to the sales-response effectiveness of premium promotions.

References

Brown, Robert George (1974), "Sales Response to Promotions and Advertising," Journal of Advertising Research, (August), 33-38.

Burnett, John J. (1984), Promotion Management: A Strategic Approach, St. Paul, MN: West Publishing Company.

Kotler, Phillip (1976), Marketing Management, Englewood Cliffs, NJ: Prentice Hall, Inc.

Meredith, George and Robert P. Fried (1977), Incentives in Marketing, Union, NJ: National Premium Sales Executives Education Fund.

Reibstein, David J., and Phillis A. Traver, "Factors Affecting Coupon Redemption Rates," Journal of Marketing, 46 (Fall), 102-113.

Seipel, Carl-Magnus (1971), "Premiums--Forgotten by Theory," Journal of Marketing, 35 (April), 26-34.

Stang, Roger A. (1976), "Sales Promotion--Fast Growth, A Faulty Management," Harvard Business Review, 54 (July-August), 115-124.

TABLE I

IMPACT OF PREMIUM PROMOTIONAL CAMPAIGNS ON SALES AND COMPETITION

PREMIUM ITEM (1)	PRICE OF THE ITEM $ (2)	PROOF OF PURCHASE (3)	UNIT SALES FROM REDEMPTION ('000s) (4)	ESTIMATED UNIT SALES TO COMPETITORS' CUSTOMERS ('000s) (5)	(5) AS % OF (4) (6)	NO. OF WEEKS* (7)	MULTIPLE ORDERS (8)
A (PR)	.50	10	122,906.8	36,872.1	30	42	4.0
B (P)	.50	10	56,480.6	16,944.2	30	63	2.1
C (U)	.50	10	1,233.7	370.1	30	17	1.6
D (U)	1.00	10	771.3	231.4	30	16	1.1
E (U)	5.95	2	272.1	122.4	45	17	1.2
F (U)	.50	2	863.8	388.7	45	18	2.1
G (R)	1.50	2	1,726.3	776.8	45	21	1.8
H (R)	1.50	2	805.0	362.3	45	14	1.8
I (U)	1.00	2	698.0	195.5	28	16	1.5
J (PU)	.75	2	188.5	36.0	19	14	1.6
K (U)	1.00	2	74.4	33.5	45	11	1.4
L (U)	3.50	2	45.8	20.6	45	17	1.2
M (PR)	.60	10	979.8	215.6	22	14	1.8
N (PU)	1.00	2	393.6	94.5	24	18	1.4
O (U)	1.00	10	1,396.8	307.3	22	14	1.8

R = Related item, i.e., complementary to the product being sold.
U = Unrelated item.
PR = Promotionally related item, i.e., the brand name of the company product being promoted on the premium item.
PU = Promotionally unrelated item, i.e., premium item is not complementary to the company product but the brand name of the company product being promoted on the premium item.
*Number of weeks during which the promotional campaign was run.

TABLE II

PRICE OF PREMIUM AND PROOF OF PURCHASE COMBINATIONAL ANALYSIS

PRICE OF PREMIUM ITEM	PROOF OF PURCHASE							
	LOW				HIGH			
		1	2	3		1	2	3
LOW	F	863.8	45	18	C	1,233.7	30	17
	J	188.5	19	14	M	979.8	22	14
		1	2	3		1	2	3
	G	1,726.3	45	21	D	771.3	30	16
	H	805.0	45	14	O	1,369.7	22	14
MEDIUM	I	698.1	28	16				
	K	74.4	45	11				
	N	393.6	24	14				
		1	2	3				
HIGH	E	272.1	45	17				
	L	45.8	45	17				

1 = Total unit sales from premium promotion (in '000s of units).
2 = Unit sales to competitors' brand patronizers as percent of total unit sales from premium redemption.
3 = Number of weeks the premium offer was promoted.

TABLE III

FOLLOW-UP SURVEY RESULTS ON CONSUMER EVALUATION OF PREMIUM PROMOTIONS

SURVEY DATA RELATING TO:	PROMOTIONALLY RELATED PREMIUM ITEM						
	SAME BRAND			DIFFERENT BRANDS LOW PRICE, HIGH PROOF			
	Medium Price Low Proof	Medium Price High Proof	Free Low Proof	Brand X	Brand Y	Brand Z	Total for X, Y, & Z
1. Total redeemers interviewed	(484)	(318)	(364)	(384)	(326)	(342)	(1,052)
2. Company brand patronizers redeeming as percentage of total respondents	47	69	75	83	76	73	78
3. Competitive brand patronizers redeeming as percentage of total respondents	53	31	25	17	24	27	22
4. Competitive brand patronizers reporting repurchase of the company brand as percentage of total respondents	21	17	14	7	10	15	10
5. Percentage of the respondents switching to the company brands	1	2	.3	0	0	0	0

FOOD COUPONS - PERSPECTIVE AND UPDATE

Lance Masters, California State University, San Bernardino
Karen Kessinger, California State University, San Bernardino

ABSTRACT

It started with wooden nickels. Coupons are issued by over 2,000 manufacturers and are used by 86% of all U.S. households. Over 140 billion were distributed in 1984, with a 6% redemption rate (over 8 billion) and with an average face value over 25 cents plus an eight cent handling fee. The industry has grown consistently for over a dozen years, and is the largest single category of consumer promotion at $2.5 billion. The average household redeems about three coupons a week, with the more affluent redeeming more than lower income groups. Once associated almost exclusively with packaged goods, marketers in virtually every sector of our economy now use coupons and rebates in some form.

HISTORY

"Don't take any wooden nickels" is a phrase still heard occasionally in this age of debit cards and electronic telecredit. But rarely is it associated with those cents off coupons that are being printed, clipped and redeemed at a furious pace. Yet the token of the wooden nickel which still lingers in our vocabulary is the forerunner of modern coupons. The wooden nickels were given away at the time of a sale as something the Cajuns of Louisiana call a little "lagniape," or something extra. Redeemable only at the store where issued, it served as a draw, enticing the customer back to the same store for a repeat visit, if only to get rid of the "free" money that was burning a hole in his pocket! They were also issued as commemorative tokens, often with expiration dates on the time permitted for redemption (Bowman, 1985, p. 3).

The origination of coupons as we know them is credited to C. W. Post, then of Battle Creek, Michigan, and to the introduction of his health product in 1895, Grape Nuts. Customers were given a "one cent off certificate" for redemption on their purchase of Grape Nuts at their local grocery store. This was a landmark in the development of price promotion incentives in new product introductions, designed to give advantage to consumer, retailer and manufacturer. (Ibid)

The use of coupons was sporadic until 1947 when Minute Maid introduced its new frozen orange juice concentrate in a combination sampling and couponing campaign. Minute Maid gave away cans of concentrate door-to-door, along with a card redeemable at the grocer's on a subsequent purchase of the product. (Ibid)

The use of coupons to boost sales and gain acceptance of new products by consumers continued then with some regularity, but the rates of distribution and redemption were unknown, as no records were kept. In 1965 the A.C. Nielsen/Nielsen Clearing House began to compile data on coupon usage, and started publishing annual volume figures on the distribution of manufacturer's coupons. They are the largest provider of coupon redemption services, but face stiff competition from a number of competitors such as the number two provider, Seven Oaks Marketing Services, Inc.

TRENDS AND INNOVATION

There are a variety of styles and methods for the effective presentation of coupons to the consumer beyond the straight cents off coupon. Premiums have been widely used since the 1960's, and in early 1970's they were heavily used promotional vehicles for a myriad of products; brand logos were displayed on everything from beach towels to children's toys. There has been a recent increase in premiums for items related to product usage, such as Midori Melon's almost ball shaped "Melonball" cocktail pitcher. Tia Maria offered cocktail glasses with Tia Maria etched on the glass along with recipe booklets that promoted the use of the product.

Coupons have been increasingly used as sweepstakes entry forms. The entry form is printed on the coupon, and when the consumer fills it out and redeems it, he is entered into the sweepstakes drawing which is normally conducted by the clearing house. This also provides a direct mail list of known product users which might be useful in later promotions. Another coupon innovation is the customer option coupon. Two coupons overlap for a particular product or for alternative product line offerings. The quantity and face redemption amount usually vary depending on which way the customer chooses to clip the coupon. An example would be 25 cents off one six pack of a beverage or 60 cents off two six packs; alternately the coupon might be 25 cents off regular versus diet or caffein free soda. Some manufacturers have confidentially told the researchers that they suspect that many consumers are confused by option coupons, although this should be reduced as option type coupons increase in popularity.

Instant or immediately redeemable coupons have increased in popularity because they increase impulse purchases by consumers, and are much easier for the consumer than either on-pack (printed on the package to be cut out after using the product) or in-pack (usually difficult to see, thus lacking visual impact, and often need to be printed with expensive food safe materials). Instant coupons are possible due to advances in label technology such as top and bottom adhesive perforated strips or double faced sticky tape. On pack coupons reward the loyal buyer and increase repeat sales, while instant coupons reward both new and old customers but only on the current sale.

General Foods developed an effective sampling coupon combination when they introduced their Birds Eye products Awake and Orange Plus. They gave away in store samples of the juice along with cents-off coupons. This combination yielded a much higher rate of sales on the sampling days and a substantially higher rate of redemption on the coupons. (Ibid)

Retailers have developed their own coupon techniques which differ from those of the manufacturer. One of the most frequently employed techniques is the in-ad coupon usually featured in the best food day market ads in the food sections of newspapers across the country. Various stores have used an integrated coupon system where they offer double value on specific manufacturer coupons that either appear within the market's own ad, or are free standing or co-op ads appearing elsewhere in the food section. Another device popular with consumers and expensive to stores is the offering of double and triple value coupons redeemable when paired with most manufacturers' coupons. Triple value coupons are not often used, except in extreme promotional wars among chains in very competitive markets such as metropolitan Los Angeles. American Stores Alpha Beta unit has recently experimented with "write your own" coupons, where the consumer chooses any item in the store and the coupon is redeemable for a fixed amount such as 50 cents.

METHODS OF DISTRIBUTION

There are four key institutions concerned with the distribution of coupons to consumers: the manufacturer, the retailer, cooperative programs operators, and clearing houses. The "co-ops" include service organizations such as John Blair Marketing, George Valassis & Co., and Newspaper Coop Couponing. These organizations feature regular distribution of inserts or strip style coupons appearing in the food section that offer the manufacturer a wide choice of markets with increased visibility, higher redemption and lower distribution costs than free standing inserts or solo run of press (ROP) adds.

CHART 1

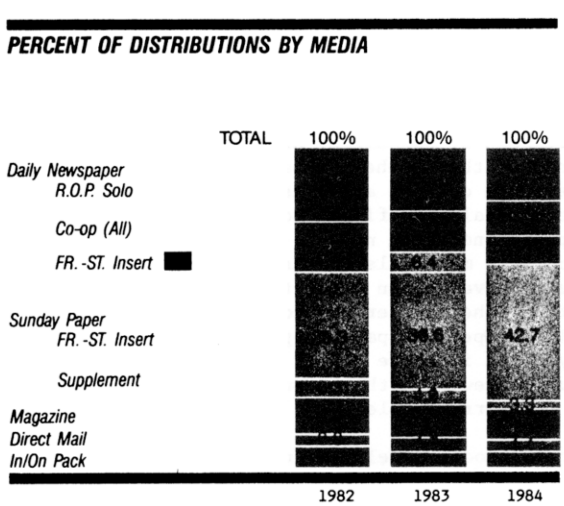
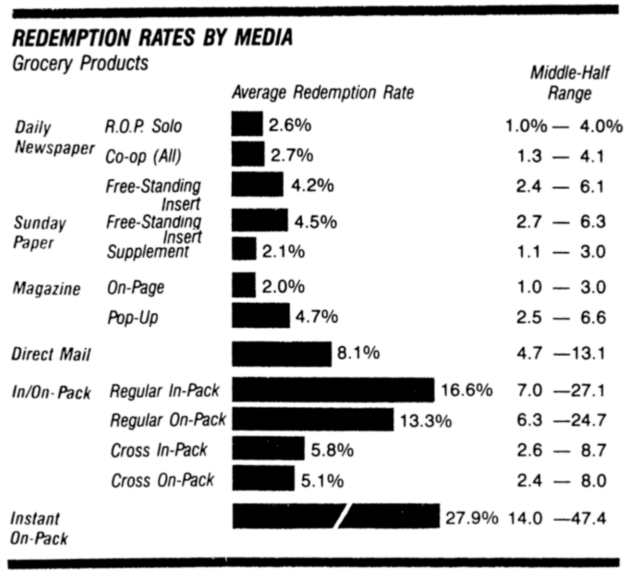


CHART 2

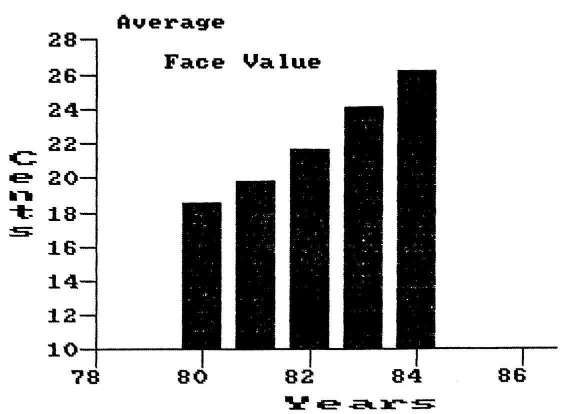


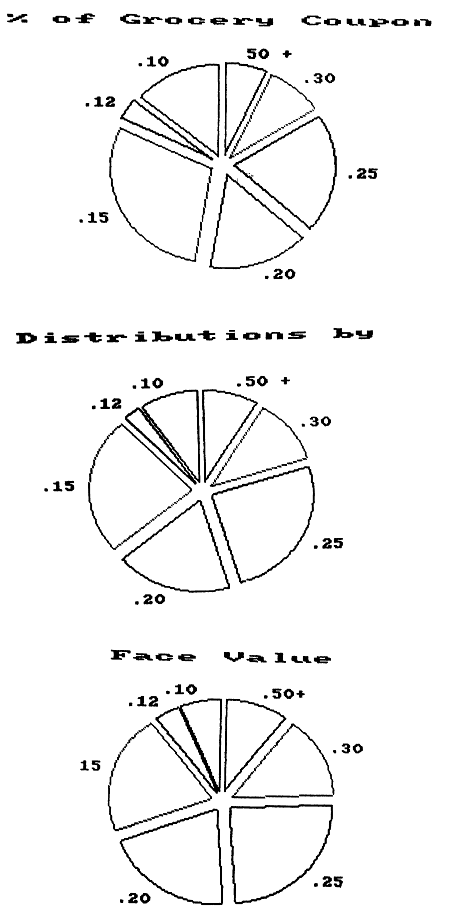
Manufacturers use several different ways to employ coupon promotions. Each has distinctive advantages and disadvantages, particularly with regard to cost, reach and effectiveness. The method chosen for any specific coupon drop often is strongly influenced by the preferences of key buyers for important chains in major market areas. The most familiar media for distribution is the newspaper run of press on page ad. Six hundred lines, just less than one quarter of a page, is the standard size, and the ad is almost always just black and white. Even though the coupon might not always be at a corner of the page where it is easiest to clip or tear out, the large circulation and quick redemptions keep newspaper media buoyed to about 45% of all coupon distribution (NCH Reporter). Redemption rates vary from 3.34% for regular newspaper coupons to 3.66 for co-op ads, but newspapers also suffer the highest percentage of "minted gang cut" misredeemed ads, at 13 and 14.3% respectively (Seven Oaks 1985). Solo ads are substantially more expense for the manufacturer, running $8. to $9. per thousand, compared to $3.00 to $3.50 per thousand for coop ads (Bowman 1985).

Sunday supplements are also very popular, and are usually in color. Free standing inserts have grown substantially in acceptance since their introduction in the Seventies. Free standing supplements have a 5.3% effective redemption rate, and the large coops have a lower rate of 3.78%. Misredemption is about 5.5% for both (Seven Oaks 1985). Free standing inserts are quite expensive, at about $11. per thousand, and again the coops are quite a bit less expensive at $2.30 to $10, depending on size (Bowman 1985).

Another popular newspaper based coupon is the Sunday comics coop, which features full color but lower cost, lower quality newsprint than the glossy paper of the supplement. The comics coop have effective redemption rates of 2.63%, and misredemption of 5.7% (Seven Oaks 1985).

Another popular media for couponing is magazines, which feature regular on page, tip in or pop up coupons, and coop ads. Tip ins are card style either bound in the magazine almost forcing the reader to open the magazine to the page because of the relative stiffness, or simply dropped in to fall out into the readers hands as they read the magazine. Magazine coupons generally have higher redemption rates than newspaper coupons, because magazines are closely targeted to very specific market segments. Regular magazine coupons have a redemption rate of 3.93 and misredemption of 6.0%, while co-op inserts are 8.13% and 3.6% respectively (Seven Oaks 1985).





Direct mail is one of the most expensive methods of coupon distribution, but also has very high redemption rates: 10.4% for solos and 9.7% for coops, and naturally has very low misredemption rates, 1.0% and 1.3% respectively (Seven Oaks 1985). Solo ads might typically run at \$90. to \$130. per thousand, in contract to \$5. to \$15 per thousand for the cooperative direct mailings (Bowman 1985).

In pack regular coupons are a strong incentive to loyal customers, and have an expectedly high redemption rate of 25.61%, with misredemption of less than 1%. In pack cross coupons, where the coupon in the package is redeemable on one of the manufacturers other products also have a high redemption rate of 9.14% with misredemption of about 1.5%. On pack coupons, where the package has to be cut up after the product is used, have lower redemption rates of 16.75 for regular and 7.7% for cross coupons (Seven Oaks 1985). In or on pack coupons offer a very inexpensive mode of distribution for the manufacturer.

In store handouts, often given away by hostesses who serve product samples, also have very high redemption rates, a whopping 40.40 percent, and have negligible misredemption (Seven Oaks 1985). Hostess services vary greatly in cost across the country, running from \$25 to over \$100. per day, and obviously the customer count or level of distribution varies dramatically. Manufacturers often have a policy of a minimum store size before they will offer sampling.

Bounce backs, the easily removable on pack coupon redeemable at time of purchase, offer the highest redemption rates of all, at 70.09%. Misredemption is also less than 1%. What is amazing is that three out of ten customers fail to redeem the coupon!

Companies are getting pickier about who receives cents off coupons, made possible through new technology. Computerized printers are installed now in some stores, and automatically spit out coupons to prime sales targets based on items scanned at the register (W.S.J. 8/8/85). Such precise targeting is obviously very expensive, with an average cost per redemption of over \$1.00 (Ibid).

SUMMARY

Couponing activity by manufacturers has grown dramatically in recent years with coupon distribution reaching a peak of 163.2 billion in 1984. Distribution nearly doubled in the five years from 1980 when 90.6 billion coupons were circulated by manufacturers.

The popularity of coupons among consumers is reflected in the fact that consumers redeemed a record 6.25 billion coupons in 1984, according to industry figures developed by Nielsen Clearing House. This reflects a 12% increase over the 5.56 billion redeemed in 1983. Through their redemption of coupons, consumers saved a total of \$2.06 billion dollars on their shopping bills in 1984. This brought consumer savings from coupons to a record level.

CHART 5

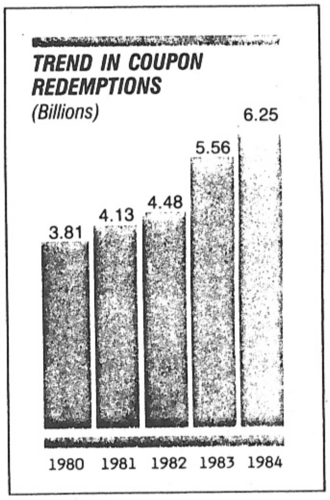


CHART 6

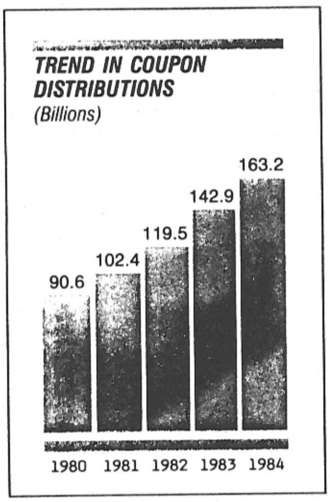
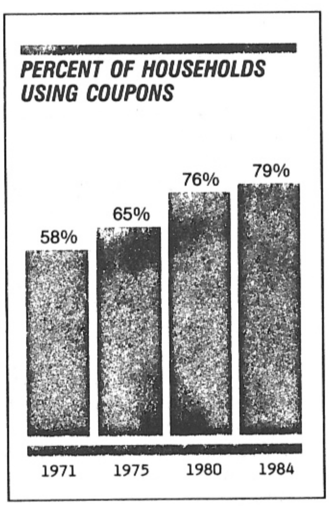


CHART 7



More manufacturers than ever are using coupons, and more consumers are redeeming them. Eighty six percent of coupons users indicated that they were loyal to certain brands, but over seventy percent of those polled indicated that they might switch. Sixty three percent said that repurchase was influenced by on-pack couponing.

Coupons have been the subject of substantial innovations in promotional techniques, as typified by recent advances in computerized dispensing at check stands in super markets. Distribution techniques are as varied as the media available, with the highest rates of redemption enjoyed by direct mail.

In a speech to the Food Industry Association, an executive from Procter and Gamble said, "The future of couponing should be very bright indeed. Coupons have proven to be good for the manufacturer to introduce new products and hype sales of existing brands, good for the retailer to sell extra volume at a profit, good for the clearing house in providing a needed service to the retailer and a profit, and good for the consumer in stretching the food budget."

REFERENCES

Alsop, Ronald, (1985), "Companies Seek Ways to Put Coupons Where They'll Count," The Wall Street Journal, August 8.

Aycrigg, Richard H., (1982), "Rising Above the Coupon Clutter," Promotion Update, Chicago: Promotion Marketing Associaton.

Aycrigg, Richard H., (1980) "What Consumers Think of Coupons," Presentation to Association of National Advertisers Promotion Planning Worshop, New York, October 15, 1980, reprinted by A.C. Nielsen Company.

Bowman, Russell D., (1985), Profit on the Dotted Line: Coupons and Rebates, second edition, Chicago: Commerce Communications, Inc.

"Coupons," (Sept. 1984), Progressive Grocer.

Couponing's Growth in Food Marketing, (1982), Washington, D.C.: Economic Research Service.

NCH Reporter, (1985), $1984 Coupon Distribution and Redemption Trends," Clinton, IA: A.C. Neilsen Company.

Seven Oaks Marketing Services, (1985), The Coupon Industry, Memphis, Tennessee. (Pamphlet)

Strang, Roger A., (1980), The Economic Impact of Cents-Off Coupons, Clinton, IA: Nielsen Clearing House.

COMPARING THE EFFECTIVENESS OF ADVERTISING APPEALS TO THE "REAL" SELF VERSUS THE "IDEAL" SELF IN A PERSONAL INVESTMENT SITUATION

John H. Holmes, Bowling Green State University
Timothy M. Calvin, Century Marketing Corporation

ABSTRACT

The study considers the appropriateness of two types of advertising appeals—one directed to the "real" self, the other to the "ideal" self—and measures their relative effectiveness in promoting a personal investment, *viz.*, a graduate degree program. Based upon self-concept theory and previous empirical research, three hypotheses were derived and tested using a between-subjects experimental design. Selected analyses of the data obtained from 217 subjects produced mixed results. Specific findings and their implications are discussed.

INTRODUCTION

Individuals demand, purchase, invest in, and consume a wide variety of goods and services for an equally wide variety of reasons. Prior to making purchases and/or investment decisions consumers often process information (Sternthal and Craig, 1982) in response to one or more types of promotional appeals. Knowledge concerning the relative effectiveness of selected appeals and the circumstances in which they are most useful contributes to marketing knowledge and provides insights for practitioners.

The present research contends that advertising appeals directed toward the "real" self—the way individuals presently perceive themselves, in comparison with messages directed toward the "ideal" self—the way individuals would like to see themselves will produce significantly different effects.

CONCEPTUAL FRAMEWORK

The concept of self has its origins rooted in psychology (Newcomb, 1950). Over the years, several marketing theoreticians and researchers have investigated its relevance for explaining and predicting various aspects of buyer behavior.

Martineau (1957) postulated a relationship between a person's self-concept or image and brand image and suggested that the "ideal" self would be a better correlate of consumer preferences than the "actual" or "real" self. Both Britt (1966) and Douglas, Field and Tarpey (1970) espoused a similar theoretic point of view. Notwithstanding, both Dichter (1964) and Grossack and Schlessinger (1961) advocated a contrary position implying that consumer preferences would more closely correspond with the person's "actual" or "present" self. Levy (1959), on the other hand, acknowledged the importance of both the "actual" self and "ideal" self in consumer decision making. And Staudt and Taylor (1965) suggested consumers will respond favorably to products and services whose images correspond either with "present" self or move them closer to becoming their "ideal" self. Congruency between product image and self image could in keeping with the theory of cognitive dissonance (Festinger, 1957) also be considered as a post purchase phenomenon.

Self theory and the debate as to whether the "real" or "present" self or the "ideal" self would be the better correlate of purchase behavior spawned numerous empirical studies. Birdwell (1965), as he had hypothesized, found congruent relationships between an individual's perception of himself and the make of automobile owned. Grubb and Hupp (1969) reported as they had predicted that the self concepts of automobile owners were significantly (1) similar to the self-concepts they attributed to others owning the same make, and (2) dissimilar from the self concepts they attributed to owners of a competing make.

Dolich (1969) investigated the congruence between self and consumers most preferred and least preferred brands of beer, cigarettes, bar soap, and toothpaste. Data obtained from two hundred students indicated (a) greater congruence between subjects' self-concept and their preferred brands in comparison with their least preferred brands and (b) that socially conspicuous items, *viz.*, beer and cigarettes showed less congruence than private consumption products, i.e. bar soap and toothpaste among the least preferred brands. His research further revealed no differences in congruency between "real" self and "ideal" self image among female students, whereas males did exhibit differences in image congruences for least preferred brands.

Ross (1971) also investigated the relationship between self concept and the conspicuousness of the consumption situation. In his study he predicted the "ideal" self would be more closely related to preferences for the conspicuous object, *viz.* automobiles whereas the "actual" self would be more closely related to the less conspicuous object, magazines. Contrary to the prediction, the "actual" self concept was more closely related to the subjects' preference for both product categories.

Landon (1974) measured the relationship between "self" image and "ideal" self image and purchase intentions for both males and females across numerous selected product categories. He reported (a) positive correlations between "self" image and "ideal" self image, (b) the purchase intentions for certain products tended to be more correlated with the subjects' "ideal" self image, whereas for others the opposite occurred, and (c) some subjects—actualizers—were characterized by a higher "self" image/purchase intention correlation whereas others—perfectionists—were characterized by a higher "ideal" self image/purchase intention.

The relationship between shoppers' self images and images of retail stores has also been assessed. Stern, Bush, and Hair (1977) collected data on subjects' "present" self images, "ideal" self images, and images of four different retail outlets. They reported (1) no significant difference between shoppers' "real" self images and their patronized store's image, (2) shoppers' "ideal" self images were significantly higher than their images of the stores they patronized, and (3) consumers' images of self (real and ideal) were much different from stores they did not patronize.

Although the previously cited research has demonstrated congruency between either the individual's "real" self image or "ideal" self image and the perceived image of the product purchased or consumed or store patronized, it has not directly addressed the comparative effectiveness of appeals to either of the two self image concepts. This is somewhat surprising because of the prevalence of lifestyle advertising which shows the kind of people who presently consume the product and advertising which depicts people enjoying some future fantasy turned reality resulting from the acquisition of the advertised product or service.

PRESENT STUDY

Therefore, the principal concern in this study is to assess the relative effectiveness of two advertising appeals: one to the "real" self and the other to the "ideal" self. Also, in contrast with the previous research which considered product purchase decisions or patronage decisions, the present investigation centers on a personal investment—more specifically furthering one's education.

Investment decisions and product purchase decisions are similar in many ways. Both are generally prompted by the recognition of a need. Both ordinarily involve some degree of information processing and the evaluation of alternatives. The actual decision in either instance likely provides an immediate psychological reaction. For example, the buyer of an automobile may experience "the pride of ownership," whereas an individual investing in an IRA experiences a "sense of security."

Although there are many similarities between the two decision situations, there are also important differences. One major difference is gratification. A physical product frequently provides tangible benefits and often facilitates consumption. The automobile owner can immediately drive the car home from the dealership and thus receives instant gratification. On the other hand, the return from an investment is often postponed until some future time. The owner of the IRA cannot access the funds until age 59-1/2 and thus accepts deferred gratification. A second principal difference concerns the level of involvement. Whereas purchases of consumer durables often occur subsequent to the formation of attitudes towards the product in question, many non-durables are bought on impulse with attitudes occurring after consumption. In most investment decisions there is a high level of involvement and investors generally will develop general and specific predispositions prior to making their decisions.

Most consumers, besides purchasing goods and services to satisfy immediate needs, recognize the necessity of investing time or money to satisfy anticipated or future needs; for example furthering one's education to prepare for a career or investing in securities to provide income for retirement. Thus, before deciding upon any given investment they will likely match its potential benefits against both their "real" and "ideal" self image. Because individuals are continuously in the act of becoming (Grubb and Hupp, 1969) and moving toward their "ideal," it is probable that the anticipated benefits and desired gratification associated with most investments will be perceived as being more closely akin to what one "would like to be" rather than to what one "presently is." Hence, it is predicted that an appeal directed toward the individual's "ideal" self image will elicit more favorable responses than a similar appeal directed toward the "real" self.

Therefore, it is hypothesized that in an investment decision situation: Individuals exposed to an advertisement embodying an appeal to the "ideal" self in comparison with those exposed to a similar advertisement embodying an appeal to the "real" self will express

1) more favorable impressions and attitudes toward the advertisement,
2) more favorable attitudes toward the investment, and
3) greater intention to act.

Because of the comparatively high level of involvement associated with investment type decisions, it is postulated that the individual consumer will have formed general predispositions—either positive or negative—toward the idea being promoted. Therefore, it is additionally predicted that the hypothesized relationships will occur regardless of the individual's predisposition toward the specific investment. The rationale is as follows: persons favorably predisposed would generally be aware that gratification is deferred and would thus seek benefits which would correspond with or move them closer to their "ideal" self; whereas among those negatively disposed, appeals to the "real" self could encounter initial resistance or induce counterargumentation, while an appeal to the "ideal" would be suggestive of what it might be like and thus perceived in a less contrary or argumentative manner. Notwithstanding, the problematic covariate effects of predisposition on subjects' responses will be addressed.

METHOD

Graduate education represents a substantial investment. An advanced degree program requires dedication and commitment. Matriculation can provide an immediate psychological reaction, e.g. a feeling of recognition and acceptance, but for most individuals the rewards are deferred until after the work has been completed and the degree has been conferred. Therefore, an MBA degree program was selected as the investment for this study. Because undergraduate students comprise the principal target market for graduate education, current upper division undergraduate students currently enrolled in business classes at a large midwestern state university were chosen as subjects. The individuals selected were homogeneous in terms of demographics and lifestyles.

A sequential four-part questionnaire was then constructed. Part one was designed to determine individuals' predispositions and participants were asked, "My (present) attitude toward MBA degrees is." Part two contained one of two nearly identical versions of a demonstration print advertisement promoting an MBA program. The only appreciable difference between the two ads was that the copy in the first embodied an appeal to the student's "real" self, whereas the second appealed to the "ideal" self. Both versions had been pretested and an overwhelming majority of the twenty-four students participating in a pretest correctly identified the appeal within each of the two respective advertisements. Part three contained a series of questions for measuring the subjects' (a) impressions and attitude toward the advertisement, (b) attitude toward an MBA degree, and (c) intention to (1) seek out more information and (2) apply for admission in an MBA program. Responses for these questions were measured on a seven-point scale. The scaled items used for measuring these dependent variables is similar to the approach used by Baker and Churchill (1977). Part four asked the participant to identify which of the two appeals he or she had just seen. This procedure would serve as a manipulation check.

A total of two hundred and twenty-one students participated in a between-subjects (Green, 1978) experiment. Pretested questionnaires were distributed on a controlled "odd-even" basis with half the subjects receiving the first version of the advertisement and the balance receiving the second. This procedure reduced order of position bias and assured a comparable number of responses from subjects exposed to each of the respective advertisements.

RESULTS

One hundred and twelve subjects responded to the advertisement containing the appeal to the "ideal" self, of these eighty percent had expressed favorable predispositions toward an MBA while only five percent were negatively disposed. The manipulation check showed that ninety-two percent correctly identified the type of appeal to which they had been exposed.

One hundred and nine responded to the appeal to the "real" self; eightyfive percent were favorably disposed with five percent expressing a negative attitude. Eighty percent correctly identified the type of appeal.

A total of 217 sets of responses were included in the analyses. Initially a MANOVA was performed to determine if there was a statistically significant difference between the two groups. The resulting multivariate F value was 4.44 which is significant beyond .0001. Analyses of covariance were then conducted on the responses given for each measure for the three dependent variables. The results of these analyses are presented in Table 1 which depicts the marginal means adjusted for the effects of predisposition for each scaled item from both appeal's groups, corresponding F values, covariate F values depicting the effects of predisposition, and the covariate slope indicating the amount of the effect the covariate had on the subjects' responses.

TABLE 1

Summary of Data Analysis

Scaled Items	Adjusted Marginal Means[a] "Ideal" Group	"Real" Group	F Value	Covariate[b] F Value	Covariate Slope
Predisposition	5.37	5.63	2.20		
Impression of Advertisement					
appealing	3.99	3.16	18.17**	16.71**	.33**
believable	4.17	4.81	10.42**	9.98*	.26**
attractive	3.69	3.00	11.43**	8.45*	.25**
informative	3.43	4.19	14.14**	4.30*	.17*
clear	4.23	4.18	.23	1.58	.10
convincing	3.38	3.09	2.34	10.01**	.25**
overall reaction	3.97	3.76	1.40	19.91**	.33**
Expressed Attitude	4.43	4.26	2.04	40.25**	.38**
Intention to Act					
seek information	5.81	6.02	1.02	6.35*	.22*
apply for admission	3.90	3.89	0.00	95.33**	.77**

[a] marginal means and F values have been adjusted to control for effects of predisposition
[b] Indicates the covariate effects of predisposition on subjects' responses
* significant beyond .05
** significant beyond .01
1 d.f.

The results in terms of the three hypotheses are as follows:

H1. Individuals exposed to an advertisement embodying an appeal to the "ideal" self will elicit more favorable impressions and attitude toward the advertisement than those exposed to the appeal to the "real" self. Here as shown by the F values in Table 1, mixed results were obtained. As had been predicted, subjects exposed to the "ideal" message rated the advertisement as being significantly more appealing and more attractive, than did those exposed to the "present" appeal. On the other hand, contrary to the prediction, those exposed to the "present" self message rated it as significantly more informative and more believable than did those exposed to the "real" appeal. Further, as can be seen, there were no significant differences between the subjects' ratings in terms of either message clarity or ability to convince its reader. Similarly, there were no appreciable differences in subjects' overall reaction to the respective advertisements. In view of these conflicting results, hypothesis one cannot be accepted.

H2. Subjects exposed to the appeal to the "ideal" self advertisement will express more favorable attitudes toward the investment than those exposed to the appeal to the "real" self. The data indicate that while the difference is in the predicted direction it is not statistically significant. As a consequence hypothesis two is rejected.

H3. Subjects exposed to the "ideal" self message will express greater intentions to act than those exposed to the "present" self message. Here the data reveal that those exposed to the appeal to the "present" self were slightly more inclined to (1) seek more information about an MBA program and (2) apply for an MBA program than those exposed to "ideal" image appeal. The differences, however, were not significant. Therefore H3 is rejected.

Analysis of Covariance-Predisposition

The analysis of covariance indicates the extent to which subjects' preexisting attitudes toward an MBA degree affected their responses to either of the two appeals. The results as presented in Table 1 reveal a statistically significant covariate effect among subjects on all dependent measures except "clarity." The effects of predisposition exceed the main effects on all measures except for "appealing," "believable," "attractive," and "informative."

DISCUSSION

Although none of the three hypotheses were confirmed, selected findings are noteworthy and will be discussed in the paragraphs which follow.

The magnitude of the covariate effects of predisposition is not surprising. An investment decision such as deciding whether or not to apply for admission to an MBA program requires considerable involvement. Therefore, while it is reasonable to believe that exposing prospective students to a given advertisement one time may make a difference, it would not be realistic to expect such a treatment to overcome the effects of one's prior thoughts and feelings. Because of the overwhelming and decidedly favorable predispositions, one can only speculate as to whether or not negative predispositions would have had a similar impact on subjects' responses to either type of self appeal. Consequently, a more definitive statement in this regard must await future research.

Impressions and Attitude toward the Message

Overall Reaction. As shown in Table 1, the covariate effects of predisposition exceded the effects of the respective message appeals. Notwithstanding, subjects rated both ads as slightly favorable. There were, however, virtually no differences between the adjusted marginal means in terms of "overall reaction." This finding—if viewed singularly—suggests that one appeal is just as effective as the other. This conclusion, however, may be overly simplistic as many factors contribute to one's overall impression. Therefore, the corresponding mean scores for each of the advertisement's components needs to be separately considered before tendering specific recommendations.

Attractive. The subjects' responses indicate that the appeal to the "ideal" self was perceived as being significantly more "attractive" than the appeal to the "real" self. This suggests that an appeal directed toward the "ideal" is the more likely of the two to (1) arrest attention and (2) potentially, at least, hold the reader's interest. This latter effect may however occur because the "ideal" self image message would more likely communicate how the idea being promoted fulfills a future need and thus more closely correspond to how the consumer purchaser or investor would like to be. Certainly, an advertisement's ability to attract attention is paramount and for that reason an appeal to the "ideal" self might be preferred; nevertheless, considerable caution must be exercised because an advertisement must often do more than attract attention.

Appealing. The "ideal" self image message was rated as significantly more "appealing" than the appeal to the "real" self. This finding similarly suggests an inherent interest; in a sense the appeal to one's "ideal" self conveys future benefits in a way which would likely be perceived as corresponding with anticipated needs as the individual moves closer to his or her concept of the "ideal". Again this suggests the viability of this creative approach. Notwithstanding, an effective ad should also be "informative," "believable," "clear," and "convincing."

Informative. The appeal to the "real" self was perceived as being significantly more "informative" than the appeal to the "ideal" self. Although this was contrary to the prediction, it is not altogether surprising. Individuals often process information in light of their present circumstance; thus it might be more difficult to assimilate new information which emphasizes future returns into one's present information processing system. Obviously, this caveat should be kept in mind before developing any message which is not specifically related to the prospect's present situation.

Believable. As the marginal means presented in Table 1 indicate, both versions of the ad elicited comparatively high response scores. Nevertheless, those generated by the appeal to the "real" self were significantly greater. Although contrary to the prediction, this finding is understandable. In deciding whether to believe or not believe, an individual usually compares the new information against an established frame of reference, viz., the "real" self. This suggests that appeals to the "ideal" self are handicapped in achieving comparable credibility as there is no clear reference point or basis for making a comparison.

Clarity. Both versions of the advertisement as illustrated in Table 1 received comparatively high and nearly identical mean scores for "clarity." This implies that each message was well understood. This suggests that incorporating the notion of delayed gratification or the postponement of the rewards in an advertisement and linking them to the way the person would like to be does not detract from overall "clarity," but neither does it provide any advantage.

Convincing. The effects of the predisposition covariate exceded the effects of the message appeals on this measure. The adjusted marginal mean responses to both ads were comparatively low and there were no significant differences between the scores. The decision to attend graduate school is important in terms of time, money, and long term implications; therefore, before applying one would rely on present feelings and possibly other sources rather than rely on a commercial communication. This suggests that both messages could possibly be made more convincing by including greater documentation of an MBA's advantages, by suggesting how perceived risks associated with a graduate program could be reduced (Roselius, 1971), or indicating additional sources of information.

Attitudes toward the Idea

Here, as one would expect, subjects' predispositions had a significant impact on expressed attitudes. There were, however, virtually no differences in subjects' attitudes toward an MBA program resulting from their exposure to the advertisements. Considering the similarity in mean score responses for subjects' overall impressions toward the respective advertisements, this result is not surprising.

Here it is interesting to note as shown in Table 2 the change between subjects' predispositions and expressed attitudes. One possible explanation is that subjects' predispositions were extremely high, thus they likely

TABLE 2

A Comparison of Predispositions with Expressed Attitudes

Attitudes toward MBA	Point Value	Ideal Appeal Predisposition	Ideal Appeal Expressed Attitude	Real Appeal Predisposition	Real Appeal Expressed Attitude
Very Negative	1	2.7%	3.6%	.9%	8.3%
Moderately Negative	2	1.8%	2.7%	.9%	5.5%
Slightly Negative	3	1.8%	7.1%	2.8%	11.0%
Neither Positive nor Negative	4	13.4%	44.6%	11.0%	40.4%
Slightly Positive	5	25.9%	25.0%	22.0%	27.5%
Moderately Positive	6	39.3%	14.3%	38.5%	5.5%
Very Positive	7	15.2%	2.7%	23.9%	1.8%
Mean Scores*		5.366	4.384	5.633	4.321

*An ANOVA to test for significance between predispositions and expressed attitudes within both groups yielded an F of 168.72, significant beyond .01.

reflect a generalized attitude toward an MBA degree, whereas attitudes expressed immediately following exposure to the ads may have become closely related to the act (Fishbein 1967) and thus were reassessed in terms of one's own personal circumstances. A second possibility is that students from both groups may have been disappointed with the advertisments and this, in turn, led to the lower attitude ratings.

Intention to Act

Seeking Additional Information. Participants from both groups expressed considerable interest in acquiring additional information. This was as expected because graduate education represents a high involvement situation. Those exposed to the "present" self appeal were slightly more inclined to seek additional information than those exposed to the "ideal" self message. This really is not surprising because the informational value, the principal benefit resulting from the acquisition of new knowledge, tends to be immediate. Thus, an appeal to one's "real" self appears to be somewhat more advantageous when immediate results can be obtained.

Intention to Apply

Once again the effects of predisposition far exceeded the effects of the respective message appeals. Further, the mean application intention scores from both groups were not surprisingly considerably lower than the responses concerning the acquisition of additional information. There were no significant differences between the two groups. This latter finding is somewhat difficult to explain because the benefits resulting from the completion of the degree program are deferred and during the interim the individual will have likely moved closer to the attainment of their desired "ideal" self and away from their present "real" self. One possible explanation which the data would tend to support is that subjects from both groups discounted the appeals in responding to this measure. In either case, the responses could perhaps be increased by including a coupon or other device for prompting immediate applications with each message.

In conclusion, it is apparent that an appeal to an individual's "ideal" self relative to their "real" self has both advantages and disadvantages. Overall, the study's findings tend to support Levy's (1959) position that congruence with either a person's "real" self concept or "ideal" self concept is desirable. They also reaffirm Staudt and Taylor's (1965) position that consumers will be drawn towards products (investments) which are compatible with either their present or desired self.

Before generalizing the results, the present study's limitations must be recognized. First, the investigation was restricted to one specific investment, graduate education and to one category of investor, undergraduate students. Had either a different investment been selected or different individuals served as subjects similar results may not have been obtained. Second, the experiment was conducted in a controlled classroom situation in which students were simultaneously exposed to one of two demonstration advertisements. Had subjects viewed actual finished advertisements over an extended time period in a natural environment the responses may have been different.

Significantly different responses were found between those exposed to the "ideal" self message and those viewing the appeal to the "real" self on four of the ten measures frequently used to assess an advertisement's effectiveness. Therefore, additional research seems warranted to better ascertain the relative strengths and weaknesses of these two advertising approaches. More specifically, the authors recommend studies which would (a) involve various types of decisions; (b) enable a more precise measure of the covariate of both negative and positive predispositions; and (c) provide comparisons between investment decision making and product purchase behavior. Such investigations should insofar as possible be conducted in natural settings.

REFERENCES

Baker, M.J. and Churchill, Gilbert A. "The Impact of Physically Attractive Models in Advertising Evaluations," Journal of Marketing Research, 19 (November, 1977), 538-55.

Birdwell, A.E. "A Study of the Influence of Image Congruence on Consumer Choice," in Smith, L. George (ed). Reflections on Progress in Marketing. Chicago: American Marketing Association, 1965, 290-303.

Britt, Stuart Henderson. Consumer Behavior and the Behavioral Sciences: Theories and Applications. New York: John Wiley & Sons, Inc., 1966.

Dichter, Ernest. Handbook of Consumer Motivations. New York: McGraw-Hill Book Company, 1964.

Dolich, Ira J. "Congruence Relationships between Self Images and Product Brands," Journal of Marketing Research 6 (February, 1969), 80-85.

Douglas, J., Field, George A. and Tarpey, Laurence X. "Human Behavior in Marketing," in Britt, S.H. (ed.) Consumer Behavior in Theory and in Action. New York: John Wiley & Sons, Inc., 1970.

Festinger, Leon. A Theory of Cognitive Dissonance. Stanford, California: Stanford University Press, 1957.

Fishbein, Martin, "Attitudes and the Prediction of Behavior," in Fishbein, Martin (ed.) Readings in Attitude Theory and Measurement. New York: John Wiley and Sons, 1967.

Green, Paul. Analyzing Multivariate Data. Hinsdale, Illinois: Dryden Press, 1978.

Grossack, M.M. and Schlesinger, L. "The Social Scientist and New Product Developments," in Grossach, M.M. (ed.). Understanding Consumer Behavior. Boston: Christopher Publishing House, 1964.

Grubb, Edward L. and Hupp, Gregg. "Perception of Self, Generalized Stereotyped, and Brand Selection," Journal of Marketing Research, 5 (February, 1968), 58-63.

Landon Jr., E. Laird. "Self Concept, Ideal Self Concept and Consumer Purchase Intentions." Journal of Consumer Research, 1 (September, 1974), 44-51.

Levy, S.J. "Symbols by Which We Buy," in Stockman, Lynn H. (ed.). Advancing Marketing Efficiency, Chicago: American Marketing Association, 1959, 409-16.

Martineau, Pierre. Motivation in Advertising. New York: McGraw-Hill Book Company, Inc., 1947.

Newcomb, Theodore M. Social Psychology. New York: The Dryden Press, 1950.

Roselius, Ted. "Consumer Rankings of Risk Reduction Methods," 35, Journal of Marketing, (January 1971), 56-61.

Ross, Ivan. "Self Concept and Brand Preference," The Journal of Business, 44 (January, 1971), 38-50.

Staudt, Thomas A. and Taylor, Donald A. A Managerial Introduction to Marketing. Englewood Cliffs, NJ: Prentice-Hall, Inc., 1965.

Stern, Bruce L., Bush, Ronald F. and Hair Jr., Joseph F. "The Self Image/Store Image Matching Process: An Empirical Test," The Journal of Business, 50, (1977), pp. 63-69.

Sternthal, Brian and Craig, C. Samuel. Consumer Behavior: An Information Processing Perspective. Englewood Cliffs, New Jersey: Prentice-Hall, Inc., 1982.

ATTITUDINAL AND BEHAVIORAL RESPONSE TO COMPARATIVE ADVERTISING: AN EXPERIMENTAL FIELD ANALYSIS

Z. S. Demirdjian, California State University, Long Beach

Abstract

Contrary to the widespread international practice of comparative advertising, most communication-effects studies have found its relative effectiveness equivocal. The author uses an attitudinal and behavioral response approach in a field study to examine the differential effects of comparative and non-comparative advertising. Results suggest that, while no differences in the relative effectiveness are found on attitude measures, comparative advertising excels at the behavioral criterion.

Introduction

Comparative advertising seems to be making regular appearances in the kaleidoscope of marketing communications. Soldner's (1978) appraisal of comparative advertising's international practice indicated a very strong global trend toward its widespread use and acceptance. Despite its frequent use in the media, a growing body of studies finds it less effective than its non-comparative counterpart. With the advent of Wilkie and Farris' (1975) positive evaluation of comparative advertising effectiveness against concepts drawn from the behavioral sciences, research has primarily focused on measuring its effects only on attitudes and purchase intentions. Aside from Jain and Hackleman (1978), Prasad (1976), and Swinyard (1981), who reported some benefits for its use, most researchers have expressed doubts about its relative effectiveness (Golden 1975; Ogilvy and Mather 1975; Wilson 1976; Etgar and Goodwin 1978; Levine 1976; Shimp and Dyer 1978; Belch 1981).

Relevant Literature

Comparative advertising began to gain momentum in the 1970's, partly due to the assumption that it would provide the consumer with additional information for evaluating the relative merits of competing brands (Schnabel 1974-75). Chairman Michael Pertschuk has had a "godfatherly" influence on this movement by encouraging advertisers to use comparative advertising strategy (Cohen 1976). As a result, the networks lifted their ban on comparative advertising and began to provide inertial guidance to the industry. Wilkie and Farris' (1975) inductive reasoning that comparative advertising should outweigh its non-comparative counterpart by generating increased attention and recall, increased comprehension of claims, and greater yielding to claims, spurred a surge of studies.

Studies of Pride, Lamb, and Pletcher (1977) and Golden (1979) reported claim acceptance of comparative advertising was no more effective than non-comparative advertising. Prasad (1976), Levine (1976), Boddewyn and Marton (1978), and Wilson and Muderrisoglu (1979) found that comparative advertising was less credible. Shimp and Dyer (1978), Levine (1976), and Sheluga and Jacoby (1978) found comparative advertising to be even less effective than non-comparative advertising. Since most of these studies had relied on attitudes and intentions to buy as dependent variables for the effectiveness measurement, Belch (1981) used a cognitive response approach to investigate the relative effects of one- and two-sided comparative and non-comparative commercials. Results indicated "qualitative" differences in the mediating roles of cognitive responses for the two kinds of messages. However, no differences in the relative effectiveness of comparative and non-comparative messages were found for both attitude and purchase intention measures.

The equivocal findings in the effectiveness of comparative advertising could, perhaps, be explained by the theoretical assumptions underlying research in this area.

Attitude As Predictor of Behavior

Most researchers on comparative advertising seemed to have tacitly subscribed to the assumption that attitudes predict behavior. For example, in Golden's (1976) study respondents were asked whether or not they would purchase the brand advertised through comparative advertising or the competing brand; since she did not find a significant difference between their intentions to buy both brands, she concluded that the effectiveness of comparative advertising has no more impact on purchase intentions than that of conventional advertising.

"The assumption is made that the stronger the emotion (attitude), negative or positive, the greater the action-tendency involved and the greater the predisposition to buy the product -- an assumption as yet unproven," points out Kassarjian (1977). Since the relationship between attitude, intentions, and purchase (behavior) is tenuous (Fishbein and Aizen 1973), the communication-effect research results really have not adequately determined the efficacy of comparative advertising.

An overview of research based on Fishbein's models on consumer products does show acceptable high correlations between attitudes and behavioral intentions (intentions to buy). However, the correlations between behavioral intentions and overt behavior remain not only poor, but generally lower than those obtained in social psychological studies (Ryan and Bonfield 1975). In fact, such an argument has created a controversy and established two schools of thought. There are those who believe that attitude change results in behavioral change, and therefore, both are significantly related (Grey Matter 1968, p. 1). For example, Kair's (1965) study reported that good commercials affect both attitude and behavior; Fendrich's (1967) study suggested that attitudes will predict behavior if proper attention is paid to measurement.

There are others who believe that behavior cannot be predicted from attitudes. There is a considerable body of evidence that shows that attitudes and behavior are very weakly related (Day 1973). One such finding came from the classical study of LaPiere in 1934. Festinger (1964), for example, could not find any consistent evidence that attitudes and behavior are related.

A. W. Wicker (1969) reviewed 32 studies on the attitude-behavior relationship and concluded "that it is considerably more likely that attitudes will be unrelated or only slightly related to overt behaviors than that attitudes will be closely related to actions." Fishbein (1967) provides further negative evidence that attitudes and behavior are related by concluding that:

> Indeed, what little evidence there is to support any relationship between attitude and behavior comes from studies that a person tends to bring his attitude into line with his behavior rather than from studies demonstrating that behavior is a function of attitude.

Bostrom (1970) warned that there is considerable evidence obtained from both social psychological and marketing studies that undimensional, affect-type models are poor predictors of subsequent behavior. In an attempt to circumvent the single component model of predicting behavior, Bagozzi, et al. (1979) tested the construct validity of the tripartite model of attitudes (affective, cognitive, and conative) and found mixed evidence for the predictive validity based on actual and intended behaviors.

Since studies have failed to yield strong support for the assumption of attitudes-behavior consistency, the purpose of this study is, therefore, to explore the differential effects of comparative advertising through both the attitude construct and the purchase behavior of consumers. Accordingly, two hypotheses were tested:

> H_1: The pre-purchase attitudes of subjects toward a low cost product will not differ significantly when it is either promoted through a comparative or conventional advertising strategy.

> H_2: Purchase rate of a low cost product will be higher when it is promoted through a comparative rather than conventional advertising strategy.

Unless we measure comparative advertising effects on behavior also, we would be running the risk of condemning prematurely a form of communication which might otherwise prove to be a powerful persuasive tool.

Method

Subjects

Two types of advertisements were manipulated randomly on a sample of 273 undergraduate marketing students. The two different categories of ads were comparative and conventional. These ads were based on actual advertisements about two virtually identical ball point pens, Scripto and Paper Mate. The product information was confined to a selected number of attributes common to both brands (such as carbide point vs. nylon point, price, writing performance -- skips or does not skip, supply of ink). To be consistent with the previous studies, low cost experimental products were chosen for the present study. For example, deodorants were used by Golden (1975), detergents by Ogilvy and Mather (1976), and toothpaste by Belch (1981).

All of the ads contained objective information, regardless of the brand of pen and type of treatments. Scripto was compared to Paper Mate in the comparative advertisement. The comparative ad for Scripto differed from its conventional ad only in the way the statements were made about the same number and kind of attributes, the only difference lay in presenting the attributes in a "comparative" statement (e.g., Scripto has a hard, rough textured carbide ball point which writes on any surface and won't skip under any circumstances, while Paper Mate has a nylon point which wears out quickly). On the other hand, in the conventional ad for Scripto the same attributes were put in a "normative" statement form (e.g., Scripto has a hard, rough textured carbide ball point which writes on any surface and won't skip under any circumstances). In the conventional advertising, the competing brand was not mentioned.

The experiment was conducted both in the classroom and in the marketplace. The classroom was used to expose the two experimental groups of students to a portfolio of advertisements. To minimize possible reactive error due to somewhat artificial setting which would bias results, a cover story was used under the pretext of requesting students to participate in a survey study to determine the feasibility of direct marketing of school supplies to college students. In an attempt to justify the inclusion of the experimental filler ads, students were informed that the companies interested in the study of direct marketing of college supplies wanted to compensate the participants for their time and suggestions; since the companies offered a number of competing products, ads were included to provide the participants with the pertinent information for correct product selection.

Procedure

Each subject received randomly one of two types of portfolios of advertisements: for the comparative treatment group, the portfolio contained the cover story, one comparative advertisement favoring Scripto over Paper Mate, one conventional advertisement favoring Paper Mate, and two filler advertisements about two kinds of dictionaries (one in comparative ad, the other in conventional format). While the portfolio for the conventional treatment group consisted of the same conventional advertisement favoring Paper Mate, the two conventional filler advertisements, and the same cover story, a conventional advertisement favoring Scripto was included in this portfolio instead of a comparative advertisement favoring Scripto over Paper Mate. To avoid any possible interaction effects, subjects were asked to read the material individually. After reading the material and examining the content of the portfolio, subjects were asked to complete a brief questionnaire on the cover story and then were asked to fill an attitudinal questionnaire pertaining to the products advertised under the pretext that the companies wished also to benefit from this occasion by knowing what the students thought of their products. Finally, each student was given a coupon for redemption at a 40 percent discount of the retail price toward the purchase of either Scripto or a Paper Mate ball point pen. Each pen was priced at 98 cents. To hedge against any possible order effect, Scripto and Paper Mate names were printed in reverse order on 50 percent of the coupons. Subjects were told that they could redeem the coupons at the university bookstore, where the experimental pens were displayed at the pen counter.

Dependent Measures

To collect data on the purchase variable, coupon redemptions were noted for each brand. The effectiveness of the sales promotion tool in terms of coupon incentives for securing immediate trial purchasing has long been recognized in marketing.

To render the coupons redeemable only by the subjects, each subject was asked to write his or her name on the coupon and the clerks at the counter were instructed to verify the name appearing on the coupon against the student's ID so as to avoid collecting biased data. Moreover, the clerks at the checkout counter were instructed to circle on the coupon the purchased brand. Such a procedure made it possible to keep track of the brand of pen purchased by the experimental subjects.

As for the other dependent variable, pre-purchase attitude data were collected through the basic multiattribute attitude model. The belief statements (for determining the subjects' overall attitude) were based on the selected product attributes which were also used in the experimental advertisements for describing the merits of the products. Again, in an attempt to avoid possible order effect, brand names and scale values were reversed in half of the sample.

Results

Before discussing the results, it should be noted that any generalizations of the findings should be confined to the subject of this study.

Attitudinal Response

The mean ratings of the experimental products are summarized in Table 1.

TABLE 1

MEAN RATING OF SCRIPTO AND PAPER MATE

	Scripto	Paper Mate
Comparative Treatment	1.32	1.75
Conventional Treatment	1.29	1.36

Two-way analysis of variance was applied on the pre-purchase attitudes toward the experimental products. Results did not indicate significant main effects for the two treatments ($F=2.30$, $df=2,542$, $p > .05$) (see Table 2).

There is no statistically significant difference between the two treatments: the comparative treatment has no greater effect on the subject's attitude than the conventional treatment. Furthermore, pre-purchase attitudes toward Scripto are not different at the .05 level. Also, the analysis indicates that there is no significant interaction effect between treatments by pen ($F=.565$, $df=1,542$, $p > .05$). H_1 is supported by the data. That is, the pre-purchase attitudes of subjects toward a low cost product will not differ significantly when it is either promoted through a comparative or conventional strategy. This finding is consistent with the results obtained in past studies based on the attitude construct (Golden 1975; Ogilvy and Mather 1975; Wilson 1976; Etgar and Goodwin 1978; Levine 1976; Shimp and Dyer 1978; Belch 1981).

TABLE 2

ANOVA OF PRE-PURCHASE ATTITUDE TOWARD THE EXPERIMENTAL PRODUCTS

Source of Variation	SS	d.f.	MS	F
Main effects	1.958	2	.979	2.305*
Pen	.532	1	.532	1.253
Treatment	1.407	1	1.407	3.313
Interactions	.240	1	.240	.5651
PXT	.240	1	.240	.5651
Residual	230.192	542	.425	
Total	232.396	545	.426	

*p > .05

Behavioral Response

Of the 273 subjects, 174 (63.7 percent) redeemed their coupons toward the purchase of either Scripto or Paper Mate pens. Table 3 summarizes the types of pens bought under each treatment.

TABLE 3

PENS PURCHASED UNDER COMPARATIVE AND CONVENTIONAL ADVERTISING TREATMENTS

	Scripto	Paper Mate	Total
Comparative Treatment	84	25	109
Conventional Treatment	23	42	65
Total	107	67	174

Subjects in the comparative group purchased 84 Scripto and 25 Paper Mate pens; while, in the conventional group, 23 Scripto and 42 Paper Mate pens were bought.

Analysis of the data resulted in a X^2 of 29.99 (1 d.f., $p < .001$, corrected $X^2=29.92$). The data supports H_2 by showing that subjects purchased more Scripto pens due to the comparative advertising even though Paper Mate was the preferred one under the conventional treatment. The finding for the behavioral response in this study can be stated that the sponsor brand sold better through the comparative ad than through the conventional ad. Such a finding contradicts previous studies on comparative advertising which implied that comparative advertising was not any more effective than conventional advertising on consumers' purchase behavior as reflected from the respondents' attitudes and intentions to buy (Golden 1975; Ogilvy and Mather 1975; Wilson 1976). But the finding is consistent with the studies which indicate that attitudes are weakly related to behavior (Festinger 1964; Wicker 1969; Day 1973).

Future Research

To extend the scope of the research on comparative advertising, it would be highly desirable to investigate its differential effectiveness across various media such as print vs. broadcast.

Another important research question to be answered is whether or not comparative strategy is also effective in the sale of high ticket products where the consumer tends to form a strong pre-purchase attitude before buying an expensive or complex product, such as a movie camera or a stereo system. Although not difficult, but costly, further research is needed to include both low cost and high cost products to see if respondents' pre-purchase and post-purchase attitudes differ markedly across these two categories of products. An inquiry is also needed to see whether or not comparative advertising is more effective for the promotion of a new product than for an established one. The new product may elicit curiosity, need for novelty, etc. in the consumer and thus, may induce him/her to purchase it.

Finally, to depart from the usual methods of measuring comparative advertising effectiveness through the consumer's attitudes, further experiments are needed to determine its effectiveness on purchase of different categories of products. After all, the ultimate success of the marketing manager depends on profitable sales which is highly congruent with corporate survival and growth objectives.

References

Bagozzi, Richard, et al. (1979), "Contruct Validity of the Tripartite Classification of Attitudes," Journal of Marketing Research, XVI (February), pp. 88-95.

Belch, George (1981), "An Examination of Comparative and Noncomparative Television Commercials: The Effects of Claim Variation and Repetition on Cognitive Response and Message Acceptance," Journal of Marketing Research, XVIII (August), pp. 333-349.

Boddewyn, J. S. and K. Marton (1978), "Comparison Advertising and Consumers," Journal of Contemporary Business, 1, pp. 135-147.

Bostrom, R. N. (1970), "Cognitive and Behavioral Dimensions of Communicative Attitudes," Journal of Communication, 20 (4), pp. 359-369.

Cohen, S. E. (1976), "Widespread FTC Probe Will Seek Codes That Hinder Comparative Ads," Advertising Age, 47 (February 23), pp. 1, 144.

Day, George S. (1973), "Theories of Attitude Structure and Change," in Consumer Behavior: Theoretical Sources, ed. by Scott Ward and Thomas S. Robertson (Englewood Cliffs, N.J.: Prentice-Hall, 1973), pp. 322-323.

Etgar, Michael and Stephen A. Goodwin (1978), "An Experimental Investigation of the Communications-Effectiveness of the Sidedness of Comparative Message Appeals, Information Load, and Utility of Product Class," Working Paper No. 360, School of Management, State University of New York at Buffalo.

Fendrich, J. M. (1967), "A Study of the Association Among Verbal Attitudes, Commitment, and Overt Behavior in Different Experimental Conditions," Social Forces, 45, pp. 347-355.

Festinger, Leon (1964), "Behavioral Support for Opinion Change," Public Opinion Quarterly, 28, pp. 404-417.

Fishbein, M. (1967), "Attitude and the Prediction of Behavior," in M. Fishbein, ed., Attitude Theory and Measurement, (New York: Wiley), p. 477.

______ and I. Aizen (1973), "Attitudes and Opinions," Annual Review of Psychology, 23, pp. 487-554.

Golden, Linda L. (1975), "Consumer Reaction to Direct Brand Comparisons in Advertisement," unpublished dissertation, University of Florida.

_____ (1976), "Consumer Reactions to Comparative Advertising," in Beverlee B. Anderson, ed., Advances in Consumer Research, 3, Cincinnati: Association for Consumer Research, 63-67.

_____ (1979), "Consumer Reactions to Explicit Brand Comparisons in Advertisements," Journal of Marketing Research, 16, pp. 517-532.

Grey Matter (1968), 39 (November), p. 1.

Jain, Subhash and Edwin C. Hackleman (1978), "How Effective is Comparative Advertising for Simulating Brand Recall," Journal of Advertising , 3 (Summer), pp. 20-25.

Kair, J. K. (1965), "Splitsville: A Split-Halt Study of Television Commercial Pretesting," Dissertation Abstracts, 27, pp. 2894-2895.

Kassarjian, Harold H. and Waltroud M. Kassarjian (1977), "Attitudes Under Low Commitment Conditions," a paper presented at AMA Attitude Research Conference, Las Vegas, March 6-9, p. 4.

LaPiere, R. T. (1934), "Attitude vs. Actions," Social Forces, 13, pp. 230-237.

Levine, Phillip (1976), "Commercials That Name Competing Brands," Journal of Advertising Research, 16 (December), pp. 7-14.

Ogilvy and Mather Research (1975), "The Effects of Comparative Television Advertising that Names Competing Brands," unpublished paper.

Prasad, V. K. (1976), "Communications Effectiveness of Comparative Advertising: A Laboratory Analysis," Journal of Marketing Research, 13 (May), pp. 128-137.

Pride, William M., Charles W. Lamb, and Barbara A. Pletcher (1977), "Are Comparative Advertisements More Informative for Owners of the Mentioned Competing Brands Than for Non-Owners?" in Contemporary Marketing Thought, B. A. Greenberg and D. N. Bellenger, eds., Chicago: American Marketing Association, pp. 298-301.

Ryan, Michael J. and E. H. Bonfield (1975), "The Fishbein Extended Model and Consumer Behavior," Journal of Consumer Research, 2 (September), pp. 118-136.

Schnabel, Morton (1974-75), "Conscious Parallelism and Advertising Themes -- The Case for Comparative Advertising," Anti-trust Law and Economics Review, 7, pp. 11-20.

Sheluga, David A. and Jacob Jacoby (1978), "Do Comparative Claims Encourage Comparison Shopping? The Impact of Comparative Claims on Consumers' Acquisition of Product Information," in Current Issues and Re- search in Advertising, J. Leigh and C. R. Martin, Jr., eds., Division of Research, Graduate School of Business Administration, The University of Michigan.

Shimp, Terence A. and David C. Dyer (1978), "The Effects of Comparative Advertising Mediated by Market Position of Sponsoring Brand," Journal of Advertising, 7 (Summer), pp. 13-19.

Soldner, Helmut (1978), "Comparison Advertising in International Comparison," Die Betriebswirtschaft, 38, 4, pp. 547-555.

Swinyard, William R. (1981), "The Interaction Between Comparative Advertising and Copy Claim Variation," Journal of Marketing Research, XVIII (May), pp. 175-186.

Wicker, A. W. (1969), "Attitudes Versus Actions: The Relationship of Verbal and Overt Behavioral Responses to Attitude Objects," The Journal of Social Issues, 25 (Autumn), p. 65.

Wilkie, William L. and Paul W. Farris (1975), "Comparison Advertising: Problems and Potential," Journal of Marketing, 39, pp. 4, 7-15.

Wilson, R. Dale (1976), "An Empirical Evaluation of Comparative Advertising Messages: Subjects' Responses on Perceptual Dimensions," in Beverlee B. Anderson, ed., Advances in Consumer Research, III, Proceedings of the Association for Consumer Research Sixth Annual Conference, 1976, pp. 53-57.

_____ and Aydin Muderrisoglu (1979), "An Analysis of Cognitive Responses to Comparative Advertising," Working Series in Marketing Number 84 (August), Pennsylvania State University.

BLACK AND WHITE CHILDREN'S RESPONSES TO TELEVISION COMMERCIALS

Joseph H. Miller, Jr., Southeastern Louisiana University
Thomas Lipscomb, Southeastern Louisiana University

Abstract

Children ranging in age from eight to twelve years were exposed to a short videotaped commercial in order to test for differences in the way in which black and white children respond to such advertisements. The results indicated no significant racial differences for product attitudes, recall, or product selection. Implications are discussed and suggestions for future research are made.

Introduction

Several studies indicate that there are differences in the way white and black children respond to television commercials. These studies suggested that differences may occur in many different areas: 1) degree of influence, 2) request for parent purchase, 3) liking and disliking of commercials, 4) recall ability and 5) product preference. To a large extent the racial variable in television advertising to children has been relatively neglected by researchers. Because of socioeconomic factors it has been suggested that researchers might find differences in the way black and white children respond to television commercials.

In using the incomplete story technique on fifth graders, Sheikh, Maleski and Pradad (1975) tested the degree to which children are influenced by commercials. They found that black and white boys and girls are influenced by television commercials to the same extent in asking their parents to purchase a toy. They also found that white children perceived their parents as yielding to their purchase requests significantly more often than did black children.

In a recent study, Donahue (1975) surveyed 162 elementary school children in first, second, and third grades. Through the use of an open-ended interview technique, he found that black children expressed a greater liking for television commercials than did white children.

Barry and Hansen (1973) investigated how race affects advertising recall and advertising preferences of children. They found that while there were no significant differences between black and white second graders concerning their recall ability, there is a significant difference in terms of preferences for the commercial, brand of cereal, and actors in the commercial. While black children overwhelmingly preferred one specific advertisement, cereal brand and actor (who happened to be black) within the test commercials, the white children displayed no consistent preferences.

Hendon (1973) also researched the area of children's advertising recall. He conducted research on normal IQ black and white children and educable mentally retarded black and white children between the ages of six and twelve. Hendon found that normal IQ white children scored higher on recall ability than normal IQ black children, but that educable mentally retarded whites scored approximately the same as educable mentally retarded blacks.

Appleton and Barrett (1973) also studied the advertising recall of black and white children. Their subjects were second, fourth and sixth grade school children in segregated classrooms. Each class was shown two 30-second ice cream commercials, and then the children were asked eight questions to measure advertising recall. The researchers found no significant difference in the recall ability of black and white children; however, they did find a significant difference in recall for whites based on age, but this difference did not hold true for black children.

Several difficulties are apparent in the literature dealing with the racial variable in children's responses to televised advertising. First, there appears to be substantial conflict in literature in certain areas. For instance, Hendon (1973) found that whites scored higher on recall tests than did black children. Appleton and Barrett (1973), on the other hand, found no significant differences in recall between black and white children. A second problem centers on the fact that researchers have ignored other potentially important dependent variables, such as attitude toward the advertised product and product selection behavior.

Research Objectives

The main purpose of this study was to compare the way that black and white children respond to the viewing of a television commercial. The specific questions explored are as follows:

1. Do black and white children respond differently to a television commercial?
2. Do black boys respond differently than white boys?
3. Do black girls respond differently than white girls?

The responses of children were measured in three different ways: attitude toward the advertised product, recall of the different elements of a commercial, and product selection (behavioral measure). These three dependent variables were operationalized in the following ways:

1. Attitude toward the advertised product was measured on a 5-point smiling face scale.
2. Recall of the different elements of a commercial was measured on a 20-item questionnaire.
3. Product selection was measured by considering whether or not a child selected the advertised product when given a choice among four similar products.

Methodology

Children in the third, fourth and fifth grades were chosen for participation in this study. Children were selected because they encompassed the typical age range of the concrete operational stage of cognitive development. Before the actual research was conducted, a pre-test was performed using a separate sample of children. The results indicated children between the ages of eight and twelve to be perfectly able to respond to the attitude, recall and product selection measures.

A separate group of 136 children were shown a color video tape presentation of a children's show--Magicland--into which the treatment commercial had been spliced. This same treatment commercial was shown twice during the program. (Two repetitions within the same program is the testing procedure used by Child Research Services, Inc. of New York City to test children's television commercials. Research has shown that increasing the number of commercials from one to three does not significantly change either attitude or behavior.)

The product category selected for this study was breakfast cereals. This selection was made for several reasons. First, breakfast cereals are a common product consumed by children. Second, cereals constitute a competitive market situation in which alternatives and choices are made. Third, other researchers (e.g., Rubin 1972; Shimp, Dyer, and Divita 1976) have successfully used breakfast cereals in studying children's responses to commercials.

The treatment commercial used in this research featured a hypothetical breakfast cereal, Canary Crunch. This commercial was made especially for the research project. The commercial was spliced into a program tape by professional production personnel at WRBT-TV in Baton Rouge, Louisiana. The professional assistance assured that the program shown to the children was as technically perfect as the TV programs they normally watch. The Magicland program consisted of the following parts: 1) Mr. Magic, the show host or personality, performing magic tricks, 2) a cartoon featuring a hunter and his dog, 3) Mr. Magic sitting in the audience talking with the children, 4) a Bugs Bunny cartoon, and 5) Mr. Magic performing more magic tricks. The approximate time of the program was 27 minutes.

Findings

Immediately after viewing the program, the children were administered a questionnaire. These responses provided the data for two of the dependent variables. The first set of hypotheses related to how race affects a child's attitude toward the advertised product.

H_1 There is no significant difference between the mean attitude scores of black and white children when asked for their attitudes toward the advertised product.

H_2 There is no significant difference between the mean attitude scores of black boys and white boys when asked for their attitudes toward the advertised product.

H_3 There is no significant difference between the mean attitude scores of black girls and white girls when asked for their attitudes toward the advertised product.

The attitude scores were obtained by giving each child a five-point "smiling face scale" and asking them to indicate which face showed how he felt toward the advertised product. The smiling face scale is presented below:

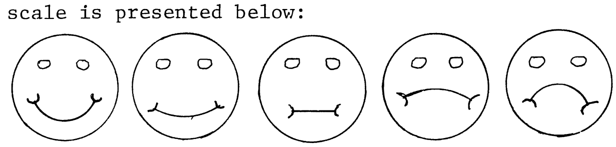


Table I contains a summary of the mean attitude scores. Results of t-tests performed on these data showed that race had no significant effect on the respondents' mean attitude scores. Therefore, hypotheses 1, 2, and 3 are not rejected.

TABLE I

Children's Mean Scores on Attitudes Toward the Advertised Product

	Mean Scores		
Black Children	4.10	n=30	p = 47.7
White Children	4.16	n=38	
Black Boys	4.07	n=16	p = 24.8
White Boys	3.75	n=16	
Black Girls	4.13	n=14	p = 14.7
White Girls	4.45	n=22	

The second set of hypotheses examined how race affects the ability of a child to recall important elements of a television commercial.

H_4 There is no significant difference between the mean recall scores of black and white children after viewing a television commercial.

H_5 There is no significant difference between the mean recall scores of black boys and white boys after viewing a television commercial.

H_6 There is no significant difference between the mean recall scores of black girls and white girls after viewing a television commercial.

After viewing the Magicland program the children were asked 20 questions concerning the commercial that had been spliced into the program. The recall measure indicated the number of questions answered correctly. (The ability of people to recall different elements of commercials is probably the most widely used measure of determining the effectiveness of commercials.)

Table II gives the mean recall scores from this experiment. The results of t-tests indicate that neither race nor race related to sex had any significant affect on their ability to identify correctly elements contained in a commercial. Based on these results, the null hypothesis is not rejected.

TABLE II

Mean Recall Scores of Children Who Viewed the Commercial

	Mean Scores		
Black Children	16.30	n=30	p = 25.37
White Children	16.82	n=38	
Black Boys	16.25	n=16	p = 48.20
White Boys	16.31	n=16	
Black Girls	16.36	n=14	p = 21.90
White Girls	17.18	n=22	

The third set of hypotheses related to how race influences the product selection decisions of children after viewing a television commercial.

H_7 There is no significant difference between product selection decisions made by black and white children after viewing a television commercial.

H_8 There is no significant difference between product selection decisions made by black boys and white boys after viewing a television commercial.

H_9 There is no significant difference between product selection decisions made by black girls and white girls after viewing a television commercial.

In order to create an environment for product selection, the researcher told the children that he wanted to give each child a present for letting the researcher take up their valuable class time. He informed the children that he was going to give them a box of cereal, but he was not sure what kind of cereal the children wanted. The researcher showed them four different boxes of cereal--Fruit Loops, Boo Berries, Kangaroo Hop and Canary Crunch --and asked the children to select the cereal they would like to receive.

TABLE III

Percent of Children Who Selected the Advertised Cereal

	Selected Advertised Cereal	Selected Non-Advertised Cereal		
Black Children	56.7	43.3	n=30	p = .44
White Children	63.2	36.8	n=38	
Black Boys	63.0	37.0	n=16	p = 1.00
White Boys	63.0	37.0	n=16	
Black Girls	50.0	50.0	n=14	p = .24
White Girls	63.6	36.4	n=22	

Table III indicates the percentage of children who selected the advertised cereal (Canary Crunch). A test of significance of difference between two proportions was performed on the data. Based on this test of significance, the null hypotheses 7, 8, and 9 are not rejected.

Discussion

The results of the present study provide no support for the premise that black and white children differ in their responses to televised commercials. No significant racial differences were found for product attitudes, recall or product selection. With regard to this last measure, however, a trend is apparent in that black girls selected the advertised product to a lesser degree than did boys of either race or the white girls. The reasons for such an effect are unclear. If, however, this result is replicable it could be of considerable practical importance with regard to segmentation of the markets for a variety of children's products.

An additional dimension of potential theoretical and practical significance concerns the possibility that developmental differences may exist with regard to children's responsivity to televised commercials. Although marketing and advertising researchers have not given much consideration to this possibility, there is a considerable literation in the area of child development to indicate that as children grow older the manner in which they think and understand the world undergoes considerable developmental transformation. It is quite possible that the course of cognitive development in children may cause children of different ages to respond differently to a variety of marketing stimuli. Thus, the children's market may be much more heterogenous than has been generally assumed.

References

1. Appleton, John S. and B. Barrett, "An Examination of Attitudes, Preferences and Recall Abilities of Children Toward TV Advertising," Unpublished paper, Southern Methodist University, 1973.

2. Barry, Thomas and R. W. Hansen, "How Race Affects Children's TV Commercials," Journal of Advertising Research, 1973, 13, pp. 63-68.

3. Donahue, Thomas R., "Effects of Commercials on Black Children," Journal of Advertising Research, December 1975, pp. 41-47.

4. Hendon, D. W., "The Effects of TV Commercials on 'Normal' and Mentally Retarded Children," Proceeding, American Academy of Advertising, March, 1973.

5. Sheikh, A. A., L. M. Maleski and V. K. Pradad, "Television Advertising and Parent-Child Interaction: Racial Differences," Unpublished manuscript, Marquette University and University of Wisconsin-Milwaukee, 1975.

6. Shimp, Ference A., Robert F. Dyer, and Salvatore F. Divita, "An Experimental Test of the Harmful Effects of Premium-Oriented Commercials on Children," Journal of Consumer Research. June, 1976, pp. 1-11.

THE EFFECT OF SOURCE, MESSAGE, AND MEDIA CREDIBILITIES ON THE PERCEPTION OF OVERALL ADVERTISING CREDIBILITY

Jacques A. Nantel, Ecole des H.E.C., Université de Montréal
Dennis L. Rosen, School of Business, University of Kansas

Abstract

Subjects were asked to rate the overall credibility of personal computer print ads designed to represent high and low credibility combinations for the variables of source, message, and media. A three-way interaction was found, and the compensatory effect of manipulating credibility levels for each of the variables was studied. Creative and advertising testing implications of the findings are discussed.

Much research in the area of advertising has had the objective of improving our understanding of advertising effectiveness (see for example Krugman 1975; Lavidge and Steiner 1961; Ostle and Ryans 1981; Shiller 1981). The effectiveness of advertising can be defined in various ways such as in its ability to generate sales, change predisposition toward purchase, develop brand awareness, or produce recall of a message.

A major factor in the effectiveness of advertising, no matter how it is defined, is its credibility. Past research has shown that credbility can be an important factor in producing positive attitude change (Golden 1977; Holbrook 1978; LaBarbera 1982; Sternthal, Dholakia, and Leavitt 1978; Sternthal, Phillips, and Dholakia 1978). And credibility is often one of the criteria used in the selection of featured spokespeople in advertising (Joseph 1982; Kamen, Azhari and Kragh 1975).

Thus, while credibility alone is not sufficient for effective advertising, it is recognized as an important factor contributing to that effectiveness. It is the purpose of this paper to explore three potential determinants of advertising credibility and their relative influences in this area.

Background

Recently the Newspaper Advertising Bureau (1981), in a study concerning the "believability" (credibility) of advertising, noted the influence of "source of the message, the medium in which the advertisement appears, and the content of the message itself (p. 1)." From a practical standpoint, source, message, and media are also three factors under control of the advertiser. Considerable research has explored the impact of each of these factors on attitude.

Research on Source Credibility

The seminal work of the Yale group (Hovland, Lumsdaine, and Sheffield 1949, Hovland and Weiss 1951), demonstrated the positive effect of source credibility on attitude change when attitude was measured immediately following presentation. This effect was found to reverse, however when attitude measurement was made some time after message presentation. Other researchers have also studied this "sleeper effect" (Cook and Flay 1978; McGuire 1969). In a different stream of research, Kelman (1958) found that a credible source generated stronger and more stable attitudes than either an attractive source (representative of the audience's reference group) or an authoritarian source.

Recently, Petty and Cacioppo (1983), and Petty, Cacioppo, and Schumann (1983) have suggested that the credibility of the source has an effect on attitude change only when the topic is not highly involving for the recipient. However, Choo (1964) and Craig and McCann (1978), dealing with trustworthiness of the source (a component of credibility), report findings that support an opposing view. Andreoli and Worchel (1978) suggest that the persuasiveness of a trustworthy source may be greater when a medium in used that highlights the source's characteristics.

In the marketing literature, Sternthal, Dholakia, and Leavitt (1978) have reported that highly trustworthy and expert spokespeople induce a greater positive attitude toward the stated position for subjects initially opposed to that position. In a similar manner, Harmon and Coney (1982) found further evidence for the mediating role of source credibility upon message acceptance. Bagozzi (1984), in a conceptual article, provides more support for this mediating role of source credibility on attitude or behavior change.

Research on Message and Media Credibility

Research relevant to the impact of message credibility includes that of Settle and Golden (1974) who found that varied claims across product attributes increased ratings of confidence. Smith and Hunt (1978) also found "perceived truthfulness scores" (credibility) increased for varied claims. Belch (1981) found no difference in credibility ratings for one versus two-sized advertising message appeals. Wegner, Wenzlaff, Kerker, and Beattie (1981) found messages using innuendos have a negative effect on credibility, while LaBarbera (1982) found messages substantiated by factual information and endorsed by a third party have a positive effect on both credibility and behavior intention.

Compared to source and message, the impact of media credibility has received very limited research. A study by Wright (1974) found that medium (print versus broadcast) has a significant effect on subject cognitive activity including factors related to perceived credibility such as support argument activity and source derogation activity. Wegner, et. al (1981) showed that variations in media credibility (N.Y. Times vs. The Enquirer) affected the persuasiveness of a message. And Fuchs (1964) found manipulation of magazine prestige level significantly affected subjects' evaluative ratings for advertised automobiles and automotive products.

The Interaction Hypothesis

While previous studies have explored the impact of source, message, and media on perceived credibility as noted, few researchers have specifically studied the interaction occurring among these three areas of credibility. Logically, such an interaction would be expected. And some support for an interaction has been indicated. For example, Wright's (1974) finding that media differences produced differences in support argument activity and source derogation activity of the audience suggests that a particular kind of message presentation may be more successful in one medium than another.

If an interaction exists, it has implications for the advertiser whose budget does not allow simultaneous use of highly credible options in all three areas. An interaction would suggest that under such circumstances, one could possibly offset a credibility problem in one area by improving the perceived credibility of the remaining areas.

Based on the above discussion, it was hypothesized in this study that a significant interaction would be found for source, message, and media credibility and that, consistent with previous research, each would significantly affect perceived overall credibility of advertising. In addition, an exploratory analysis of the contribution of each of the credibility areas was undertaken to determine if a compensatory process operates through which a deficiency in the level of credibility of one of the factors can be overcome by an increase in the perceived credibility of the other two.

Method

A 2x2x2 completely crossed design was employed with eight print advertisements constructed to represent different combinations of high and low credibility for source, message, and media. The advertisements concerned a fictitious brand (Access 85) of personal computer. The product category, personal computer, reflects one of general interest to the subjects involved (students) and is new enough in the marketplace that the lack of familiarity for the brand name advertised would not seem unusual to the subjects. Pre-testing was conducted to generate two significantly different levels of credibility for source, message, and media.

Credibility Manipulations

The selection of sources for presentation presented a problem because the definition of advertising source is not immediately clear. Fuchs (1964), for example, refers to the source of an advertisement as "n-dimensional" including such factors as the vehicle (e.g., specific magazine containing the advertisement), the company presented as the manufacturer of the product, and the spokesperson, if any, present in the advertisement. However, given the current emphasis in advertising and research on the use of product spokespeople and endorsers (Atkin and Block 1983; Freiden 1982; Friedman and Friedman 1979), source was defined in the current study as referring to the advertisement's spokesperson. This definition is also similar to use of the concept by Starnthal, Phillips, and Dholakia (1978).

Based on this definition, a pretesting of credibility ratings was obtained for three message sources, a Vice President of Access Corporation, a market analyst, and a graduate student, all identified as F. Clark. The most statistically significant difference in rating was obtained between the market analyst and graduate student which were, therefore, used as the high and low source credibility manipulations, respectively.

Message was defined in the study as the form of the claim provided in the advertisement concerning the product, this being similar to its operationalization in the research of Earl and Pride (1980) and Smith and Hunt (1978). Based on the discussion of presentation form in these two studies, three different presentations were developed and pretested with the two demonstrating the most statistically significant difference in credibility rating selected for use in the study. Thus, the high credibility message took the form of a comparative/factual advertisement. Previous research (Golden 1977, LaBarbera 1982, Settle and Golden 1974) has shown this form of message increases credibility. The low credibility message presented a claim in the form of an innuendo. Previous research (Wegner, et. al 1981) has shown this type of message reduces the degree of perceived credibility.

"Media" can be defined as including both media forms (e.g., newspapers and magazines) and vehicles within those forms (e.g., different magazine options). This recognizes the findings of previous research which have shown the varied aspects of vehicles within both print (Bass, Pessemier, and Tigert 1969) and broadcast (Tigert 1971). To facilitate control over the experimental variables, only print advertisements were employed in the current study. Media credibility levels were selected based on the ratings of 11 newspaper and magazine publications by a sample of business school students who were asked to consider the appropriateness of each for acquiring information relating to purchase of a personal computer. Time magazine and the local city newspaper were found to have the most statistically significant difference in rating and were, therefore, chosen to represent high and low media credibility levels, respectively.

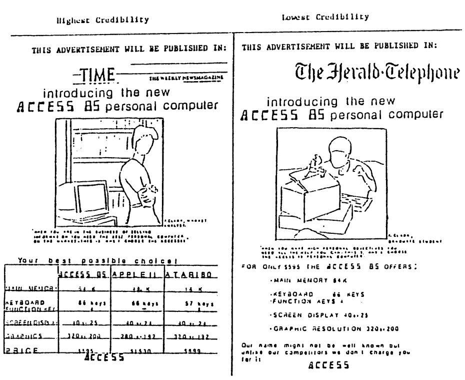
The Stimulus

The stimulus consisted of a print advertisement for the Access 85 personal computer and incorporated one of the eight possible combinations of high or low credibility for the three factors of interest. At the top of each print advertisement appeared the statement, "The following advertisement will be published in..." followed by the logo of either Time magazine or the local city newspaper. Underneath was shown a picture of the spokesperson, F. Clark, as either a female market analyst pictured in an office library setting or a male graduate student pictured at a kitchen table doing homework. The pictures were obtained from actual print advertisements for a less popular brand of computer not identifiable in the pictures. (There were no indications by subjects of previous familiarity with the pictures employed.) The fact that the market analyst was female while the graduate student was male was not considered a problem for manipulation of credibility levels. Although some authors have suggested that women may be perceived as being less credible than men (Joseph 1982), others have suggested that credibility is generally not affected by gender (Bernstein and Figioli 1983). Further, the selection of these two spokespeople had been based on a statistical test of credibility to properly represent high and low levels, respectively.

Directly under each picture was a brief statement by the source concerning his/her use of the Access 85. This statement was developed by the experimenter with the purpose of relating the use of the product to the source's particular occupation, as is often done in advertising. Following this, the claim of advertisement in either comparative or innuendo format appeared. The format of the stimuli employing all high credibility levels and all low credibility levels is shown in the Figure.

FIGURE 1

EXAMPLE OF PRINT STIMULI*



* Finish pictures were employed in the actual stimuli.

Procedure and Measures

Subjects, 320 business school students of a large, midwestern university, were asked to take part in the experiment in a classroom setting. They were told that a Canadian company was considering the export of its computer to the U.S. market and was interested in student reaction to its proposed promotion. Subjects were asked to examine a single print advertisement for as long as desired and then to provide ratings on a set of 6-point scales that addressed the various credibility areas of concern. All scales were anchored with the words "Strongly Disagree" (1) and "Strongly Agree" (6).

Overall credibility for the advertisement was assessed with the general credibility statements, "The advertisement you just read was truthful" and "I would describe the Access Corp. as being a truthful advertiser." The term truthful was used because of the recognition by many authors that this component is the most significant determinant of credibility (Jurma 1981, McGinnies and Ward 1980). Message credibility was assessed with the statements, "The claims presented by Access Corp. about their product were truthful" and "If I was in the process of buying a computer, I would be interested by the characteristics of the Access 85." Again the term truthful was used for its consistent relationship with credibility. The second item, representing a form of behavioral intention, was used because it has been shown to be related to message credibility (LaBarbera 1982).

Source credibility was measured with three statements, "...I would place confidence in F. Clark's advice," "I think F. Clark is a competent person to recommend personal computers," and "I believe that F. Clark is a trustworthy person." The use of these multiple statements recognizes that source credibility can be a function of a number of variables (Applebaum and Anatol 1973). Finally, media credibility was measured with the single statement, "...I would describe the media used by Access to publish their advertisement as being a credible source of information."

The two total credibility scales correlated at .71, and the two message credibility scales correlated at .75. Reliability for the three source credibility scales was .82 using Heise and Bohrnstedt's (1970) omega coefficient.

ANALYSIS AND RESULTS

A principal components analysis using varimax rotation was employed on the three credibility measures for source and the two measures for message to determine independence of the manipulations. Each measurement set loaded on separate factors as expected with loadings above .80. The single measure for media credibility could not be included in the factor analysis but was found to correlate with the three source credibility measures at .16 or less and with the two message credibility measures at less than .33.

Next, t-tests were performed on subjects' ratings of credibility for high versus low credibility levels of the three constructs (averaging across the respective scales for each) to verify proper manipulation. Mean differences between high and low credibility manipulations for source (3.10 vs. 2.86), message (4.18 vs. 3.93), and media (4.37 vs. 4.15) were significant at beyond the .01 level using a one-tailed test.

To test for the relative effect of source, media, and message as well as for their interaction on overall credibility, a three-way ANOVA was performed with the overall credibility rating as the dependent measure. As shown on Table 1, significant main effects were found for message and media credibility, but no main effect was found for source credibility. Finally a three-way interaction for source, message, and media significant at $p < .10$ was found as had been hypothesized.

TABLE 1

A THREE-WAY ANALYSIS OF VARIANCE FOR SOURCE, MESSAGE, AND MEDIA CREDIBILITY EFFECT ON PERCEPTION OF TOTAL ADVERTISING CREDIBILITY

Source of Variation	Mean Square	df	F
Source	.06	1	.06
Message	17.71	1	16.14***
Media	5.34	1	4.87**
Source by Message	.01	1	.01
Source by Media	.68	1	.62
Message by Media	.39	1	.36
Source by Message by Media	3.15	1	3.56*

* p .10
** p .05
*** p .01

The exploratory investigation of compensatory effects for the three credibility factors was undertaken through a post-hoc analysis using Newman-Keuls test at the .05 significance level. This analysis tested for differences in overall credibility generated by manipulation of any one, two, or all three of the independent variables. Mean ratings for the eight possible combinations of source, message, and media are shown on Table 2. Some deviation from linearity of the results was found as it has in previous research (Fuchs 1964).

TABLE 2

MEAN OVERALL CREDIBILITY RATINGS FOR COMBINATIONS OF SOURCE, MESSAGE, AND MEDIA CREDIBILITY LEVELS[a]

	Credibility Level			
	Source	Message	Media	Mean
1.	High	Low	Low	3.56
2.	Low	Low	High	3.71
3.	Low	Low	Low	3.82
4.	Low	High	Low	4.03
5.	High	Low	High	4.05
6.	High	High	Low	4.16
7.	High	High	High	4.38
8.	Low	High	High	4.47

[a]Using 6-point scales with 1 indicating lowest credibility. Post-hoc comparisons significant at the .05 level using the Newman-Keuls test were 8. vs. 1., 8. vs. 2., and 7. vs. 1.

Only three of the 28 possible comparisons were found to be significant. High source/high message/high media had a significantly higher credibility rating than high source/low message/low media (4.38 versus 3.56, respectively). Low source/high message/high media had a significantly higher credibility rating than either high source/low message/low media or low source/low message/high media (4.47 versus 3.56 and 3.71, respectively).

Discussion

It is interesting to note that the overall credibility rating of the advertisement which employed all low credibility levels could not be significantly improved through the solo change of any one of the three credibility areas. Of course, it is possible that this finding was due to a limitation in the credibility manipulations employed and that with stronger manipulations the impact of a single variable may have become significant.

The interaction among source, message, and media is apparent in the results of the post-hoc comparison. Message appears to be the most important factor of the three since all significant effects on credibility occurred with a change in message. However, these effects only occurred when certain combinations of the remaining factors were present. In no case did the manipulation of source credibility have a significant effect on overall credibility. This finding is surprising given that previous studies have indicated the importance of source in perceived credibility of a communication, as previously noted. It also runs counter to the current trend of using spokespeople who might be perceived as more credible in advertising (e.g., respected celebrities, recognized experts).

Again, the finding may be a function of the source manipulation employed. The possibility also exists that this finding is particular to the product and/or the subject sample involved in the study. It should also be noted, however, that most previous research has not specifically studied the effect of source credibility in <u>advertising</u> communication. Therefore, results for much past research demonstrating the importance of source are not directly comparable to findings of the current study.

The laboratory setting of the study and its restricted sample suggest caution in generalization. With this recognized, results of the study do not argue against the use of highly credible sources per se, but they do indicate that source alone may not be able to compensate for a low credibility message or medium employed in the advertising. Further, the findings suggest that additional research is needed to clarify the impact of source credibility on overall credibility of an advertisement.

Results of the study may have important implications when an advertiser must use a low credibility source. For example, a corporate executive might insist on being the spokesperson in his/her company's advertising though the target audience may perceive the executive's self interest in the firm as affecting his/her credibility. Findings suggest that the advertising agency may be able to compensate for this factor and raise overall perceived credibility of the ad through the use of a high credibility message and medium.

Finally, the finding of a three-way interaction for source, message, and media credibility suggests that credibility levels and, therefore, effectiveness of an advertisement may not be properly pretested if respondents are not provided information concerning all three variables. This has implications for those advertising pretesting techniques which involve presentation of finished advertisements to respondents for evaluation of the ad or purchase intent measurement in a laboratory setting. Such pretesting methods generally provide information concerning source and message but not media (i.e., the particular television program or magazine to be used). To the extent that media information can be made available to respondents, results of the current study suggest that the accuracy of such pretesting techniques should be improved.

References

Andreoli, Virginia, and Stephen Worchel, "Effects of Media, Communicator, and Position of Message in Attitude Change," Public Opinion Quarterly, 42 (1978), 59-70.

Applebaum, Ronald L. and Karl. W.E. Anatol, "Dimensions of Source Credibility: A Test for Reproducibility," Speech Monographs, 40 (August 1973), 231-237.

Atkin, Charles and Martin Block, "Effectiveness of Celebrity Endorsers," Journal of Advertising Research, 23 (February/March 1983), 57-61.

Bagozzi, Richard P., "A Prospectus for Theory Construction in Marketing," Journal of Marketing, 48 (Winter 1984), 11-29.

Bass, Frank M., E. Pessemier, and Donald J. Tigert, "A Taxonomy of Magazine Readership Applied to Problems in Marketing Strategy and Media Selection," Journal of Business, 42 (July 1969), 337-363.

Belch, George E., "An Examination of Comparative Television Commercials: The Effect of Claim Variation and Repetition on Cognitive Response and Message Acceptance," Journal of Marketing Research, 18 (August 1981), 333-349.

Bernstein, Bianca L. and Stuart W. Figioli, "Gender and Credibility Introduction Effects on Perceived Counselor Characteristics," Journal of Counseling Psychology, 30 (1983), 506-513.

Choo, Tong-He, "Communicator Credibility and Communication Discrepancy as Determinants of Opinion Change," Journal of Social Psychology, 64 (1964), 65-76.

Cook, Thomas D. and B.R. Flay, "The Temporal Persistence of Experimentally Induced Attitude Change: An Evaluative Review," in L. Berkowitz (Ed.) Advances in Experimental Social Psychology, 11 (1978), New York: Academic Press.

Craig, Samuel C. and John M. McCann, "Item Nonresponse in Mail Survey: Extent and Correlates," Journal of Marketing Research, 15 (May 1978), 285-289.

Earl, Ronald and William M. Pride, "The Effects of Advertisement Structure, Message Sidedness, and Performance Results on Print Advertisement Informativeness," Journal of Advertising, 9, (1980), 36-46.

Freiden, Jon B., "An Evaluation of Spokesperson and Vehicle Source Effects in Advertising," in James H. Liegh and Claude R. Martin, Jr. (eds.) Current Issues and Research in Advertising, Ann Arbor, 1982, 77-87.

Friedman, Hershey and Linda Friedman, "Endorser Effectiveness by Product Type," Journal of Advertising Research, (October 1979), 57-61.

Fuchs, Douglas A., "Two Source Effects in Magazine Advertising," Journal of Marketing Research, 1 (August 1964), 59-62.

Golden, Linda L., "Attribution Theory Implications for Advertisement Claim Credibility," Journal of Advertising, 11 (1977), 15-24.

Harmon, Robert R. and Kenneth A. Coney, "The Persuasive Effects of Source Credibility in Buy and Lease Situations," Journal of Marketing Research, 19 (May 1982), 255-260.

Heise, David R. and George W. Bohrnstedt, "Validity, Unvalidity and Reliability," in E.E. Borgatta and G.W. Bohrnstedt (eds.), Sociological Methodology, San Francisco: Joss-Bass, (1970).

Holbrook, Morris B., "Beyond Attitude Structure: Toward the Informational Determinants of Attitude," Journal of Marketing Research, 15 (November 1978), 545-556.

Hovland, Carl I., Arthur A. Lumsdaine, and Fred D. Sheffield, "Experiments on Mass Communication," Studies in Social Psychology in World War II, Vol. 3, Princeton, N.J.: Princeton University Press, 1949.

______ and William Weiss, "The Influence of Source Credibility in Communication Effectiveness," Public Opinion Quarterly, 15, (Winter 1951), 635-650.

Joseph, Benoy W., "The Credibility of Physically Attractive Communicators: A Review," Journal of Advertising, 11 (1982), 15-24.

Jurma, William E., "Evaluations of Credibility and the Source of a Message," Psychological Reports, 49 (1981), 778.

Kamen, Joseph M., Abdul C. Azhari, and Judith R. Kragh, "What a Spokesman Does for a Sponsor," Journal of Advertising Research, 15 (April 1975), 17-24.

Kelman, Herbert C., "Compliance, Identification and Internalization: Three Processes of Attitude Change," Journal of Conflict Resolution, 2

(March 1958), 51-60.

Krugman, Herbert E., "What Makes Advertising Involvement?" Harvard Business Review, 53 (March 1975), 96-103.

LaBarbera, Priscilla A., "Overcoming a No-Reputation Liability Through Documentation and Advertising Regulation," Journal of Marketing Research, 19 (May 1982), 223-228.

Lavidge, Robert J. and Gary A. Steiner, "A Model for Predictive Measurements of Advertising Effectiveness," Journal of Marketing, 25 (October 1961), 59-62.

McGinnies, Elliott and Charles D. Ward, "Better Liked Than Right: Trustworthiness and Expertise as Factors in Credibility," Personality and Social Psychology Bulletin, 6 (September 1980), 467-472.

McGuire, William J., "The Nature of Attitudes and Attitude Change," in G. Lindzey and E. Aronson (eds.), The Handbook of Social Psychology -- The Individual in a Social Context, 3 (2nd ed.), 1969, Reading, MA: Addison Wesley, 136-314.

Newspaper Advertising Bureau, "The Believability of Advertising in Five Media: Results From a Recent Nationwide Survey," (September 1981).

Ostle, Glenn V. and John K. Ryans, "Techniques for Measuring Advertising Effectiveness," Journal of Advertising Research, 21 (June 1981), 19-22.

Petty, Richard E. and John T. Cacioppo, Attitudes on Persuasion: Classic and Contemporary Approaches, Dubuque, Iowa: William E. Brown Company (1983).

Petty, Richard E., John T. Cacioppo, and David Schumann, "Central and Peripheral Routes to Advertising Effectiveness: The Moderating Role of Involvement," Journal of Consumer Research, 10 (September 1983), 135-146.

Settle, Robert B. and Linda L. Golden, "Attribution Theory and Advertiser Credibility," Journal of Marketing Research, 11 (May 1974), 181-185.

Shiller, Sherman B., "Accelerated Attrition: A New Approach to Measuring Advertising Effectiveness," Journal of Advertising Research, 21 (February 1981), 51-57.

Smith, Robert E. and Shelby D. Hunt, "Attributional Processes and Effect in Promotional Situations," Journal of Consumer Research, 5 (December 1978), 149-158.

Sternthal, Brian, Ruby Dholakia, and Clark Leavitt, "The Persuasive Effect of Source Credibility: Tests of Cognitive Response," Journal of Consumer Research, 5 (March 1978), 252-260.

______, Lynn Phillips, and Ruby Dholakia, "The Persuasive Effect of Source Credibility: A Situational Analysis," Public Opinion Quarterly, 42 (Fall 1978), 285-314.

Tigert, Douglas J., "Are Television Audiences Really Different," Proceedings of the American Marketing Association, National Conference (1971), 239-246.

Wegner, Daniel M., Richard Wenzlaff, Michael R. Kerker, and Ann E. Beattie, "Incrimination Through Innuendo: Can Media Questions Become Public Answers?" Journal of Personality and Social Psychology, 40 (1981), 822-832.

Wright, Peter L., "Analyzing Media Effects on Advertising Responses," Public Opinion Quarterly, 38 (Summer 1974), 192-205.

LATENT STRUCTURE IN PRINT AD
SUBJECTIVE STRATEGY: A SUGGESTED METHOD FOR ADVERTISING STRATEGY
STUDY IN MARKETING EDUCATION

Karen Blotnicky, Saint Mary's University
Nathan D. King, Saint Mary's University

Abstract

Subjective message strategies for ads in women's consumer magazines were examined using a content analysis method. The data was then subjected to a factor analysis to explore latent components underlying the subjective portion of the ads. Five unique subjective components emerged from the analysis. The exploratory study indicates that print ads have unique components. The study of subjective print ad strategy can be enhanced by understanding the nature of the components of an ad. This can facilitate the learning/instruction process.

Introduction

Instruction in the field of advertising has approached the print ad strategy question by discussing the use of photos, copy and various subjective cues, designed to elicit a certain response from readers. As research has progressed, theory has resulted in numerous copy and illustrative techniques which have all been considered valuable tools. The result has been somewhat confusing to advertising students, faculty, and practitioners. It is the authors' contention that these techniques may be analyzed for underlying message structures, or factors, and that advertising education may benefit from viewing advertisements as possessing, or not possessing these implicit message components. Used as an adjunct to current educational material in print advertising, these components may aid students in understanding the goals of the strategies themselves and how they combine to influence the consumer.

The primary objective of this study is to examine several message strategies in Canadian women's consumer magazines and to explore the existence of underlying structures, or components, behind these strategies. This information should allow advertising educators and practioners to identify these structures, or components, and utilize them in the study, and/or design of print ads.

Review of Relevant Research

To isolate structures in ad strategy, we have chosen to study ad information strategies, comparative strategies and the use of decorative models.

Information Strategies

Fletcher and Zeigler isolated ten creative strategies used in magazine ads from the work of Julian Simon (1971). Their first strategy was straight factual rendition of the product, without use of explanation or argument. They called this the "Information" strategy (Fletcher and Zeigler, 1978).

Their second strategy was "Argument", where established desires and excuses to buy are manipulated in advertising copy, to provide a detailed reason why the product should be purchased (Fletcher and Zeigler, 1978). Copy is important in this ad strategy. The "Motivation with Psychological Appeals" strategy provides an explicit statement of how the product will benefit the consumer, with emotional persuasion, to create a desire for the product in the mind of the reader (Fletcher and Zeigler, 1978). The next strategy involves reiteration of one basic product attribute which is usually very general in nature and seldom supported by factual evidence. This is called the "Repeated Assertion" method, and basically constitutes a hard-sell approach (Fletcher and Zeigler, 1978). The next strategy is very commonly used and deals with source credibility. It is the "Command" strategy which involves a reminder that is designed to make the audience respond favourably toward the product; it is often reinforced with an authority figure (Fletcher and Zeigler, 1978).

Next strategy, "Brand Familarization" (Simon, 1971) stresses brand loyalty, with very little selling taking place. The brand name is emphasized, and a feeling of trust-worthiness is communicated. The ad is friendly and conversational in nature (Fletcher and Zeigler, 1978). The seventh strategy is called "Symbolic Association". Using little copy it functions only to establish a psychological symbiosis between the product and a particular place, person, event or symbol, which has a positive connotation to the reader (Fletcher and Zeigler, 1978). Next is "Imitation," which uses an individual with whom the product user can identify. The individual can be a celebrity, or an ordinary citizen, who provides a testimonial for the product (Fletcher and Zeigler, 1978). The next appeal, which is quite effective, is known as "Obligation". It is designed to arouse feelings of gratitude in the consumer, through offering a free gift, information, or sentimental wording (Fletcher and Zeigler, 1978). Their final strategy "Habit-Starting," provides a sample of the product or uses a price-off ploy. The intent of the ad is to invoke the consumer to purchase the product regularly (Fletcher and Zeigler, 1978).

Resnik and Stern have developed a classification system to effectively objectify and record the presence of the information strategy in advertisement (Resnik and Stern, 1977). This strategy contains fourteen cues which demonstrate the appearance of an informative ad strategy in ads. The degree to which the ad is informative is determined by the number of informational cues present in ad copy. The fourteen cues which Stern and Resnik identified in informative ad copy were as follows: price-value of product; product performance; product's components/contents; product availability; special offers/deals available with product purchase; taste superiority of product purchase; taste superiority of product according to consumer surveys; nutritional content or comparison; special shapes available in product, or special packaging; postpurchase guarantees/

warranties; safety feature of product; results of "independent" research firms cited; results of "company research" cited; introduction of a new concept/idea, and/or its advantages. According to Stern and Resnik, if only one such cue appears, the advertisement contains Informative ad strategy (Resnik and Stern, 1977).

Decorative Models

Skinner insists that the pretty face serves to capture a reader's attention, and that once ad readership begins, the reader is not likely to remember that the model exists (Skinner, 1975). Chestnut, LaChance and Lubitz (1977) found that the presence of female models improved ad recognition. Smith and Engel (1968) discovered that the use of female models in automobile advertisements yielded higher perceptual ratings on emotional and connotative features. Reid and Soley (1981) determined that while female models increased Starch-measured illustration scores, they failed to increase Starch-measured body copy readership scores. Researchers Baker and Churchill had male and female subjects rate advertisements with male and female models for sexually-relevant and sexually-irrelevant products. Sexually-relevant products included items such as after shave, and sexually-irrelevant products included items like coffee. They concluded that both males and females demonstrated higher ratings for opposite-sex ad models than ad models of the same sex, and higher behavioural intention ratings for sexually-relevant products, than sexually-irrelevant products (Baker and Churchill, 1977).

Reid and Soley (1983) conducted a study where the effect of decorative models was measured across product categories, using male subjects. The ads were tested for male models alone, female models alone, and a pair of models, one of each sex. Results showed that the attention-getting ability of an ad decreased as the model went from being a female alone to the male/female pair, and then the lone male model. However, the presence and nature of the models in the ads did not affect the ad-noted score across the different product categories. Also, none of the model types differentially affected male ad readership. Therefore, while female models may attract attention to an ad, they do not mean an ad's copy will be read (Reid and Soley, 1983).

Comparative Strategies

An innovation is comparative advertising. It may compare like products to one another to emphasize the superiority of one brand of product over the other. It may also name the two products, like Coke versus Pepsi, or it may use a more subtle means of comparison like "better than the leading brand", or "Brand X". Jackson, Brown and Harmon define comparative advertising as an appeal which compares at least two products, implying that tests have been conducted, or that a particular product enjoys a superior market position to another product. The products may or may not be named outright (Jackson, et. al., 1979). Jackson, Brown and Harmon have also isolated two forms of comparative advertising: strict and implied comparative advertising. They identify any ad which names and/or shows two or more competing products as strictly comparative in nature, and those which make allusions to "Brand X", "all other brands", or "the leading brand", as implied comparative advertising (Jackson, et. al., 1979). Previous studies indicated higher recall levels for comparative ads despite the fact that the same messages were often regarded as more confusing and less believable than their non-comparative counterparts (Jackson, et. al., 1979).

Methodology

Sample

To examine the usage of advertising strategies a sample of Canadian women's consumer magazines was drawn from recent issues of Chatelaine and Canadian Living magazines. These publications were specifically chosen because of their large distribution across Canada. Only Anglophone issues were analyzed. These would be geared to the English Canadian cultural segment. A separate Francophone magazine is produced which is directed to the French Canadian marketplace. These issues were not studies. Women's magazines were selected because the bulk of general consumer advertising is targeted toward housewives. Five issues of each magazine were selected.

The advertisement itself was the unit of analysis. Each ad was analyzed according to a basic typology questionnaire designed to measure the subjective elements present in the ad. The individual ad sampled within selected issues was chosen using an approach pioneered by Stern, Krugman and Resnik (1981). This enabled the analysis of a magazine without taking a census of ads in the issue. To use this method, an average number of ads per magazine was calculated over all selected issues. In the current application, the average was calculated for each magazine title group. Then, a proportion was arbitrarily selected for ads to be sampled in each issue. The proportion selected to draw a sample of ads was 15 percent. This meant that 15 percent of the ads in each issue would be selected, as determined by the following formula:

(Number of ads in issue/Average number of ads x 15 = Number of ads to be sampled in issue)

Using the proportional sampling equation, a total of 150 ads were selected from the ten issues. For the sampling breakdown, please see Figure 1. The ads in each magazine were then numbered consecutively and the required number of ads from each issue were drawn using a random number table. Each issue was a stratum providing a stratified random sampling of each magazine group. This allowed three levels of sampling. Each issue was randomly sampled; the magazine population overall was randomly sampled, and each magazine group was randomly sampled. As a result, conclusions may be drawn under the assumption that proper representation is provided in the issue, the title, and women's magazines.

FIGURE I
SAMPLE SELECTION

Magazine	N = no. ads in issue	n = no. ads in sample	
Canadian Living:			
August, 1984	51	11	
November, 1983	107	21	
July, 1983	64	13	X = 76
December, 1983	95	17	
October, 1981	64	13	
	N = 381	n = 75	
Chatelaine:			
November, 1983	157	25	
July, 1983	76	12	
August, 1984	61	10	X = 94
January, 1984	71	11	
June, 1984	106	17	
	N = 471	n = 75	
	N = 852	n = 150	X = 85

Formula for ad number selections = N/X x 15 = n

From the literature review several variables were isolated. The relevant variables were incorporated into a typology which was used to analyze selected magazine ads. Please see Figure II for the strategies used in the typology.

FIGURE II
MESSAGE STRATEGIES DEFINITIONS

Argument Strategy - Detailed excuses/desires show why consumer should purchase. (Fletcher and Zeigler, 1978)

Motivation with Bmod (Behavior Modification) - Emotional persuasion provides explicit statement of how product will benefit consumer (framework just for you). (Fletcher and Zeigler, 1978, originally "Motivation with Psychological Appeals.")

Repeated Assertion - General aspect of product is reasserted with little factual support. (Fletcher and Zeigler, 1978)

Brand Familiarization - Stresses brand loyalty with prominent trademark or brand name. (Simon, 1971 and Fletcher and Zeigler, 1978)

Symbolic Association - Little copy - establishes connection between product and place, person, or object, deemed to be positive stimulus to consumer. (Fletcher and Zeigler, 1978)

Testimonial - Individual provides testimonial favouring the product. (Author's own addition)

Imitation - Role model with whom reader can identify presents product. (Fletcher and Zeigler, 1978)

Comparative - Direct - naming competitors' products outright. Implied - comparing products covertly, such as Brand X, etc. (Jackson, Brown and Harmon, 1979), and Fletcher and Zeigler, 1978).

Pretty Face - Pretty face appears in ad to entice readers to stop and look, and read the ad. The face can be male or female. (Skinner, 1975; Chestnut, Lachance and Lubitz, 1977; Smith and Engel, 1968; Reig and Soley, 1981)

Eye-catching Art - Low key methods of catching the reader's attention, uses striking artwork, the subject of which may/may not be related to the product being advertised. (Author's own addition)

Personalizing - Mechanism to capture the reader's attention, by naming the reader, or using the word "you" in the appeal. (Author's own addition.)

Price-Value of Product Demonstrated - Presence of discussion of price-value of product in ad copy. (Stern and Resnik, 1977)

Product-Quality - Presence of discussion of product-quality in ad copy (Stern and Resnik, 1977)

Product Performance Demonstrated - Presence of discussion of product performance in ad copy. (Stern and Resnik, 1977)

Product-Availability Discussed - Presence of discussion of product availability in ad copy. (Stern and Resnik, 1977)

In the application of the ad typology rules had to be developed for consistent treatment of selected advertisements. Ads which advertised the magazine itself, or offered special project/sales sponsored by the magazine, were not included. This allowed for sampling of ads of consumer goods and services only. When a pair of ads occurred in the same focal space, often advertising different or related products, but by the same sponsor, or brand name, the ads were treated as one split-page ad. If both ad parts were not in the same focal space (ie: not in the space immediately apparent to the reader, on the left or right-had sides), they were treated as separate ads. Those ads which were not eligible were not included when ads were consecutively numbered prior to sampling.

The researchers examined the selected magazines using the typology and the presence or absence of the strategies was recorded. The resulting data were then factor analyzed to determine if latent structures existed in the message components of the ads surveyed.

To pretest the typology questionnaire for consistency, ease of application, completeness and sample size, 104 ads were drawn according to the sampling procedure. A simple random subsample of thirty ads was drawn from the larger sample of 104 ads to use in a pretest.

Following the pretest, the sample size was increased to 150 ads, and the application rules were noted to allow an accurate testing of all ads in the sample. The pretest enabled streamlining the sample and research instrument, allowing for a more accurate and efficient final test.

Inter-judge Reliability Testing

Since the nature of the message strategies is quite subjective, it became a matter of personal judgement of the researcher to determine whether or not an ad strategy (e.g. Motivation with Bmod) was present in an ad. To insure that the measurement of subjective ad strategies was reasonably consistent and reliable, it was necessary to employ judges to analyze various ads according to subjective ad strategies, and determine their inter-judge reliability.

Four judges were selected to judge the thirty ads selected for the pretest. The judges judged the thirty ads for subjective strategies only. The Kuder-Richardson coefficient (Anastasi, 1968) showed the consistency with which the judges judged each ad for subjective factors. The reliability coefficient was approximately 1.00 showing absolute reliability. From this, we can conclude that the subjective factors measured were consistent in application, and that their inclusion did not leave the analysis open to subjective bias on the part of the researchers.

Results and Discussion

Factor Analysis

A principal components factor analysis using Varimax rotation with Kaiser normalization was performed on the fifteen message variables. Five factors with eigenvalues of 1.00 or better were obtained. Only factor loadings of .50 or higher were considered in the analysis. The resulting factor matrix appears in Table. 1. All factors accounted for 62.4% of the total variance. The first factor accounted for 20.4% of the variance. The variables of "quality discussion", "performance discussion", "argument strategy", and "repeated assertion" all loaded heavily on this factor. The first factor was called "Argument Component".

The second factor extracted accounted for 14.9% of the variance. Three variables, "motivation with bmod", "symbolic association", and "eye-catching art", loaded highly on this factor. Given the heavy Bmod loading (.831), and the emotional context of the other strategies loading on this factor, the factor was named the "Emotional Component".

The third factor accounted for 11.2% of the overall variance in the model. Only two of the variables, "product availability" and "price", had high loadings on this factor. Consequently, this factor was named the "Product Information Component".

Three variables loaded highly on the fourth factor. These were "imitation strategy", "testimonial", and "pretty face strategy". As a result, the factor was named the "Role Model Component." This factor accounted for 9.1% of the variance in the model. The last factor extracted consisted of only one variable, comparative ad strategy. As a result, it was named the "Comparative Component". This component accounted for 6.8% of the total variance. There were no negative loadings on any of the factors.. Two variables, "personalization" and "brand familiarity" did not load on any factor at the .50 level.

TABLE 1

PRINCIPAL COMPONENTS FACTOR ANALYSIS OF DATA FOR AD TYPOLOGY QUESTION (VARIMAX ROTATION AND KAISER NORMALIZATION)

VARIABLE	FACTOR 1	2	3	4	5
Quality Discussion	.863				
Performance Discussion	.838				
Argument	.712				
Repeated Assertions	.581				
Motivation - Bmod		.831			
Symbolic Association		.777			
Eye-catching Art		.716			
Availability Discussed			.829		
Price Discussion			.800		
Imitation				.805	
Pretty Face (models)				.753	
Testimonial				.575	
Comparative					.834
Eigenvalues	3.06	2.23	1.68	1.37	1.02
Percentage of Total Variance	20.04	14.90	11.20	9.10	6.80

Discussion

The factor analysis provides an interesting illustration of the apparent latent structures within the strategies present. The five factors which emerged very strongly in the analysis can be easily identified as being distinct from one another, and valuable in terms of understanding the character of print ads. Interpreted from an educational perspective, one can envisage consumer print ads as consisting of up to five subjective message components. Naturally, the product advertised may dictate which component should be used to maximize an ad's appeal, or increase ad ad's effectiveness.

Subjective ad strategy may be viewed as argumentative, informative, comparative, emotional or model-based. These five basic components will combine to produce an overall ad effect on the consumer. Conceptually, they help to describe advertising technique and aid one's understanding of the processes resulting from various combinations of message strategies.

The argument component of an ad consists of an argument-type of copy presentation. Mainly it presents detailed excuses to show why consumers should purchase, or listing the desires which the product would accommodate, and convincing the reader that those assertions are true. In addition, the same assertion may appear more than once in an ad. There may or may not be a great deal of factual support for the assertions which appear. In most cases, product quality or performance will be stated in ad copy.

The emotional component of an ad is that message component which uses subjective strategy to create a "mood" for the ad. Ideally, the reader will associate the mood with the product and would purchase the product to fill a psychological need equated with the product's mood, or ambience. These ads would have less copy, be more artistic and visual, and utilize a behaviour modification message strategy.

The product informative or informative ad component would provide more factual rendition and rely little on argument or emotional mood to make its connection to the reader. It may deal extensively with discussions of product availability and price-value of the product.

A further component implicit in ads appears to be a model-based component. These ads would utilize figures with which the reader could identify (role models), individuals making product testimonials, or attractive/sexually-appealing models, to give the product a certain character. Theoretically, these ads carry persuasive power by providing the consumer with a reference group, or status symbol, to which they can aspire through using the product.

The final implicit ad component is comparative. This ad would use either direct or implied comparisons between the sponsor's product and that of his competition, to persuade the consumer to purchase the "best" product. Naturally, the "best" product will appear to be that produced by the sponsor.

Conclusions and Recommendations

Based on the previous exploratory study, it appears that five basic components exist in most print ads. Admittedly, not all ads would use all five components, and some appear to be mutually exclusive (such as argument vs. emotional). However, the documentation of such latent structures in print ads can facilitate the learning process by simplifying the aspect of the "message" part of the ad. Indeed, this part of the ad is often so subjective as to render it very complex, hard to visualize, and difficult to measure. Consequently, using the component approach initially in advertising study can increase one's understanding, and inevitably pave the way to a better understanding of individual ad strategies and how they combine to produce a print ad's total effect.

The techniques used in this analysis are suitable for exploring the area but significance tests should be done for conclusive purposes. Indeed, these components could vary by type of product, type of magazine, and the nature of the audience. Future research should investigate these areas much further. Also, similar latent structures may exist within the mechanical aspects of print ads. Such variables would include ad size and colour, positioning, amount of copy, and the like. It would be interesting to explore that area further. Nevertheless, the results of the study are encouraging and may be of interest to educators, students, and practitioners in the field of advertising.

References and Bibliography

Blotnicky, K. A., A Study of Mechanical Ad Factors, Subjective Ad Strategies, and Products, in Canadian Women's Magazines, Unpublished Master's Thesis, Halifax, N.S., 1985.

Chestnut, R., LaChance, C., and Lubitz, A. "The Decorative Female Model: Sexual stimuli and the Recognition of Advertisements", Journal of Advertising, 6 (Fall, 1977): pp. 11-14.

Fletcher, A.D. and Zeigler, S. K. "Creative Strategy and Magazine Ad Readership, Journal of Advertising Research, Vol. 18, No. 1, (Feb. 1978), pp. 39-43.

Hair, J. F., Anderson R. E., Tatham, R. C. and Grablowsky, B. J., Multivariate Data Analysis With Readings. Petroleum Publishing Company, Tulsa, Oklahoma, 1979.

Jackson, D. W., Brown, S. W., and Harmon, R. R., "Comparative Magazine Advertisements", Journal of Advertising Research, vol. 19, No. 6, (Dec. 1979), pp. 21-26.

Keon, J. W., "Copy Testing Ads for Imagery Products", Journal of Advertising Research, Vol. 23, No. 6, (Dec/83 - Jan/84), pp. 41-48.

Nie, N. H., Hull, C. H., Jenkins, J. G., Steinbrenner, K., and Brent, D. H., SPSS Statistical Package for the Social Sciences, 2nd Ed., McGraw-Hill Book Co., U.S.A., 1975.

Reid, L. N. and Soley, L. C. "Another Look at the 'Decorative' Female Model: The Recognition of Visual and Verbal Ad Components" in James H. Leigh and Claude R. Martin, Jr., eds., Current Issues and Research in Advertising, 1981, Division of Research, Graduate School of Business Administration, pp. 123-133.

Resnik, A., and Stern, B. L., An Analysis of Information Content in Television Advertising, Journal of Marketing, 41 (1977), pp. 50-53.

Rummel, R. J. Applied Factor Analysis, Northwestern University Press, U.S.A., 1970.

Simon, J. L. The Management of Advertising, Englewood Cliffs, N.J. Prentice-Hall, 1971, pp. 174-183.

Skinner, S. The Advertisement Book, McDougal, Littel and Company, Illinois, U.S.A., 1975.

Smith, G. and Engel, R. "Influence of a Female Model on Perceived Characteristics of an Automobile", Proceedings of the 76th Annual Convention of the American Psychological Association, (1968): pp. 681-682.

SPSSX Inc., SPSSX User's Guide, McGraw-Hill Book Co., U.S.A., 1983.

Stern, B. L., Krugman, D. M., and Resnik, A. "Magazine Advertising: An Analysis of its Information Content", Journal of Advertising Research, Vol. 21, No. 2, (1981) pp. 39-41.

MARKETING OF SERVICES

CHARACTERIZING MARKET SEGMENTS FOR A GENERAL AVIATION AIRPORT

Kenneth D. Bahn, Virginia Polytechnic Institute and State University
Akshay Rao, Virginia Polytechnic Institute and State University

Abstract

This study investigates the relationship between awareness, attitudes, intentions, media habits, and demographics and the frequency of flying during a one year period. Multiple discriminant analysis is used to profile market segments based on services offered by a general aviation airport. Awareness was found to have the least predictive power and intentions to use specific services was the most useful in characterizing market segments.

Introduction

An airport like any other business entity may seek to serve consumers on a local, regional, or national level. The level on which an airport may seek to serve consumers is usually a function of product positioning. That is, determining the needs of a particular population, defining potential market segments, and then actively seeking patrons for the services offered. Within the last decade or so, small or reliever airports have come into existence (Thurber 1985). These airports usually provide services which the larger airports with national carriers are unable to because of traffic. The reliever airport is usually local or regional in scope. With the advent of many local airports servicing basically rural communities, airport managers need to take a closer look at the composition of potential market segments.

Local airports in rural regions have typically concentrated on providing services which they feel facilitate the economic development of a particular region and provide services for general aviation enthusiasts. Services falling under the rubric of general aviation include: charter service, fueling for corporate aircraft, aircraft maintenance, and flight instruction, to name a few.

The implications for managers of a general aviation airport to understand what comprises the different market segments using their services needs no elaboration here. But the extent to which consumer markets have been characterized has yet to be documented. Although some airport managers still tend to think of patrons as a homogeneous group, many have come to view the market for airport services (i.e., general aviation, corporate) in terms of segments encompassing people with different demographic characteristics, attitudes toward the services, and awareness about the services offered. Therefore, there appears to be a need to better understand people who patronize the general aviation airport.

The main purposes of this study are: (1) to determine viable market segments for a general aviation airport based on demographics because demographics in particular have been a successful criterion for segmenting markets into non, light and moderate users, and (2) to determine the predictive power of awareness of services, attitudes toward services, intentions to use services, and media habits. The addition of four other variables offers a basis for assesing the predictive efficacy of demographics, as well as for enlarging our understanding of the factors underlying potential users of a general aviation airport.

Variables Considered in the Study

In characterizing market segments for a general aviation airport, many variables could be potentially important. This study has chosen to concentrate on five constructs: awareness of services being offered, intentions to use existing services, attitudes towards proposed services, media habits, and demographics. The criterion variable was conceptualized to be users of air travel. It was thought that the more people traveled by air for business, pleasure, etc., the greater the likelihood that they would use services provided by a general aviation airport.

While demographics are more easily measurable than other consumer characteristics, they represent only the first phase in market segmentation. Demographics are basic socio-economic characteristics which have been used quite extensively in the service marketing literature for profiling market segments (Guseman and Hatfield 1978). Darden and Darden (1981) found demographics useful for segmenting users and non-users of legal services; Wood, Venkatesan, and Albaum (1984) used demographics as a segmenting variable to assess new services in medical clinics, and demographics were also used to segment users of cancer screening clinics (Smith and Scammon 1984). The study which mostly aligns itself with the present one, found demographics to be useful in segmenting markets for local public transportation (Reed 1973).

Although most of the studies cited are not directly related to general aviation airports, the conceptual link is that if demographics have shown to be an important criterion for other service-related businesses, then there is likelihood that they should be predictive for other service-oriented businesses, namely a general aviation airport. In fact, most of the literature cited in the study is outside the literature on general aviation because very little, if any, has been done in this area.

In addition to demographics, basic socio-economic characteristics are conceptualized to be media habits. These variables, media habits and demographics, allow decision makers to identify consumer segments for the purpose of communication. That is, the task of designing and communicating a particular program that seeks to change consumers' usage of services related to transportation can be focused on segments of the population specifically delineated by such variables as gender, age group, and educational level. Knowledge of the media preferred by the target group can be used to facilitate more effective communication. In short, the variables form a core for initial segmentation strategy.

To provide a broader understanding of usage patterns for services offered by a general aviation airport, three other types of variables were also investigated: awareness, intentions (willingness), and attitudes. These three variables suggest more of a psychological or psychographic segmentation strategy then either demographics or media habits. Awareness was selected as a segmentation variable because it may be viewed as an initial phase of psychological variables which may lead to purchase, or in this case, to usage behavior. Griffith and Wells (1984) have suggested that awareness as a segmentation variable must be considered when planning strategy for new or existing services. Additionally, Lovelock (1975) found awareness to be a useful segmentation variable in planning public transportation, and awareness was also found to be an important segmentation variable in developing strategies for cancer screening clinics (Smith and Scammon 1984).

Attitudes toward products have, of course, been shown related to consumption or usage behavior in numerous studies. Recently, attitudes toward specific services have been studied (Tardiff 1979; Smith and Scammon 1984). Specifically, attitudes toward public transportation and alternative services associated with public transportation were found to be very useful in segmenting markets (Nicolaidis, Wacks, and Golub 1977). Tardiff (1979) found attitudes to be useful in designing new transportation services. Whether attitudes toward several proposed services for a general aviation airport is a viable segmentation variable remains to be seen.

At a more manifest level, behavioral intentions were used as a proxy for actual behavior. Rosenstock (1966) has suggested that intentions are the last step in the psychological process leading to behavior. Fischer and Dobson (1977) found intentions to be useful as a segmentation variable for introducing public transportation as an alternative mode for travel to work. In short, these five sets of variables can aid those charged with providing services to meet the needs of the communities that lie in the domain of the service area of the general aviation airport.

The criterion variable, frequency of air travel during a typical year was used because it was thought that people who flew more often would be more inclined to use the services provided by a local airport. Blankenship (1976) conceptualized users and non-users of public transportation as a dependent variable. Thus, non, light, and moderate patrons of air travel were used in the study to provide a characterization of market segments.

Methodology

Research Design

The design of this specific research project was descriptive. Descriptive research is appropriate when the research problem focuses on attitudes, awareness, and behavioral intentions. Descriptive research seeks to describe the phenomenon under investigation by determining the relationships, if any, between dependent and independent variables. For this study, the independent variables were: (1) awareness, (2) attitudes, (3) intentions, (4) media habits, and (5) demographics. The dependent variable for the study was the number of times people travel by air in a typical year. This research is solely dependent upon primary data in which 800 households were surveyed.

Awareness of services offered was measured by a 0/1 response to a list of services, 6 of 8 were actually offered. Attitudes comprised four measures on a 5 point likert rating scale from strongly disagree to strongly agree. Eight of seventeen intention measures were scaled on 5 point willingness rating scales from very unwilling to very willing. Seven intention measures were dummy coded 0/1 for possible destinations for a new commuter service. Finally, two intention measures were scaled on frequency of use for two proposed services ranging from never to more than 6 times per year. The dependent variable, air travel was broken down into three groups, non-users, light users (i.e., flying one time per year) and moderate users (i.e., flying two or more times per year).

Data Collection

The data were collected by a self-report personal interview method comprising eight towns in three counties of the Southwestern area of Virginia. The population was defined as those adults (18 years of age and older) living in the designated area described above. The total sample, 800 was then divided into these three counties proportionate to the total population of the three counties and then subdivided into eight towns proportionate to the population of the town. Each interviewer was given a specific town to interview. They were instructed to go to every 2nd street, every third house until the quota for that specific area was complete. Thus, a cluster systematic random sample was employed. The interviewers were also instructed to leave the questionnaire with the subjects and then return within one hour to pick-up the completed questionnaire. Seven hundred and fifty-seven surveys were returned and 747 were usable. This represents 93.4% of the target sample size of 800.

Data Analysis

A multiple discriminant analysis and a stepwise discriminant analysis were performed in order to characterize potential target markets. These analyses were appropriate as the dependent variable was categorical and the five sets of independent variables were continuous. Subjects were classified into non-users, light users, and moderate users of air travel based on the number of times that they fly during a typical year. This analysis matches up the five independent constructs of awareness, attitudes, intentions/behavior, media habits, and demographics with the frequency of air travel. The purpose of this analysis was to (1) discern if a relationship exists between the sets of independent variables and the criterion variable, and (2) characterize market segments for a general aviation airport. In order to produce a compact portrayal of both the independent and dependent constructs, a stepwise discriminant analysis was done which produced the 9 most important variables across all independent variables in explaining non, light, and moderate users of air travel.

Results

Discriminant Analysis

Table 1 presents the results of five discriminant analyses in which consumer segments based on the amount of yearly air travel are characterized. Each of the five discriminant analyses was analize in two steps; (1) a univariate F test in which each independent variable was analyzed with the 3 group dependent variable, and (2) a multivariate analysis in which all items of each independent construct were analyzed with the 3 group dependent variable. Variables considered to be important in explaining a statistically significant function had an absolute value of .30 or greater. The first analysis considers the relationship between awareness and non, light, and moderate users of air travel. In the univariate analysis, only one variable, aircraft rental was significant at the .05 level. Analyzing the group means demonstrates that group three or the moderate users of air travel are those likely to rent aircraft. There were no significant functions in the multivariate case. This means that the likelihood of a relationship between these awareness items and frequency of air travel is virtually nonexistent.

The second analysis presented in Table 1 investigated the relationship between intentions and frequency of air travel as defined in non, light, and moderate users. At the univariate level, 14 of 17 variables were significant at the .05 level. Generally, the light and moderate users were more willing to use the existing and proposed services of the airport than the non-users of air travel.

The moderate users and the light users were more willing to use the commuter service than the non-users, and the moderate users also demonstrated that they would use the service more frequently than the other two groups. Proposed destinations that were statistically significant were Greensboro, Charlotte, Washington, D.C., Richmond, and Atlanta. For Greensboro, Charlotte, and D.C., both the light and moderate users were more likely to frequent these destinations, and for Atlanta and Richmond, the moderate users were more likely to frequent these two destinations than the other two groups. The non-users of air travel were least willing to use the cargo transportation service.

TABLE 1

CHARACTERISTICS OF THREE SEGMENTS OF AIR TRAVEL PATRONS

Variables	Group Means			F Ratio	P	Canonical Loadings	
	None (n=370)	Light (n=164)	Moderate (n=213)			(Root 1)	(Root 2)
Awareness[a]							
Aircraft Maintenance (0=don't offer, 1=offer)	.79	.79	.87	1.71	.18	----	----
Charter Service (0=don't offer, 1=offer)	.72	.74	.80	.97	.38	----	----
Pilot Training (0=don't offer, 1=offer)	.64	.74	.76	2.44	.09	----	----
Aircraft Rental (0=don't offer, 1=offer)	.66	.78	.82	4.65	.01*	----	----
Cargo Transportation (0=don't offer, 1=offer)	.38	.45	.40	.58	.56	----	----
Car Rentals (0=don't offer, 1=offer)	.27	.26	.39	2.62	.07	----	----
Aerial Tours (0=don't offer, 1=offer)	.55	.70	.59	2.37	.09	----	----
Commuter Service (0=don't offer, 1=offer)	.29	.33	.24	.82	.44	----	----
Intentions[b]							
Aerial Tours (5 pt. scale)	2.72	3.32	3.04	7.77	.00*	-.23	.63
Charter Service	2.84	3.39	3.58	23.80	.00*	.22	-.02
Aircraft Rental	2.63	2.75	2.90	2.66	.07	-.07	-.55
Pilot Training	2.64	2.93	2.93	3.39	.03*	.02	.15
Car Rentals	2.92	3.18	3.41	8.27	.00*	-.05	-.04
Aircraft Maintenance	2.58	2.84	2.95	5.23	.00*	.07	-.24
Commuter Service (5 pt. scale)	3.19	4.02	3.97	40.80	.00*	.19	.79
Frequency Commuter Service (1=never, 2=1-2 times, 3=3-4 times, 4=5-6 times, 5=6+)	1.41	1.93	2.63	74.10	.00*	.51	.53
Greensboro (0=no use, 1=use)	.11	.34	.37	16.90	.00*	.08	.27
Charlotte	.10	.24	.41	19.60	.00*	.20	-.10
Washington, D.C.	.26	.75	.83	5.72	.00*	.13	.01
Roanoke	.16	.26	.24	2.01	.13	-.05	.01
Richmond	.15	.30	.41	12.10	.00*	.10	-.02
Atlanta	.16	.25	.48	17.40	.00*	.11	-.35
Tri-Cities	.09	.11	.06	.67	.51	-.24	.10
Cargo Transportation (5 pt. scale)	3.02	3.49	3.52	16.60	.00*	.02	.07
Frequency Cargo Transport (5 pt. scale)	1.35	1.83	2.14	35.00	.00*	.41	.16
Group Centroids-Root 1	-.74	.20	1.10				
Root 2	-.15	.69	-.26				

TABLE 1 (CONTINUED)

Variables	Group Means None (n=370)	Light (n=164)	Moderate (n=213)	F Ratio	P	Canonical Loadings (Root 1)	(Root 2)
Attitudes[c]							
Medical Service (5 pt. scale)	4.13	4.38	4.17	2.52	.08	-.27	----
Farming Community Transport Medicine/Equipment	3.84	4.04	4.05	3.18	.04*	.10	----
Airport Improvements	3.51	3.84	3.83	7.24	.00*	.11	----
Commuter Service Needed	3.48	3.96	3.99	17.30	.00*	.97	----
Group Centroids-Root 1	-.32	.25	.36				
Media Habits[c]							
How Often Read Newspaper (1= once week, 2=twice, 3=3 times, 4=4 times, 5=daily, 6=Sunday only)	4.42	4.66	4.69	2.06	.13	.01	----
Radford News Journal (0=don't read, 1=read)	.13	.21	.09	2.26	.11	-.26	----
Southwest Times	.15	.14	.08	1.58	.21	-.22	----
Roanoke Times & World News	.78	.83	.86	1.43	.24	-.10	----
None	.03	.01	.02	.31	.73	.03	----
News Messenger	.20	.24	.25	.59	.55	-.04	----
Wall Street Journal	.03	.04	.17	11.70	.00*	.40	----
Virginian-Leader	.19	.10	.10	3.08	.05*	-.41	----
National (0=don't read, 1=read)	.65	.82	.86	9.19	.00*	.25	----
Local	.92	.96	.96	1.18	.31	.04	----
Sports	.50	.55	.59	1.13	.32	-.13	----
Editorial	.40	.45	.59	5.10	.01*	.07	----
Entertainment	.54	.55	.72	4.73	.01*	.15	----
Classified	.52	.58	.56	.52	.60	.01	----
Supplements	.49	.51	.58	1.15	.32	-.09	----
Business	.34	.50	.68	17.00	.00*	.52	----
FM95 (0=don't listen, 1=listen)	.18	.16	.29	3.35	.04*	.18	----
K92	.44	.50	.39	1.11	.33	.05	----
WUVT	.01	.04	.06	2.51	.08	.12	----
WJJJ	.07	.05	.10	.70	.50	-.06	----
WNRB	.11	.11	.06	1.20	.30	-.07	----
Q99	.14	.20	.20	1.10	.34	.14	----
V105	.10	.09	.15	.95	.39	.07	----
FM89	.06	.13	.13	2.73	.07	.21	----
WPSK	.10	.11	.09	.81	.92	.05	----
Group Centroids-Root 1	-.41	.00	.70				
Demographics[d]							
Gender (0=male, 1=female)	.60	.57	.39	6.06	.00*	-.20	----
Age	41.60	39.43	41.48	.70	.50	.06	----
Marital Status (1=single, 2=divorced, 3=married, 4=widowed)	2.72	2.59	2.68	.75	.47	-.12	----
Background (1=urban, 2=rural)	1.67	1.50	1.51	5.13	.00*	-.11	----
Occupation (Duncan SES)	39.47	47.82	58.59	28.20	.00*	.43	----
Own Airplane (0=yes, 1=no)	1.00	1.00	.98	2.48	.08	-.12	----
Education (12 pt. scale)	7.97	9.28	10.05	34.62	.00*	.55	----
Household Income (8 pt. scale)	5.52	6.18	6.46	12.71	.00*	.18	----
Group Centroids-Root 1	-.49	.17	.72				

[a]The first and second functions were non-significant, therefore, no coefficients were reported.

[b]The first and second functions were significant at P = .001.

[c]The first function was significant at P = .001.

[d]The first function was significant at P = .001.

[e]The first function was significant at P = .001.

The multivarate analysis between the user groups of air travel and intentions produced two significant linear functions (roots). The first function represents a preference for innovative transportion services. The first root characterizes the moderate user group as willing to use the commuter service and the cargo transportation service more frequently than the other two groups.

The second linear function significant in this analysis represents a general willingness to commute on the positive side, and those people who prefer to rent aircraft on the negative side. The light user group is characterized as willing to use the commuter service and use it more frequently than the other two groups. In addition, this group appears to be more open to taking aerial tours than the other two groups. The moderate user group was more willing to rent aircraft, and use the commuter destination, Atlanta, than the light patron of air travel. The non user group was also more willing to rent aircraft than the light group, but not as much as the moderate user of air travel.

Considering attitudes toward four issues relating to proposed services, 3 of 4 variables were significant at the .05 level in the univariate case. The light and moderate user groups demonstrated a more positive attitude than the non-user group concerning airport improvements, the need for a commuter service, and transporting equipment or medicine for animals.

The multivariate analysis produced one significant root at the .05 level and represents the attitude that a commuter service is needed. Again, the moderate user group had the most positive attitude that a commuter service is needed, followed by the light user group.

The univariate analysis between user groups of air travel and media habits produced 7 of 25 variables significant at the .05 level. The Wall Street Journal is read mostly by moderate users of air travel and the Virginian-Leader is read mostly by non-users of air travel. The moderate users are more likely to read the editorial, entertainment, and business sections of the newspaper than the other two groups; whereas, the non-users are the least likely to read national news. Finally, FM95, an easy listening radio station, is listened to by moderate users of air travel more than the other two groups.

The multivariate analysis supports the univariate analysis. This analysis produced one significant linear function at the .05 level. This function describes the moderate users as those people who read the Wall Street Journal and the business section of the newspaper, while the non-users subscribe to the Virginian-Leader.

The last analysis presented in Table 1 examined the relationship between demographics and the air travel user groups. The univariate analysis generated 5 of 8 variables significant at the .05 level. The moderate user appears to be male, considers his background to be urban, has a more prestigious occupation, has more years of education, and has a higher income level than the other two groups.

The multivariate analysis produced one significant function at the .05 level. Education and occupation appear to have the most explantory power in this function. Again, the moderate user was more educated and had higher status occupations than the non or light user.

The last analysis reported in this paper is a stepwise discriminant analysis in which all the independent variables were entered into the analysis with the three user groups and then the most important variables designated to characterize the three groups extracted. Table 2 presents the 9 most important variables that discriminate between the three user groups of air travel. The stepwise discriminant analysis generated two significant functions at the .05 level. The variables deemed important in the first function characterizes the moderate user group as willing to use the

TABLE 2

A COMPACT CHARACTERIZATION OF MARKET SEGMENTS FOR AIR TRAVEL PATRONS

Variables[a]	Canonical Loadings Root 1	Root 2
Commuter Service-Frequency	.49	-.75
Education	.40	.16
Commuter Service	.20	-.85
Cargo Transport-Frequency	.38	.13
Tri-Cities-Tennessee	-.26	.08
Wall Street Journal	.11	-.44
Business Section	.19	.02
Background	-.09	-.37
Greensboro-North Carolina	.14	.24

[a]First canonical discriminant function significant at p=.001; second function significant at p=.001. Group Centroids for first canonical root are: non, -.88; light, .31; moderate, 1.26. Centroids for second functions are: non, -.12; light, .64; heavy, -.26.

commuter service and the cargo transportation service more frequently, and has a higher degree of education than the light user group.

The second function produced five important variables. The moderate user was more willing to use the commuter service, and use it more frequently than the light user. Additionally, the moderate user was more likely to read the Wall Street Journal and considers their background to be more urban than the light user.

Discussion

Considering the five sets of predictor variables, those variables that have found the most general applications in a wide variety of market studies again showed the best predictive power. Intentions to use existing and proposed services, and demographics claimed the strongest links to users of air travel and thus, potential users of services offered by the general aviation airport. The attitudes and media habits items did, however, supplement these findings with a portrayal of the moderate user that is consistent with the information contained in the intentions and demographic measures.

Thus, the moderate user appears to be fairly "cosmopolitan" in attitudes and adopting new innovations, even though they live in a primarily rural area of Virginia. This person is more highly educated, has a pretigious occupation, reads the Wall Street Journal, and has a higher income. This person seems to fit the image of one who has found success within the American social and economic systems while choosing not to live in highly urban areas. This persons attitude toward innovations, namely general aviation services, appears to be somewhat progressive.

Remaining manuscript and references available upon request.

ADOPTION OF NEW SERVICES - CONSUMER VERSUS ORGANIZATIONAL BUYER ATTITUDES AND INTENTIONS: AN EXPLORATORY STUDY

Kenneth D. Bahn, Virginia Polytechnic Institute and State University
Akshay Rao, Virginia Polytechnic Institute and State University
Richard Werbel, San Jose State University

Abstract

This paper examines the attitudes and intentions of two very diverse segments of the market, general consumers and organizational buyers, towards new services proposed by a general aviation airport. Data were collected from 800 households and 200 businesses to test differences. These differences related to the degree of positivity of attitudes and intentions towards the new services.

Support was found for differences of behavioral intentions between the market segments with the organizational buyer being more willing to use the proposed services. General consumers exhibited less variability on two indicators suggesting greater homogeneity in that segment. This latter result was surprising, and an examination of the particular indicators provides a plausible explanation for this finding. Marginal support was found for differences between groups' attitudes towards the new services.

Introduction

There is a considerable body of literature on new product management and new product adoption (Bass 1969; Robertson 1967). However, there is relatively little research available on new services marketing. Given recent estimates (U.S. Dept. of Commerce 1982 - 1983) that the American economy will continue to get progressively service oriented, the importance of research in new service marketing cannot be understated. This section attempts to use a popular conceptual framework of new product management in new services marketing.

As suggested by Enis, La Grace and Pell (1977) there are four degrees of newness to an innovation. A fundamental innovation is an entirely new product concept, *e.g.*, when the original typewriter replaced caligraphy. A functional innovation replaces an old product with a new, better performing one (*e.g.*, the electric typewriter replacing the manual typewriter). An imitative innovation is a new product to the producing company or to the market, that mirrors previous products in most features. For example, the IBM Selectric was an imitative innovation of the IBM Executive series of typewriters. Finally, an adaptive innovation is a new model of essentially the same product, *e.g.*, the IBM Selectric III replacing the IBM Selectric II. This conceptual framework can be used in the context of new services as well. For instance, air travel represented a fundamental innovation, while jet air travel represented a functional innovation. Further, wide bodied jets were imitative innovations while variations in conveniences offered by airlines (*e.g.* boarding passes provided in advance) could be considered adaptive innovations. It can be argued that the distinctions presented are artificial operationalizations of a phenomenon that is essentially a continuum on a scale of newness. Nonetheless, it is a useful framework that is intuitively appealing and has been used in a variety of contexts (Monroe, Rao and Chapman 1985).

A second issue of interest in the new product management literature has been the adoption process. Under the broad rubric of diffusion of innovation theories, a number of models have been proposed. Bass (1969) used an equation based on an epidemic model to forecast future sales of appliances, while Fourt and Woodlock (1960) developed a similar model for consumer nondurables. Numerous other formulations of the adoption process (Learner 1968, Massy 1969, Parfitt and Collins 1968, Urban 1968) are available in the literature. The underlying logic that is common to all of these various models is segmentation theory. Influential early adopters are present at one extreme of a continuum of time lag between introduction and adoption, and laggards are present at the other extreme. Thus, initial sales are to early adopters whose experience with the product and degree of influence on prospective users will cause a ripple effect that can be modelled.

Clearly, there are numerous theoretical positions from which this segmentation process can be viewed. The notions of risk taking ability, product knowledge, previous experience with the company and other contextual factors influencing the adoption process are just some of these possible perspectives. However, the conceptual background presented above is directly applicable to new services. For, if the adoption process is hypothesized to follow a certain model, the same principle likely will apply in the adoption of new services. Therefore, there should be a segmental sequence in the adoption of new services. The dimensions of these segments will necessarily be service specific, but certain essential principles follow directly from new product adoption processes.

First, it is argued that the early adopters of a new service will comprise buyers who are relatively needy of the service. This presupposes buyers recognizing the existence of a problem and hence the need for a solution. Using traditional notions of a dichotomy between organizational and consumer buying behavior, it is posited that the former are more cognizant of their needs than the latter. As a consequence, given a service that is of potential benefit to both organizational and lay consumers, the former are more likely to have positive attitudes towards the service than the latter.

Second, the notion of the buying center (Webster and Wind, 1972) and related ideas of rationality in organizational buying suggest that organizations can be segmented more easily than lay consumers. In other words, using decision making as a segmenting dimension would result in a more cohesive organizational segment and a more varied consumer segment.

As a consequence of this rationale, the following theoretical propositions are derived.

a) Given a new service with an established need satisfying ability, organizational buyers will have a more positive attitude as well as behavioral intention towards the new service than lay consumers.

b) Given a new service with an established need satisfying ability, organizational buyers attitude and behavioral intentions towards this new service will be more homogeneous than the attitudes and behavioral intentions of lay consumers.

Research Setting and Variables

The propositions were tested using a general aviation airport offering new services.

General aviation airports do not have regional or national status because they do not have the facilities for national or regional air carriers. General aviation airports offer numerous services including aircraft rental, aircraft maintenance, refueling for corporate aircraft and charter services. The concept of market segmentation is relatively new to these smaller airports and therefore it is necessary to conduct research on segments of the market for proposed services. This particular study concentrates on two specific segments of the market - the organizational buyer and the lay consumer. While these categories are broad, it is argued that this perspective is useful for the reasons mentioned in the last section.

Although many variables could have been used and investigated, given the exploratory nature of this research, this study focuses on intentions and attiutdes. Both of these variables have potential for segmenting markets. Within the public transportation literature, these variables have been successful in differentiating between segments (Robinson 1981; Nicolaidis, Wacks and Galub 1972; Tardiff 1979; Tischer and Dobson 1977). Therefore, it is anticipated that these variables will be appropriate to a different type of transportation service, namely, services offered by a general aviation airport.

Methodology

Research Design

The design of this specific research project was descriptive. Descriptive research is appropriate when the research problem focuses on attitudes, and behavioral intentions (Churchill 1983). Descriptive research seeks to describe the phenomenon under investigation by determining the relationships, if any, between dependent and independent variables. For this study, the dependent or response variables were: (1) Attitudes and (2) Intentions. The term response variable is more appropriate in this instance as the new service may be viewed as a stimulus variable rather than as an independent variable that is manipulated at various levels. Hence, attitudes and intentions are response to the stimulus. This research is solely dependent upon primary data in which 800 households were surveyed and 200 organizations were surveyed.

Data Collection

The data were collected by a self-report personal interview method for consumers and a self report mail questionnaire for organizations. The population of lay consumers was defined as those adults 18 years of age and older living in three counties in Southwestern Virginia. Eight hundred responses were collected from the population of interest, ensuring that each of the counties was represented in proportion to its population. Interviewers were instructed to go to every 2nd street and every third house until the quota for that specific area was complete. Thus, a systematic random cluster sample was employed. The interviewers were also instructed to leave the questionnaire with the subjects and then return within one hour to pick-up the completed questionnaire. Seven hundred and fifty-seven surveys were returned and 747 were useable. This represents 93.4% of the target sample size of 800.

For organizational buyers, reports of local Chambers of Commerce were used to generate a list of 200 businesses. Geographic location was also used as a criterion for choosing a particular company such that the businesses were located in the service area of the airport. Additionally, one or two person operators were typically not included in the sampling frame. The instructions requested that the official responsible for air travel related decisions respond to the survey instrument. However, no check was made to ensure that this request was complied with and this may therefore contribute to some inflation in error variance. Sixty six survey instruments were returned.

The usual problems of collected data in primarily rural areas did prevail, however. At times, people were not at home or they were too old to read the surveys, or the housing sections were so spread out that the stated sampling procedure was virtually impossible. These problems were rectified in the data collection process so that randomness was maintained. The overall result of this data collection process was that the sample was quite representative of the geographic areas under investigation.

Measures

The first variable analyzed in this study was intentions. Two measures of intention appeared in the survey instruments for both general consumers and organizational buyers. The first measure was a 5 point rating scale on willingness to use a proposed commuter service. The scale ranged from very unwilling to very willing. This same scale was used for another indicator, namely, a proposed air cargo transportation service.

The second intentions measure for the proposed services was scaled to capture the frequency with which the respondents thought they would use the specific service. The air cargo transportation service was scaled on 5 points ranging from 'never use' to 'use more than 6 times per year' for the general consumer. The same measure was used using a 7 point scale ranging from 'never use' to 'use more than 10 times per year' for the organizational buyer. For purpose of anlaysis, the 7 point scale was rescaled to a 5 point scale in order to compare differences between organizational and general consumer responses.

Within the two survey instruments, three measures of attitudes towards issues involving new services were similar. These three items were measured on a 5 point Likert scale ranging from strongly disagree to strongly agree. The three items were attitudes towards the need for: an emergency medical service, a commuter service, and airport improvements (which, when accomplished would increase the number of services offered).

Results

In order to test the difference between organizational buyers and general consumers attitudes and intentions towards new services, differences in mean responses were tested for significance. The results of these tests are presented in Table 1.

All four measures of intentions were significant at the .05 level.

The results in Table 1 suggest that there is virtually no difference in the degree to which organizational buyers have more positive attitudes towards new services. Only one measure of attitudes were significant at the .05 level. In this measure, the general consumer had a more positive attitude towards the need for an emergency medical service than organizational buyers. There was no significant difference on the other two measures. These results provide partial support for the first proposition in that organizational buyers did have more positive intentions towards the proposed new services.

With reference to testing for the homogeneity of variance among the two segments, an F-test was carried out on each of the seven measures that measured intentions and attitudes. The tests were significant at the .05 level for the intentions measures which were the frequency with which the sample population would be willing to use the commuter and air cargo transportation services. Finally, a similar analysis was performed on the homogeneity of attitudes towards three issues related to proposed services. The groups were not significantly different at the .05 level, suggesting that the two groups were equivalently homogenous in their response. Thus, there was no support for the second proposition.

Discussion

The results described in the previous section provide only partial support for the propositions derived earlier. While organizational buyers did display a more positive attitude and behavioral intention towards a needed service, that segment was not as homogeous as the general consumer in its responses. In fact, the F-tests that were significant suggested that organizational consumers exhibited a greater variance than general consumers.

A closer look at the items on which this contrary finding was displayed suggests a possible explanation. Given the nature of the businesses sampled and the proximity of other airports in the region surveyed, it is possible that some businesses were strongly in favor of a commuter service and an air cargo transportation service while others were not likely to view these services favorably. Further, and more significantly, the nature of these services (unlike emergency medical care) are such

TABLE 1

MEANS, STANDARD DEVIATIONS, AND VARIANCES FOR INTENTIONS AND ATTITUDE MEASURES OF GENERAL AND ORGANIZATIONAL CONSUMERS

Variables	General Consumers			Organizational Consumers			t	F
	Means	Std. Dev.	Var.	Means	Std. Dev.	Var.		
Intentions								
Commuter Service-Willingness (5 pt. scale)	3.56	.928	.861	4.02	.793	.625	3.81*	1.37
Commuter Service-Frequency (5 pt. scale)	1.84	.961	.923	2.94	1.42	2.03	8.25*	2.19*
Air Cargo Service-Willingness (5 pt. scale)	3.21	.851	.724	3.45	.823	.678	16.55*	1.07
Air Caro Service-Frequency[a]	1.66	.856	.733	2.84	1.93	3.72	8.07*	3.66*
Attitudes								
Emergency Medical Service	4.13	.816	.666	3.56	.947	.896	5.25*	1.35
Airport Improvements	3.68	.804	.647	3.44	.842	.709	1.62	1.17
Need for Commuter Service	3.73	.832	.693	3.83	.808	.653	.92	1.06

* P = <.05

[a]Measures were rescaled from a 7 point scale to a 5 point scale for the Organizational buyer data to match general consumer data.

that general consumers are likely to be uniformly unenthusiatic about them. Therefore, the latter segment is likely to exhibit less overall variability than the former. Finally, it is of interest to note that the remaining F ratios were statistically significant at the .10 level and the magnitude of the variances were in the hypothesized direction. Therefore, there is overall substantive support for these findings which may be of interest to managers of general aviation airports.

The limitations of this research effort are numerous. Most significantly, only a thirty three percent response rate was achieved from the organizational sample. Typically a response rate of more than fifty percent is considered necessary to make the assumption of non-response bias and randomness. Therefore, the likelihood that this sample was unrepresentative of the population limits the external validity of the study.

The findings are of importance to both academic researchers as well as business practitioners. The former can utilize extant notions in new product theory and segmentation theory in new services marketing research. Further, the link between attitudes and behavioral intentions, while not empirically investigated, does seem to exist. It is argued that therefore, the link between behavioral intention and actual behavior will also likely hold.

Business practitioners have long lacked theoretical input on new services marketing. That the distinctions between new products and services are relatively inconsequential from a segmentation and customer need perspective would be useful in the design of marketing programs. For, if practitioners can view enduring customer needs for goods and services synonymously, in harmony with the marketing concept, their probability of long term success will likely be enhanced.

In sum, this research provides some guidelines for future research investigating the similarities and difference between new products and services as well. Further, practitioners stand to benefit understanding the link between segments and the enduring need for the service.

References

Bass, Frank M. (1969), "A New Product Growth Model For Consumer Durables," Management Science, 15, 215-227.

Churchill, Gilbert A. (1983), Marketing Research: Methodological Foundations (3rd. Ed.), Chicago, IL: The Dryden Press.

Enis, Ben M., LaGrace, Raymond and Pell, Arthur E. (1977), "Extending the Product Life Cycle," Business Horizons, 20 (June), 46-56.

Learner, David B. (1968), "Profit Maximization Through New Product Marketing Planning and Control," in Applications of the Sciences in Marketing Management, ed. Frank M. Bass, Charles W. King, and Edgar A. Pessemier, (John Wiley & Sons, Inc., New York), 151-167.

Massy, William F. (1969), "Forecasting Demand For Convenience Products", Journal of Marketing Research, (November) 405-413.

Monroe, Kent B., Rao, Akshay R. and Chapman, Joseph D. (1985), "Towards a Theory of New Product Pricing," in Proceedings, Stellnar Symposium on the Theories of Marketing Practice, Champaign, Fall, J. N. Sheth and Gary Frazier eds., (forthcoming).

Nicolaidis, Gregory C., Wacks, M. and Galub, T. F. (1977), "Evaluation of Alternative Market Segmentations for Transportation Planning," paper presented at the 56th Annual Meeting of the Transportation Research Board, Washington, D.C.

Parfitt, J. H. and Collins, B. J. K. (1968), "The Use of Consumer Panels for Brand Share Prediction," Journal of Marketing Research, (May) 131-146.

Robertson, Thomas S. (1967), "The Process of Innovation and the Diffusion of Innovation," Journal of Marketing, 31 (January), 14-19.

Robinson, Richard K. (1981), "Transit Market Segmentation: Research and Applications," in Marketing Public Transportation: Policies, Strategies and Research Needs for the 1980's, eds. Richard K. Robinson and Christopher H. Lovelock, Proceeding Series, American Marketing Association.

Tardiff, Timothy J. (1979), "Attitudinal Market Segmentation for Transport Design, Marketing and Policy Analysis," paper presented at the 58th Annual Meeting of the Transportation Research Board, Washington, D.C.

Tischer, Mary L. and Dodson, R. (1977), "An Empirical Analysis of Behavioral Intentions to Shift Ways of Traveling to Work," Paper presented at the 56th Annual Meeting of the Transportation Research Board, Washington, D.C.

Urban, Glen L. (1968), "A New Product Analysis and Decision Model," Management Science, (April), 490-517.

U.S. Department of Commerce, (1982-82), Statistical Abstract of the United States, 103rd edition.

Webster, Frederick E. and Wind, Yoram (1972), Organizational Buying Behavior, Prentice-Hall, Inc., Englewood Cliffs, New Jersey.

ASSESSING THE IMPACT OF TRANSIT MARKETING CHANGES

John J. Considine, Le Moyne College

Assessing the Impact of Transit Marketing Changes

This study's main focus in on the inability of the transit industry to assess the impact of marketing changes. A two-stage process was required to address this problem. First, appropriate performance measures that will be sensitive to changes in the transit system were obtained. Secondly, a research design was developed to isolate the role the marketing program had in shifting those measures. This study illustrates how a technique - intervention analysis - can be used to measure the impact of changes to a transit system.

Introduction

One of the main problems currently facing the transit industry is its inability to assess the impact of marketing changes. At present, no nationally accepted methods exist for evaluating the effectiveness of a transit marketing program, particularly where the primary objective is more complex than increased total ridership. Moreover, the evaluation of marketing efforts is essentially difficult because of the complex invironment in which a public transit system operates.

Measuring the impact of marketing expenditures and establishing some type of control or feedback present several problems for transit management. First, not only the costs of certain marketing strategies but, more importantly, the benefits must be calculated. Second, it is often difficult to distinguish the effects attributable to marketing strategies. Similarily, many of the perceived benefits or results are not immediately apparent. They require time, so the efforts can mature and be more pronounced.

Bloom and Novelli (1981) contend that all marketers find it difficult to evaluate the impact of a marketing program. They suggest a two- stage process to address this problem. First, determine appropriate performance measures that will be sensitive to changes to the system. Second, develop a research design that can isolate the role the marketing program has had in shifting those measures.

Unfortunately, most research shows very few performance measures are widely available from transit operators, and common performance measures are not currently used throughout the transit industry (Heaton, 1980). Some believe that many of the most useful measures are not being collected at all, or that they are being collected, using inappropriate sampling and measurement methodologies.

Similarly, little has been done in employing appropriate research designs that can isolate the effects of a marketing change. To enable transit managers to better control their marketing expenditures, Tybout and Marks (1981) state that two types of research are required. Prospective research is needed as a basis for planning a transit program. Retrospective research is needed for evaluating transit programs that actually are implemented.

Most research in the transit industry has been prospective. Very little retrospective research has been conducted. And no one has systematically assessed the impact of changes (e.g., fare changes, route structure changes, advertising campaigns) in operating transit systems. Furthermore, the retrospective research that has been completed gives only limited insight into the effect of a change because rigorous evaluation methods are not always employed. The purpose of this paper is to illustrate how a technique, intervention analysis, could be used to measure the impact of changes to a transit system.

Research Focus

While the DOT recently suggested that research is needed to determine the impact of marketing activities and to develop promising techniques, the problem is difficult to address on an industry level. Consequently, any effort must begin with a micro-perspective. Individual systems should be studied, techniques tested, and the findings examined. Only then can one generalize research to the rest of the transit industry.

This study used such a micro perspective in examining the effects of a marketing change to a transit system in a large southern city. Specifically, this research investigates the impact of a major change in the transit service itself, which involved a complete redesign of the system's route structure and scheduling process. The goal was to improve the efficiency and effectiveness of the transit network. Thus, this overall change represents the intervention or treatment. Management believes that this change, which is based on a planning and design method they developed, is timely and effective. They believe that improving routes, fine-tuning schedules, and reallocating service may be more desirable than reducing service across the board and can result in significant savings.

According to Bloom and Novelli (1981), the first step in evaluating the impact of a marketing change is to determine performance measures that will be sensitive to such a change. In this study, six measures were used because of their measurability and availability. Unfortunately, many measures, which are now part of management's reporting process, were not collected until recently. Certain measures were not used because archives were limited or unavailable.

The six measures that were used are as follows:

(1) total ridership
(2) total operating expenses
(3) total operating revenues
(4) total operating expenses/total revenue miles - This variable represents the cost efficiency of changes.

(5) total operating revenues/total revenue miles - This variable reflects the revenue efficiency of changes.
(6) total passenger trips/revenue miles - This variable reflects the ridership efficiency of changes.

The data for the six variables was obtained from ATE Management and Service Company, Inc., which is the world's largest transit management company. ATE's purpose is to assist agencies that are responsible for the provision of mass transportation. Managers are assigned to the client systems. ATE has become a recognized industry leader in the knowledge and skill gained from their experience and methods.

The city studied contracted with ATE in the early 1970s. Monthly observations were obtained for all these variables beginning in 1974 and a total of 112 monthly observations were obtained. There were 73 observations obtained prior to the implementation of the marketing change or intervention. The change was implemented in February 1980, the 74th month. This allowed sufficient post-interventions to be obtained to evaluate the effect of the change.

Methodology

The second stage of evaluating a marketing change involves developing a research design that can isolate the change has had in shifting the performance measures. Since the objective of retrospective research is to identify and measure all the effects directly attributable to a particular program, transit management would find it very beneficial. They could use it to establish objective criteria to aid decision-making about continuing, modifying, or deleting existing programs.

To evaluate the impact of a marketing change to a transit system, this study used the interrupted time series design. It provides the strongest causal inference, and controls any instability in the variables and the impact of common environmental factors (Tybout, Marks, 1981).

The interrupted time series design is an appropriate technique to use for assessing the impact a change has had on a time series. Its name implies that time is interrupted by the intervention. Interrupted time series analysis requires knowing the specific point in the series when an intervention occurred.

To permit unbiased estimates in a series, Cook and Campbell (1979) recommend that analysts use the autoregressive, integrated, moving average (ARIMA) models and the associated modeling techniques developed by Box and Jenkins (1976).

ARIMA models describe a time series as the realization or model of a stochastic process, which generated the observed time series. Using this model to account for process noise (trend, seasonality, etc.), we can assess the impact of the intervention (McDowall, McCleary, Meidinger, Hay, 1980).

The ARIMA model is composed of three structural parameters: stationarity (d), an autoregressive order (o), and a moving-average order (g). Cook and Campbell (1979) outline a three-step reiterative procedure: 1) identify a likely model, 2) estimate the model parameters, and 3) diagnose the adequacy of the model. It is repeated until an adequate ARIMA (p,d.g) model is generated.

ARIMA models were built using this iterative identification/estimation/diagnosis strategy. For each measure, the models were built with the intervention component being included. Rather than add the intervention component after diagnosing the basis ARIMA model, the whole model was identified, estimated, and diagnosed.

All parameter estimates must be statistically significant and must lie within the bounds of stationarity-invertibility. If they do not, one must specify a new model and estimate its parameters. Finally, the tentative model is diagnosed. To pass diagnosis, the residuals of the tentative model must be white noise. If they are not, the model is rejected and a new one specified. The whole procedure is repeated until an adequate model is created for the time series.

Once a tentative model has been specified and found significant, and acceptable parameter estimates have been obtained; the impact assessment model must then be diagnosed. As before, the residuals must not be different than white noise. The model-building process continues iteratively until a statistically adequate impact assessment model is generated.

All impact parameters are eventually tested for statistical significance, so one can interpret the model. McCleary and Hay (1980) contend that, in addition to drawing conclusions from the assessment in every case, the analyst must reconcile those conclusions with the prevailing theory of a substantive area.

These authors further state that an impact assessment model is built for no other reason than interpretation. The resulting impact assessment model may then be the "best" possible model in a statistical sense, but not in the substantive sense. Interpretability is everything, and for this reason, impact assessment modeling cannot be reduced to a set of objective, mechanical steps.

As a result, two types of transfer functions were tested to assess the impact of the intervention. First, a zero-order transfer function was used to represent a step function. This step function was modeled with the original data if the autocorrelation functions (ACF) and partial autocorrelation functions (PACF) did not indicate nonstationarity. Three variables satisfied this criteria: ridership, revenues, and passenger trips /revenue miles.

The remaining three variables needed to be differenced as evidenced by their ACF and PACFs. To employ a step function intervention, total differencing was required. In estimating the impact assessment models, the parameter estimates were statistically significant and all estimates lay within the bounds of invertibility. The residuals of the models were not different that white noise so the tentative models were accepted.

While zero-order transfer functions adequately model impacts that are abrupt, many impacts will be gradually realized. Such a gradual, permanent change in level is implied by a first-order transfer function.

Initially, a first order transfer function was modeled with the actual data. However, since the impact parameter "S" is constrained to the interval $-1<S<+1$, it became apparent that such a model was not adequate. McCleary and Hay (1980) state that if the value of the impact parameter lies outside these bounds, the impact assessment model is unstable. This was the case for all the variables.

A final attempt was made to model a first order transfer function with the differenced data. Unfortunately, an appropriate model could not be obtained for diagnosis as there was no convergence of the estimates.

Results

The following discussion illustrates the impact assessment procedure employed. It involves an example of the variable ridership in which the intervention was added to the basic ARIMA model.

To begin with, the series appeared stationary and therefore did not require differencing. The ACF tended to decay exponentially, indicating an autoregressive process. The examination of the PACF indicated a significant spike, thus infering an ARIMA (1,0,0) process. The diagnosis determined that the residuals were not different than white noise and the autoregressive parameters were both statistically significant and within the "bounds of invertibility".

The impact parameter was estimated by a zero-order transfer function to reflect a change in level at the time of intervention. The resulting impact parameter was statistically significant (t=4.34). Consequently, evidence exists to support the belief that the intervention caused a change in the time series. Since the impact parameter is statistically significant, we were led to reject the hypothesis that the marketing change had no impact on total ridership.

The parameter estimates for the ARIMA (1,0,0) model were:

0(1) = .2561 with a t-stat = 2.71

MU(constant) = 210,631 with a t-stat = 71.5

The intervention parameter = 21,601 with a t-stat = 4.24.

The resulting ARIMA (1,0,0) model for the time series may be written as:

Y(t) = 210,631 + .2561Y(t-1) + 21,601I(t) where I(t) = 0 prior to the intervention and I(t) = 1 after the intervention.

This procedure was used for all the performance measures. A t-value of 2.00 was used to assess whether the parameters were significant, which implies a 95% degree of confidence for the parameter estimates.

As mentioned perviously, both types of impact - gradual and step - were used in determining appropriate ARIMA models. While the use of a step change resulted in determining adequate models for all the variables, the attempt to model a gradual effort was not helpful. In several cases the parameter estimates did not converge thus preventing any resulting model from being diagnosed. In the cases where estimates were obtained, the value of the intervention parameter was outside the acceptable interval. McCleary and Hay (1980) state that if the value of the intervention parameter lies outside the acceptable bounds, the impact assessment model is unstable.

The following tables list the performance measures. Included are the parameter estimates, intervention (impact) parameters, and the t-value for each parameter.

Variable	Step Function Total Differencing		Step Function Original Date	
Ridership			MU=210,631 AR(1)=.2561 INTER=21,601	T=71.5 T=2.71 T=4.34
Revenue			MU=103,711 MA(5)=-.2175 AR(1)=.2975 AR(2)=.3200 INTER=35,238	T=17.42 T=2.13 T=3.19 T=3.32 T=3.66
Expenses	MA(1)=.7069 MA(5)=.3213 INTER=30,308	T=10.14 T=3.30 T=1.59		
EXPRM	MA(1)=.9151 MA(2)=-.2584 INTER=.042	T=9.71 T=2.75 T=0.86		
REVRN	MA(1)=.4288 INTER=.1022	T=4.65 T=1.20		
PTRM			MU=1.45 AR(1)=.6646 INTER=.1815	T=35.3 T=8.78 T=2.78

Conclusions

McCleary and Hay (1980) contend that while ARIMA models per se (the noise component) are a-theoretical and uninterpretable, impact assessment models (noise and intervention components) are constructed only for interpretation. Thus, we must draw conclusions from the impact assessment analysis.

Since the impact parameters were not significant for all the variables, it is necessary to examine the findings and discuss their implications. First, it is important to note that ridership was significantly affected by the marketing change. This significant effect was modeled as a step change and the impact parameter was statistically significant. Ridership is most likely the key variable for transit systems. Taley and Anderson (1981) state that since ridership relates to consumption, one may label ridership as the public transit firm's effectiveness objective. It is also one of the variables that have historically been collected by most transit agencies (revenues and expenses being the others).

Secondly, the author was encouraged by the significant findings for total revenue. Again the step function was modeled and the marketing change did produce a significant effect of revenue. This is another measure of effectiveness that UMTA Section 15 reporting system requires.

The significant findings for the two main measures of effectiveness provide support for the contention that the research design was appropriate for assessing the impact of marketing changes. This concurs with similar findings resulting from the use of the interrupted time series design.

The use of the interrupted time series design, however, has been successful in testing and measuring the impact of new traffic laws (Campbell, Ross, 1968), of decriminalization (McCleary, Mushevo, 1980), of gun control laws (McCleary, Hay, 1979), and of air pollution laws (Box, Tiao, 1975). Wichern and Jones (1976) also used this technique to assess the impact of Procter and Gamble's promotion of the American Dental Association's endorsement of Crest. They concluded that intervention analysis could be useful for assessing the impact of manipulations of the marketing mix. They say that the technique is attractive because it has a framework for modeling the nature of the impact.

However, it is more complicated to examine the findings for total expenses. An appropriate model was determined for expenses yet their impact parameter was not statistically significant. Transit management envisioned that the route structure and scheduling change would improve both the efficiency and effectiveness of the transit system thereby reducing the total expenses. In theory, this goal appears feasible. However, the transit industry was affected by rampantly increasing costs during the 1970s. High inflation, increasing labor demands, surging fuel prices, increased costs of maintenance, etc. all contributed to escalating expenses in the transit industry. It appears that while the marketing change was successful in causing a significant change in ridership and revenues, it could not alter the pattern of rising costs. One could conclude that while the marketing change did improve the effectiveness of the transit system, its impact had no effect on such uncontrollable factors as wage demands, fuel prices, inflation, etc.

One might conclude that without the intervention expenses might have risen even more. Thus, it could be argued that the intervention was helpful in keeping expenses from escalating too much.

Similar findings were determined for two of the efficiency measures, expenses/revenue miles and revenues/revenue miles. Appropriate models were determined, yet the impact parameters were not statistically significant. The former reflects the cost efficiency of routing changes, while the latter reflects the revenue efficiency of such changes. Thus, while the marketing change produced a significant effect of total revenues, it did not significantly alter the revenue efficiency of the alter the revenue efficiency of the change.

Finally, there was significance for the sixth variable - passenger trips/revenue miles - which is an indicator of ridership efficiency. The impact parameter was statistically significant thereby indicating the marketing change caused a significant shift in this time series.

Since significant findings were determined for ridership and revenue, the two effectiveness measures, and passenger trips/revenue miles, one of the efficiency measures, and the successful uses of the design in other studies, the author strongly believes that this technique is applicable for assessing the impact of such marketing changes.

References

Agrawal, D.C., "The Factors Affecting Mass Transit Ridership", Transit Journal, Summer 1978, Pages 55-66.

Anthony, Robert N., Young, David W., Management Control in Non-Profit Organizations, Richard D. Irwin, 1984.

Bloom, Paul N., Novelli, William D., "Problems and Challenges in Social Marketing", Journal of Marketing, Spring 1981, Pages 79-88.

Box, G., Tiao, G.C., "Intervention Analysis with Applications to Economic and Environmental Problems", Journal of the American Statistical Association, March 1975, Pages 70-79.

Cook, Thomas D., Campbell, Donald T., Quasi-Experimental Design and Analysis Issues for Field Settings, Rand McNally, 1979.

Didou, Nicholas M., "Composite Measures in Time Series Designs", Eighth Annual Macromarketing Seminar, 1983.

Didou, Nicholas, Franks, George R., "The Market Effect of Sweepstakes: A Time Series Application", AMA 1981 Educators Conference Proceedings, 1981, Pages 350-353.

Hay, Richard, McDowall, David, McCleary, Richard, Meidinger, Errol, Interrupted Time Series Analysis, Sage Publications, 1980.

Heaton, Carla, "Designing a Transit Performance Measurement System", Transit Journal, Spring 1980, Pages 49-55.

Hibbs, D.A., "On Analyzing the Effects of Policy Intervention: Box Tiao vs Structural Equation Models", Sociological Methodology, 1977.

LOvelock, Christopher, Robinson, Richard K., "Marketing Public Transportation", AMA Proceedings Series, 1981.

McCleary, Richard, Hay, Richard, Applied Time Series Analysis, Sage Publications, 1980.

Tybout, Alice M., Marks, Amy, "Evaluating Public Transportation Programs: The Role of Retrospective Research", Marketing Public Transportation, AMA Proceedings Series, 1981.

DECISION CRITERIA FOR HOTEL SELECTION SEGMENTS

William J. Quain, University of Nevada, Las Vegas
and
Peter W. Hermann, University of New Orleans

Abstract

Travelers reported how they had chosen their hotel for a specific trip. The trip specific choice groups were compared with the respondent's usual method of hotel selection by multiple discriminant analysis. Business and pleasure travel segments emerge as being different not only in reason for travel, but also in their method of choosing a hotel. Business travelers were more inclined to have chosen the hotel where the convention was being held or to let the secretary make the reservation. Pleasure travelers seemed more inclined to go with a friend's recommendation, or to have stayed there before. A second dimension of hotel selection emerged relating to the use, or nonuse, of a travel agent.

Introduction

The hospitality industry slowly has been improving its marketing skills to handle today's more competitive environment. Unfortunately, comments like the following are still far too frequent. "When asked how his firm derived guest profiles, the senior vice president of marketing for one national hotel chain replied, 'We ask the front desk clerks.'" (Lewis 1983, p. 81). This situation is being addressed within the industry and there is a growing awareness that sales and marketing are not synonymous. As with other industries, e. g. banking, this evolution is painfully slow. And with this change there is a recognition of differences between market segments (Lewis 1982). The value of marketing research to supply data on the differing wants of these segments is also gaining recognition. For example the Cornell Hotel and Restaurant Quarterly (which is the Harvard Business Review of the hospitality industry), recently ran a six part series on marketing research.

The purpose of this paper is to continue with the identification of market wants within the hotel industry and to attempt to identify promotional tools to reach potential hotel guests. Respondents in the middle of the travel experience were asked how they had chosen the hotel they had stayed at. They were also asked how they felt they generally chose a hotel. A comparison of the responses, along with hotel features and demographics indicate choice differences between the selection criteria groups.

To an extent, this paper could be viewed as an illustration of problems in response style, (Nunnally 1977), as it examines actual as opposed to stated behaviors. The authors argue that the selection criteria for a specific trip can be quite different from the respondent's generalized choice behavior.

Methodology

A questionnaire was developed to measure the attributes of what a hotel guest wants, the use rates of promotional tools available to the hotelier, travel frequency, and demographic information.

Hotel Guest Needs

Much research has been carried out in attempts to determine just what a potential guest is looking for in a hotel. Studies by Lewis and Pizam (1981), Swerdlow and Patterson (1983), Lewis (1984), and Hermann and Quain (1985) seek to identify the hotel attributes desired by various customer groups. Using these sources as well as the personal experience of one of the researchers, (a former hotel manager), a set of ten attributes was developed. The respondents were asked to rank order the attributes from most important to least important in the selection of their favorite hotel. While the rank order leads to, in a strict interpretation, only ordinal data, it also assures an elimination of the lack of variance that often occurs with a Likert scaling of desirable attributes. The ten attributes selected are given in Table 1, questions 5 to 14.

Promotional Tools

The hospitality industry is confronted with the problem of widely scattered customers and rather limited promotional budgets. While there is a recognition of the value of good promotion (Pritchard 1982), the question of how to promote a hotel is still being investigated (Lewis and Chandrasekar 1982). A list of seven promotional tools was developed by the researchers. The respondents were asked to indicate their degree of use when selecting a hotel. The scaling was from 4--Use the most, to 1--Do not use. The seven items used are listed in Table 1, questions 15 to 21.

Use Rate and Demographics

Use rate was measured with a single scale that asked how often the respondent traveled. The response categories ranged from 1--more than once a week, to 7--less than once a year. Demographics used in this study were age, sex, and income.

Sample

The questionnaire was administered at Moisant Airport, the major air terminal for the city of New Orleans, in the fall of 1983 prior to the Thanksgiving holidays[1]. This was done to avoid a skewing towards holiday, as opposed to business travelers. Interviewing at the airport also meant that all the respondents were in the middle of the travel experience, and the objectives of this study were very real and immediate concerns to the sample. A total of 478 questionnaires were analyzed.

Data Analysis

Screening questions asked whether or not the respondent was leaving the New Orleans airport at the end of a visit after staying in a local hotel or motel. Thus, all qualified respondents had stayed at a hotel or motel in New Orleans during their visit. The primary differentiating variable in this study was, "How did you choose this hotel?". Six primary reasons were observed for choosing the particular hotel. They were:

CHOICE GROUP	NUMBER	PERCENT
Stayed there before	92	19.2%
Travel agent	50	10.5%
Friend recommended	54	11.3%
Convention was there	165	34.5%
Business associate recommended	52	10.9%
Secretary made reservation	65	13.6%

These are the reasons for choosing the actual hotel stayed at. Thus, the remainder of this study will deal with the relationships between these choice groups and the independent variables.

A multiple discriminant analysis was run using the six actual choice groups as the dependent variable. The independent variables related to hotel guest needs, promotional tools, use rate demographics, reason for travel, expense account, and reservation as the independent variables. Each of these variables is specified in Table 1. The discriminant analysis resulted in four dimensions significant at the .05 level. However, given the human weakness in interpreting more than two dimensions at once, only the two primary discriminant functions were examined further. These functions were both significant at beyond the .0001 level, accounting for 57.07% and 17.29% of the variance, respectively. The standardized discriminant function coefficients are presented in Table 1.

While some sources imply that interpretation of multiple discriminant analysis can follow from a direct examination of the standardized discriminant coefficients, this is valid if and only if the independent variables are uncorrelated. As with multiple regression, multicollinearity distorts the value of the discriminant coefficients so that a direct interpretation is quite hazardous. A more appropriate procedure is to examine the correlations between the questions and the discriminant functions themselves (Johnson 1977). These correlations are generally referred to as structure coefficients (Klecka 1980). These coefficients are also presented in Table 1. The larger the absolute value of the correlation with the function, the more that specific question is related to the discriminant axis. This relationship implies that the question is more important in differentiating between the segments along the axis. The multiple R values are analogous to those in multiple regression. Therefore, question 2, traveling for business or pleasure, is most highly related to both of the two discriminant functions.

A geometrical interpretation of the results is presented in Figure 1. This graph displays the data in a much more direct fashion. Computing the mean discriminant scores for each of the six segments results for the points in Figure 1. They are simply the cannonical discriminant functions evaluated at the group centroids. An immediate finding is the right-hand side of the graph represents business users, while the left-hand side of the graph appears to indicate pleasure users. Convention, secretary made the reservation, and business associates recommendation are the specific methods of choosing the hotel on the right-hand side of the figure. A friend's recommendation, stayed there before, or used a travel agent is on the left-hand side of the plot. As was expected, this business versus pleasure differentiation occurs immediately.

Visually examining the features that differentiate the six segments is taking advantage of a geometric characteristic of multiple discriminant analysis. The structure coefficients are directly related to direction cosines (Johnson 1977). Thus, an attribute vector can be plotted for all the questions in the study. The attribute vectors visually indicate the way in which the six segments differ from each other in terms of both the specific attribute and the direction of the attribute. To interpret the attribute vectors, consider question 2, travelling for business or pleasure. From Table 1 not only are the structure coefficients for question 2 given, but also a multiple R value and a significance level. The significance level is a one-way analysis of variance, where the six groups are the dependent variable and the mean value on each specific question for each group represents the independent variable. Before a variable was chosen to be plotted as an attribute vector in Figure 1, the ANOVA had to be significant. Next, the multiple R was utilized to indicate the strength of the relation between a specific question on both discriminant axes, with only the larger multiple R questions being plotted.

Question 2, travelling for business or pleasure, is significantly different among the six choice segments, and its multiple R is the highest. Therefore, it is the most important variable in differentiating between the six selection groups. Notice also, that it is very close to the first discriminant axis, which accounts for 57% of the total variance. Thus, the first discriminant axis, that is, the first discriminant function, is a business versus pleasure dimension. This interpretation is further strengthened by question 3, on an expense account or not, which had the second highest multiple R. This particular question literally sits on top of the first discriminant axis. Therefore, the primary discriminant axis is differentiating between business and pleasure travel, as was initially apparent visually.

The second discriminant axis, accounting for 17% of the variance, seems to be most highly related to the use of a travel agent. The multiple R on this question was third overall. The group that selected their hotel with the use of a travel agent is closest to the head of the vector.

Respondents who had higher incomes and reservations were the more likely to be convention attendees. And least likely to have simply, stayed there before. Although dropping a perpendicular from both reservation and higher income, one sees a much higher income, one sees a much higher tendency to have used a travel agent.

The remaining three plotted attributes friend or business associates recommendation, pick on arrival, or use billboard advertising, were used by those who selected their hotel because they had stayed there before, or relied on another's recommendation. These attribites were more preferred by the pleasure traveler.

The billboard or pick on arrival method would seem more common with non-airline travelers. The fact that it did emerge, even with airline travelers, is an indicator of possible importance of billboard advertising. Only 3.1% of the total sample actually chose there hotel by billboard advertising on this trip. For this reason, it was not used in the discriminant analysis, but use of billboard advertising by car travelers may be significant.

Implications

Business use, specifically the convention, appears to be the most important feature in hotel selection. To some extent, this is fortunate, as most hotels "marketing" departments are purely sales related. This sales relation is directed primarily towards convention usage. Thus, conventional hotel wisdom, in terms of the effectiveness of a sales orientation, seems to be fairly appropriate for the business segment, which represents about 80% of hotel business.

The present study utilized airport travelers exclusively. The automobile traveler has more mobility, thus more flexibility, available in choosing a hotel. Therefore, the number of air travelers who still replied positively to the question, pick upon arrival, was surprising.

Conclusions

An understanding of the hotel user is an effective preliminary for developing a marketing plan for a hotel. The above discussion has been based upon a perceptual map as opposed to a preference map (Myers and Tauber 1977). A more appropriate segmentation analysis would utilize preference mapping. While the authors recognized limitations of the present study, it still begins to shed some light on the mechanics of actual hotel choice.

[1]The authors wish to thank the administration of Moisant Airport for the tremendous amount of cooperation provided. Without the free access interviewers were given to airport patrons, this study would have been impossible.

References

Hermann, Peter W. and Quain, William J. (1985), "Heavy-Half Segmentation for the Hotel Industry", Proceedings: Southwest Marketing Association, Crawford J. and B. Garland, eds.

Johnson, R. K. (1977), "Multiple Discriminant Analysis: Marketing Research Applications," in Multivariate Methods for Market and Survey Research, J. Sheth ed., Chicago: American Marketing Association.

Klecka, William R. (1980), Discriminant Analysis. Beverly Hills: Sage Publications.

Lewis, Robert C. (1982), "Developing a Benefit Matrix for Positioning Hotels," in The Practice of Hotel Management, A. Pizam, R. Lewis, and P. Maning, eds. Westpoint: AVI Publishing.

Lewis, Robert C. (1983), "Getting the Most from Marketing Research," The Cornell HRT Quarterly, 24 (November), 81-85.

Lewis, Robert C. (1984), "The Basis of Hotel Selection," The Cornell HRT Quarterly, 25 (May), 54-69.

Lewis, Robert C. and Chandrasekar, V. (1982), "Restaurant Advertising: Is Anyone Listening?," The Cornell HRT Quarterly 23 (May), 79-84.

Lewis, Robert C. and Pizam, Abraham (1981), "Guest Surveys: A Missed Opportunity," The Cornell HRT Quarterly 23 (May), 79-84.

Lewis, Robert C. and Pizam, Abraham (1981), "Guest Surveys: A Missed Opportunity," The Cornell HRT Quarterly, 22 (November), 45-52.

Myers, James A. and Tauber, Edward (1977), Market Structure Analysis, Chicago: American Marketing Association.

Nunnally, Jum C. (1978), Psychometric Theory, 2nd. ed., New York: McGraw-Hill.

Pritchard, Garth (1982), "Tourism Promotion: Big Business for the States," The Cornell HRT Quarterly, 23 (August), 48-57.

Swerdlow, R. A. and Patterson, L. T. (1983), "Hotel Marketing: A Segmentation Case Study," Southwest Marketing Association Conference Proceedings, J. C. Crawford and J. R. Lumpkin eds., Southwest Marketing Association.

TABLE 1
DISCRIMINANT COEFFICIENTS AND STRUCTURE COEFFICIENTS

Question	Standardized Discriminant Coefficients		Structure Coefficients		Multiple R
	1	2	1	2	
1. Sex	-.04	-.27	.24	-.03	.24 *
2. Traveling for business of pleasure	.72	-.27	.84	-.11	.85 *
3. On an expense account	.21	.07	.77	-.01	.77 *
4. Reservation	.21	.10	.34	.27	.43 *
5. Close to transportation	-.01	.15	.04	.10	.10
6. Clean rooms	-.03	-.17	-.03	-.20	.20
7. Knowledgeable staff	-.07	-.11	-.11	-.10	.15
8. Inexpensive	.18	-.08	.18	-.04	.19
9. Close to places you want to go	-.10	-.14	-.10	-.16	.20
10. Accurate Billing	.04	.15	-.02	.18	.26
11. Luxurious appearance and decor	.20	.01	.07	-.00	.07
12. Friendly staff	.00	.09	-.03	.09	.09
13. Good food for the price	.26	-.06	.15	.00	.15
14. Quick check in and check out	-.14	.25	-.20	.21	.29 *
15. Travel agent	-.03	.59	.10	.67	.67 *
16. Friends or business associates recommendation	-.15	-.32	-.23	-.37	.43 *
17. Television advertising	-.36	.23	-.27	-.09	.28 *
18. Magazine advertising	.22	.02	-.06	-.15	.14 *
19. Billboard advertising	-.05	-.18	-.22	-.23	.32 *
20. Past experience with hotel chain	.11	-.10	.02	-.26	.24 *
21. Pick a hotel when arriving	-.06	-.22	-.23	-.36	.43 *
22. Frequency of travel	.42	.22	-.07	.15	.14
23. Age	-.08	.14	.02	.28	.28 *
24. Income	.15	.28	.41	.29	.50 *

*ANOVA between the six choices was significant at the .05 level.

SELECTION SEGMENTS AND ATTRIBUTE VECTORS

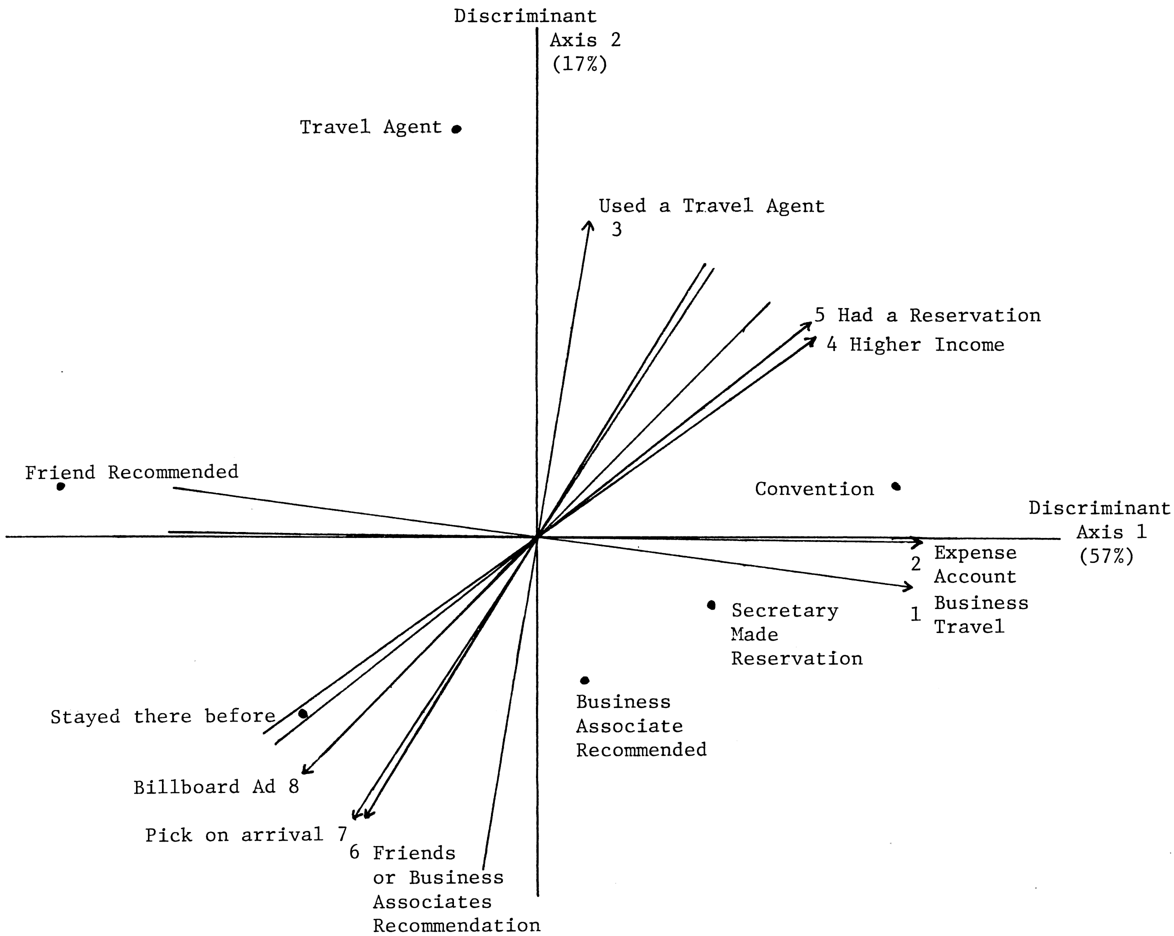


Figure 1

THE INFLUENCE OF ATTITUDES ON NURSE RECRUITMENT

Rebecca M. J. Yates, University of Dayton
Lynn M. Schultz, University of Dayton

Abstract

The purpose of this study was to provide quantitative data as a basis for the development of a nurse recruitment program. Quantitative measures were designed utilizing Fishbein's Expectancy Value Model and assessed using Chi-Square Analysis, and Facotr Analysis. Fishbein's Model provided a list of attributes, identified by the nurses as being of highest importance when making an employment decision. Further, the model represented the degree of importance the nurses attached to each respective attribute. Cross tabulation of the data was performed through Chi-Square Analysis in order to examine the interrelationships among the attributes. The use of factor analysis provided a means to evaluate the attributes in terms of their synergistic effects when communicated to the nurses as a unified set. Also identified in the study were the information sources most influential in the nurse's employment decision. In conclusion, from the perspective of a nurse recruiter, internal and external recommendations were made to successfully attract potential employees.

Introduction

As a result of the current shortage of registered nurses, the nature of nurse recruitment has become increasingly competitive. [1] A successful recruiter can gain a competitive edge by utilizing a marketing approach to attract potential employees.

The goal of the marketer is to maximize consumer satisfaction. In terms of nurse recruitment, the consumer is a registered professional nurse, the product is a nursing position and the consumer wants/needs are considerations in employment decisions. To build upon this foundation, the task of the nurse recruiter is twofold: First, the recruiter must identify those factors influencing employment decisions. SEcondly, the recruiter should assist in both the development of those factors within the institution and also the communication of what the institution has to offer in terms of these needs. [2]

Speculation on methods of attracting nurses into the work force and retaining them are prevalent. However, there is an absence of quantitative marketing research validating these techniques. This study was designed to provide quantitative data as a basis for developing a recruiting program. This was accomplished by:

a) Identification of nurses' needs/wants when making decisions;

b) Determining the nurses' perceptions of the extent to which a specific hospital is able to fulfill these needs;

c) Obtaining a measure of local nurses attitudes toward the hospital as an employer;

d) Development of a recruiting program for the nursing department utilizing a marketing approach.

Theoretical Background

The framwork for this study was Fishbein's expectancy value model. (Note Diagram #1) [3] This model defines attitude as a summation of beliefs about an attribute with consideration given to the importance attached to each attribute.

In this study, the attributes (1-n) were the nurses' various employment decision considerations. The beliefs (b) are the degree to which the nurses perceive a hospital to offer these attributes. The evaluation (e) represents the importance of each attribute (in this case, the importance of each employment decision factor) to the nurse. The result of the beliefs multiplied by the weighted evaluation factors forms the nurses' overall attitude (A) toward the hospital as an employer.

DIAGRAM # 1

$$A = \sum_{1}^{n} b_{1-n} \; e_{1-n}$$

Methodology

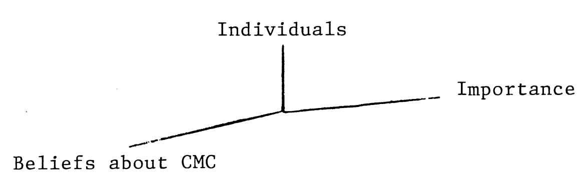
Montgomery County, Ohio nurses were surveyed to determine their attitudes toward the Childrens Medical Center (CMC) in Dayton, Ohio. Initially, a broad facet design was developed, representing the formation of the nurses attitude toward CMC as an employer. (Note Diagram # 2) As illustrated, the design is based on the interaction of three key factors:

a) Individuals: professional registered nurses;

b) Beliefs: beliefs about CMC as an employer;

c) Importance: evaluations of the importance attached to each employment decision criterion.

DIAGRAM # 2



The first step necessary in the formulation of this design was to obtain a comprehensive list of attributes affecting nurses' employment decisions. A literature review produced a list of 37 attributes which were presented as broad statements of belief about any employer and statements of belief about CMC specifically. For the evaluation of these statements, a direct judgement method was utilized allowing for a limited scale response. The survey yeilded interval scale data fot he belief and importance attributes, with positive responses consistently on the high end of the scale in order to decrease the possibility of respondent confusion. Because it was realized that such a format may result in a more sterotyped response, on the CMC segment of the questionnaire the respondents had the option of leaving an item blank if they were uncertain of their answer. This indicated a true lack of familiarity with the hospital and/or the operation of the nursing department, yet did not interrupt the interval scale.

Once the prelimiary questionnaire was designed, content validity was examined using expert interviews and a focus group. These experts were chosen within the field of nursing on the basis of their educational background and experience. The focus group consisted of CMC nurses with a variety of patient care specialities and a wide range of education preparation and experience. Each group evaluated the survey for completeness, structure and ambiguity.

Date Analysis

The data resulting from this survey was broken down into three segments: descriptive variables, attributes and information sources. The descriptive section consists of information pertaining to the respondents' employment, preferred areas of practice, and educational background. The section entitled attributes reveals the degree of importance the nurses place on each employment decision factor, as well as their perception of CMC. Also included in this section is an evaluation of the responses in the form of three different analyses: Fishbein's Expectancy Value Model, Chi-Square Analysis and Factor Analysis. The third section, information sources, provides an evaluation of the responses based on the sources of information the nurses utilize and how it relates to the institution. The information obtained in each respective segment is represented in TAbles 1 - 5, please note appendix.

Descriptive

Approximately 3400 registered nurses live in Montgomery County. The desired sample size was 10% of the population. Four hundred surveys were mailed, forty-one of which were not deliverable, making the sample size 359. The subjects were randomly chosen with respect to zip code due to the possibility of location giving a skewed view of attitudes.

One hundred and twenty surveys were returned for tabulation (33.4%). Of those returned, eighty percent were employed in nursing. The employment breakdown of those surveyed according to place of employment and positions held is presented in Tables 1 and 2. The percentages calculated in reference to the place of employment are comparable to the profile of employed nurses in Dayton. In reference to the positions held, the position of staff nurse was cited by an overwhelming 54.3% of the nurses surveyed. Information was also obtained regarding the nurses' preferred area of practice. (Table 3) The top three areas noted were: adult Medical Surgical - 22.9%, Pediatrics - 9.5%, and adult/Critically ill - 8.5%. For those who indicated a preference for Pediatrics (Table 4) the top two areas, Neonatal Intensive Care Unit and Pediatrician's Office, comprised 60.1% of the total responses with ratings of 33.4% and 26.7%, respectively. In addition, data was submitted by the nurses in respect to the educational preparation for their positions. (Table 5) These figures indicate that the majority of nurses, 58.9%, are diploma graduates. Further breakdown indicated that 23.3% hold associate degrees, 16.1% hold a bachelor of Science in Nursing, and only 1.8% have earned a masters in nursing. These figures are very similar to the national profile of nursing preparation. [4]

Attributes

This data revealed the degree of importance the nurses attached to each decision employment factor when making a career choice. The attributes highest in importance were:

1) adequate staffing to provide optimal patient care;

2) a sense of pride in the nursing care provided;

3) a nursing staff which works well together;

4) a well managed nursing department.

The attributes with the lowest importance ratings were:

1) availability of hcild care services;

2) availability of dental plan;

3) the opportunity for career advancement in nursing administration'

4) availability of primary nursing.

Although availability of primary nursing was rated one of the lowest in importance on average, there was a significant number of responses at both extremes, statistically this attribute had the highest variance of all.

The nurses' responses to CMC specifically on a scale of agree/disagree, resulted in the following data replies. The most positive statements that CMC received were:

1) CMC's flexible scheduling for its nursing staff;

2) CMC has modern facilities;

3) the nurses who work at CMC are recognized as making an important contribution to the Dayton community;

4) the nurses at CMC take pride in the nursing care they provide.

On the other hand, CMC received the lowest ratings in the following areas:

1) CMC has enough nurses to provide optimal patient

2) the salary at CMC is comparable to other Dayton hospitals;

3) the nursing department at CMC is well managed;

4) nurses at CMC are able to impact decisions throughout the hospital.

In reference to the CMC responses, the data revealed that an average of 65% of the respondents were not familiar enough with CMC to answer specific questions about either the institution of the nursing department. This significant point will be used as a basis for recommendations later in this study.

Fishbein's Model

The measure of Dayton area nurses' attitudes toward CMC was determined using Fishbein's expectancy value model previously mentioned. In order to avoid falsely lowering the rating by including those with no opinion of CMC, the calculations incorporated only those who considered themselves familiar or very familiar with CMC. Each respondents' score was determined using only those questions that were answered, any unanswered questions were omitted to maintain standardization. Further standardization of the responses was achieved through amodification of Fishbeins' Model, in which an average for each individual's score was obtained. The result of these calculations established a score of 7.603 for CMC on a scale of 1 to 25, with one as the most negative and twenty-five as the most positive. Since no other health care institutions were evaluated, the rating of 7.603 is relative to an ideal, not to other local hospitals. While the representative score standing alone may not reveal a great deal the process involved in obtaining it is very beneficial. Through this procedure CMC has uncovered the importance the nurses attach to each attribute, their beliefs that the institution maintains them, and the nurses overall attitude toward the CMC as an employer.

Chi-Square Analysis

Through the use of chi-square analysis, the interrelationships among attributes were examined. Several significant interactions were identified as follows. The importance of location in employment decisions is related to position, with staff nurses valuing a convenient location more than head nurses, nursing administrators or educators. Nurses with both bachelors and masters degrees in nursing were shown to value salary as well as the opportunity to be creative more than nurses with lesser degrees.

Factor Analysis

Factor analysis was performed on the improtance data in order to identify the "dimensions underlying manifest variables." [5] Descriptions of these factor dimensions can be inferred from the variables which comprise each set. A variable taken singly may not be considered extremely important, but grouping it with other related variables via factor analysis enhances the value of the combined variables. Factor analysis revealed ten areas of importance to nurses in employment decisions. The first four of these comprise 73% of the variation in the original data and are most relevant to this analysis. Factor 1 explains 44% of the common variance in the data. This factor will be termed "Professional Growth." Dimensions included in this factor:

1) ability to make an important contribution to the Dayton community.

2) opportunity to be creative.

3) ability of nursing staff to impact decisions within the nursing department.

4) ability of nursing staff to impact decisions throughout the hospital.

5) opportunity for career satisfaction.

6) open communication channels between nursing administration and nursing staff.

7) high technology available.

8) nursing considered an integral part of the health care team.

9) opportunity for career advancement in nursing administration.

10) continuing education to provide the opportunity to stay abreast of developments in nursing.

11) nursing administration values continuing education.

The recruiter must recognize that the variables comprising "professional growth" have a synergistic effect when presented as a unit to a nurse considering an employment decision.

An additional 12% of the common variance is explained by Factor 2. Elements of this "Convenience" factor are:

1) modern facilities.

2) comprehensive dental plan.

3) latest equipment for providing patient care.

4) easily accessible location.

Furthermore, 10% of the common variance is explained by Factor 3 -- "BEnefits" comparable to other local hospitals is the major component of this factor. Seven percent of the common variance is explained by Factor 4. This factor identifies the nurses' desire to reach a position that requires responsibility consistent with their training.

The importance of factor analysis is manifested in the development of a satisfied staff. In order to maintain a satisfied staff the most important attributes must be provided. The reason for this emphasis is that the attributes with the highest importance ratings are not necessarily satisfiers if present, but are dissatisfiers if absent. Therefore, a nursing department must be perceived as maintaining the following:

1) adequate staffing;

2) pride in the patient care provided;

3) a nursing staff which works well together;

4) a well managed nursing unit.

Based upon factor analysis, satisfying the components of the professional growth factor will promote career satisfaction. Therefore, nursing administration must promote openness in communication, creativity and continuing education in order to provide high levels of professional growth.

For institutions that value baccalaureate or masters prepared nurses, administration must be aware that these nurses value salary as well as creativity. Therefore, compensation must be competitive in order to attract nurses with these levels of educational preparation, followed by a program that encourages creativity in order to both attract and retain these staff members.

Information Sources

Data pertaining to the different types of information sources were also obtained. The rank order of the most influential sources in listed below:

Other Nurses	48.5%
Family and Friends	14.6%
Newspaper Advertising	5.8%
Hospital Recruiter	3.0%
Career Day/Job Fair	2.0%
Nursing School Counselor	1.0%
Nursing School Instructor	1.0%
Direct Mail Advertising	1.0%
Other	23.1%
Total	100.0%

The study revealed that the two most frequently used information sources are the recommendations from other nurses and those from family and friends. From this standpoint, it would be most beneficial for CMC to reach these nurses through these identified influential sources. What can be done to promote positive "word of mouth" communications?

Fundamentally, current employees must be satisfied with their careers. If staff members' wants/needs are being fulfilled by the institution, they will promote employment at that institution among their friends. Secondly, as Berry points out, nurses who are satisfied with their careers will consistently provide higher quality care to the patient and family. [6] This will result in positive recommendations by healthcare patients to family and friends who may be potential employees.

Recommendations

Internal.

Recommendations for CMC include internal and external promotion. Internally, nursing administration must promote word of mouth communications by enhancing career-satsifaction among the nursing staff. An attitude measure of CMC nursing employees will provide a data base, identifying areas that require improvement. Reward for achievement in the form of peer recognition will be an incentive for "professional growth." A feature story in the monthly nursing newsletter recognizing the contributions of a staff member nominated by their peers may be one short term incentive. In the long run, a career ladder for identification of career achievement can be utilized as an effective tool for rewarding professional growth. Overall, extensive efforts must be made by the administration to facilitate open communication channels at all levels throughout the institution.

External.

A significant fact revealed by the survey is that 65% of Dayton area nurses are not familiar enough with CMC to have an opinion about the institution or the nursing department. (Note previous section.) Therefore, an external promotional program must be developed to reach a broad spectrum of nurses in the community. The importance attributes depicted in the professional growth factor that the hospital maintains must be identified through a promotional program. VArious measures can be utilized to accomplish this awareness objective.

Several media sources such as trade journals, magazines and local newspapers provide a means to promote the attributes of the hospital through image building ads. The message conveyed would focus on the attributes noted in the study as being of highest importance to the nurses, i.e., adequate staffing for optimal patient care, a sense of pride generated throughout the hospital, and a unified, effective and well managed nursing staff. Another promotional tool that could be utilized is direct mail. Letters or flyers could be sent out to the registered nurses or nursing students throughout the community describing CMC in terms of supporting the important personal growth factors. (Refer to factor analysis.) Thus, the following factors would be emphasized together to create a synergistic effect: the integral role the nurses play in the hospital as well as the community, the importance of their decisions and resulting impact on the nursing department and the hospital, the open communication channels that exist, the opportunity for career satsifaction and advancement, and the high technology put forth by the administration to support continuing education.

Another form of direct mail that Dickson describes involves the mailing of ten minute cassette tapes to interested nurses. [7] These tapes describe philosophy, goals and objectives of the department using the voices of staff nurses to add a personal touch. This promotion would be a unique way of delivering a word ofmouth message reaching a broad audience.

Perhaps a more personal approach would be to provide opportunities for registered nurses and nursing students to visit CMC and speak directly with administrative and staff members. THis technique would offer the nurses a more in-depth view of the hospital. Follow up literature could also be sent to interested individuals to further enhance the personalization of this appraoch.

To gain additional awareness, it would be beneficial for CMC to reach potential registered nurses that are still in the educational stage of their career. Arranging for CMC representatives to speak at various nursing schools in the community in reference to nursing careers (i.e., various fields, career opportunities, educational preparation), while at the same time providing information about the attributes that CMC has to offer. A second technique would be for CMC to sponsor interesting seminars that provide educational information for the nurses (i.e., treatment diagnosis for specific diseases, patient care techniques). Taking this idea one step further, this concept could be extended to the entire community. With the trend toward more personal health care and fitness, many individuals may be interested in seminars dealing with these issues. This approach would serve a dual purpose, the first being community education, and the second being promotion of the ideal that CMC values continuing education and promotes openness and creativity in its nursing staff.

Conclusions

Developing a data base of the nurses' need/wants is the first step to being able to fulfill their needs effectively. This study has identified the factors important to nurses in making employment decisions and has demonstrated how Children's Medical Center is perceived as being able to satisfy them. Thus, the major point presented throughout this analysis is the importance of first recognizing consumer needs and then, and only then, developing means to fulfill these needs within the institution and communicating these attributes to the consumer.

Finally, the marketer must remember that this is a dynamic provess. Once a plan of action has been implemented, the effects must be evaluated and the necessary changes made for improvement.

Appendix

TABLE 1

PLACE OF EMPLOYMENT

Place of Employment	Percentage Employed
Kettering/Sycamore Hospital	22.7%
Miami Valley Hospital	13.6%
Doctors' Offices	12.5%
St. Elizabeth's Medical Center	10.2%
Good Samaritan Hospital	5.7%
School Nurse	4.5%
Community Aging	2.3%
Grandview Hospital	2.3%
Nursing Homes	2.3%
Psychiatric Institutions	2.3%
Children's Medical Center	1.1%
Purchase Pool	1.1%
Wright State University	1.1%
Occupational Health	5.7%
Other	12.6%
Total	100.0%

TABLE 2

POSITIONS HELD

Positions Held	Percentage Employed
Staff Nurse	54.3%
Charge/Head Nurse	15.2%
Educator	7.6%
Nursing Administrator	5.4%
Clinician/Clinical Specialist	1.1%
Other	17.4%
Total	100.0%

TABLE 3

PREFERRED AREA OF PRACTICE

Preferred Area of Practice	Percentage of nurses
Adult Medical/Surgical	22.9%
Pediatrics	9.5%
Adult Critically Ill	8.5%
OB - GYN	7.6%
Community Health	5.7%
Family Practice	5.7%
Adult Psychiatric	3.9%
Adult OR	3.8%
Emergency Room	3.8%
Teaching in a School of Nursing	3.8%
Adult Out-patient Clinic	2.9%
Geriatrics	2.9%
Nursing Administration	2.9%
Adult Orthopedics	0.9%
Adult Rehabilitation	0.9%
Other	12.4%
Total	100.0%

TABLE 4

SPECIALTY AREAS IN PEDIATRICS

Areas of Specialty in pediatrics	Percentage of nurses
Neonatal Intensive Care Unit	33.4%
Pediatrician's Office	26.7%
General	13.3%
Newborn Nursing	13.3%
Pediatric Intensive Care Unit	6.7%
Pediatric Nurse Associate	6.6%
Total	100.0%

TABLE 5

EDUCATIONAL PREPARATION

Educational Preparation	Percentage of nurses
Diploma	58.9%
Associate Degree	23.2%
Bachelor of Science in Nursing	16.1%
Masters in Nursing	1.8%
	100.0%

Footnotes

1. "RN Magazine Assessment of the Nursing Shortage," Medical Economics Research Group, September 1980.

2. Kotler, P. E., Marketing Management, Englewood Cliffs, N.J.: Prentice-Hall, Inc., 1980, p. 16.

3. Engel, James, et. al., Consumer Behavior, Hinsdale, IL: Dryden Press, 1978, p. 389.

4. "Nursing Today--A Statistical Portrait," American Journal of Nursing, March 1982, p. 451.

5. Green, Paul and Tull, Donald, Research for Marketing Decisions, Englewood Cliffs, N.J.: Prentice-Hall, Inc., 1970.

6. Berry, Leonard, "Services Marketing is Different," Business, May-June 1980, p. 27.

7. Dickson, Mary BEth, "Reaching Out," Profiles in Hospital Marketing, Third Quarter 1981, p. 20.

References

Berry, Leonard, "Services Marketing is Different," Business, May-June 1980.

Campbell, D. and Stanley, J. Experimental and Quasi-Experiemental Designs for Research. Boston: Houghtin Mifflin Co., 1963.

Dickson, Mary Beth, "Reaching Out," Profiles in Hospital Marketing, Third Quarter 1981.

Engel, James; Blackwell, Roger; Kollat, David, Consumer Behavior. Hinsdale, IL: Dryden Press, 1978.

Fishbein, Martin and Ajzen, Icek, Belief, Attitude, Intention and Behavior: an Introduction to Theory and Reserach. Reading, MA: Addison-Wesley Publishing Co., 1975.

Fishbein, Martin, Readings in Attitude Theory and Measurement. New York: John Wiley and Sons, 1967

Green, Paul and Tull, Donald, Reserach for Marketing Decisions. Englewood Cliffs, N.J.: Prentice-Hall, Inc., 1970.

Kotler, P. E., Marketing for Non-Profit Organizations. Englewood Cliffs, N.J.: Prentice-Hall, Inc. 1975.

Kotler, P. E., Marketing Management. Englewood Cliffs, N.J.: Prentice-Hall, Inc., 1980.

Nie, Norman, et. al., SPSS. New York: McGraw Hill Co., 1975.

"Nursing Today -- A Statistical Portrait," American Journal of Nursing, March 1982.

"RN Magazine Assessment of the Nursing Shortage, Medical Economics Research Group,September 1980.

THE PROFESSIONAL SERVICE PROVIDER AND THE CLIENT: A DIFFERENT TYPE OF EXCHANGE RELATIONSHIP

Kenneth E. Crocker, Bowling Green State University

Abstract

The paper compares and contrasts the exchange process and resulting interactions of a professional and client with a typical commercial exchange relationship. Unique aspects of the relationship are discussed that highlight the need for further research and development of a "client" behavior model.

Introduction

While there are those who argue that current marketing knowledge regarding the behavior of individuals towards goods is transferable to the service sector of the economy (Levitt, 1972; Enis and Roering, 1981), the consensus in the literature is that services are different and a definitive area of study must be established (Rathmell, 1974; Sasser, 1976; Shostack, 1977; Bateson, 1979; Hempel and Laric, 1979; Lovelock, 1979, 1983; and Gronroos, 1980). These differences have been well articulated by those mentioned and by others not cited; and will not be reiterated here. The purpose of this paper is to focus on one unique aspect of professional services that requires further discussion and research; the professional service provider/client interface. It is felt that this relationship sets this encounter apart from many other service encounters.

Professional/Client Interface

There are several aspects of this relationship that make it different from the normal service encounter, among those are:

1. The consumer's confidence must reside in the source that provides the services;

2. The consumers may be more involved with both the creation and consumption of the service;

3. The mental image of a service is less concrete than the image of a good;

4. The consumer, in many cases, lacks the technical knowledge to comprehend the act being performed;

5. A consumer's urgency in selecting the professional may influence the selection process.

(Rathmell, 1974; Sasser, 1976; Bateson, 1979; Gronroos, 1980; and Lovelock, 1983)

Many commercial transactions have traditionally been conducted under the caution, caveat emptor, let the buyer beware; whereas in the arena of professional services these transactions have operated under the credo "credit emptor," let the buyer trust. The first phrase is one we generally accept notwithstanding the trend toward "caveat vendor," let the seller beware. The second phrase, however, strikes a discordant note in many but is the essence of the professional/client relationship. Part of the alien feeling for this phrase lies in our mode of thought that is by tradition bound in consumer goods marketing. However, by examining more closely the professional/client relationship the "credit emptor" phrase is not so alien or unwieldy.

Exchange Relationship

A buyer and seller who enter into a transaction for a good have an understanding on several issues. One, it is recognized that the seller is, more often than not, motivated by profit. Second, the seller is recognized, as having some degree of expertise about the item under consideration thus is granted some legitimate authority. Third, both parties, for the most part, expect to be able to receive and ask questions regarding the transaction. Lastly, if the item that is being transacted for does not meet the buyer's expectations, the resulting complaint is taken as being based on sufficient knowledge. That is, the complaint and resulting discussion takes place on concrete issues such as length of purchase, care of product, warranty, etc., and not on issues of relative experience (Nilson and Edelman, 1979; Triandis, 1977).

The transaction described above provides a framework for a comparison to transactions dealing with professional services. Involved are at least two parties, the buyer and seller, who come together for the purpose of attaining some benefit. The buyer to achieve some degree of satisfaction from the item central to the exchange; the seller to obtain satisfaction from the buyer, usually expressed in monetary terms. The individuals are engaged in an exchange situation that is represented by a social process that is ongoing between the parties. The situation is bounded by the economic and psychological constraints of the setting and the individuals.

Baggozi (1978) hypothesized that exchange relationships are a function of three constructs:

1. The characteristics of the social actors
2. The social influence of the actors on one another
3. the situational context of the exchange.

Each of the constructs will be examined as they bear on the professional/client relationship.

Characteristics of the Social Actors

Among one of the distinguishing traits that sets a professional apart from a tradesman is the possession of specialized knowledge based on theoretical foundations. Upon this possession of knowledge the professionals lay claim to autonomy and self-regulation (Carr-Saunders, 1966; Greenwood, 1966; Daniels, 1973; Friedson, 1973). As a result, the professional enters into the relationship with the client with legitimate authority based on expertise and the client brings an element of implied trust based on the professional's possession of this specialized knowledge (Greenwood, 1966; Moore, 1976). Moore (1976, p. 97) states that "in return for the trust that a client places in a professional whose help he seeks, the professional owes various duties to the client." Among these are:

1. The obligation to remain abreast of developments in the professional's area of expertise;

2. To preserve the confidentiality of both the relationship and information exchanged therein;

3. To attend to the client's welfare.

This latter duty can be used to highlight how this relationship differs from the traditional commercial one; it is the corollary duty of the professional to refuse service to a client when in the opinion of the professional they are not needed. This is the positive interest that a professional displays on behalf of the client (Moore, 1976). This positive interest would seem out of place in a commercial transaction. It is elements such as these that help create an atmosphere in which the client brings a degree of trust, and as mentioned earlier why the client's confidence must reside in the professional service provider.

Social Influence of the Actors

The knowledge that the professional has the capacity to utilize a body of theoretical knowledge in the solution of a problem for the client provides the professional with power over the client. By either giving or withholding information the professional can improve or worsen the client's fate (Thibaut and Kelly, 1959; Lieberman 1970; Friedson, 1971; Moore, 1976; and Nilson and Edelman, 1979). Thibaut and Kelly (1959) stated that the power of one individual over another will vary with the ability to affect the quality of outcomes attained by the other party. The client then is in an unequal position.

This inequality is enhanced by the professional is several ways. An integral part of the professions is the use of technical language. Technical in the sense that, as in the case of law or medicine, it must be precise and contain the same meaning to other professionals. This language also serves as a form of identification for the professional in that it distinguishes a professional from a non-professional (Moore, 1976). This language, also called jargon, esoterica, and dramaturgy, serves to reinforce the aura of the professional (Moore, 1976; Nilson and Edelman, 1979). In addition to this technical language, the professional institutes "symbols of authentication." Moore (1976) refers to the array of diplomas and certificates of recognition and membership that adorn the walls of the professional's office. Other symbols are the usage of titles and initials; Ph.D., D.D.S., J.D., M.D.

The use of jargon, symbols, and titles adds to the professional's image of authority. Awe is a term that is often used when discussing how people react to a phenomenon they cannot understand, and when that phenomenon is not within their control. Myerhoff and Larson (1972) and Nilson and Edelman (1979) state that these elements; jargon, titles, symbols, etc., are the same elements that contribute to the aura of magic, religion, and science. It has been noted that through the influence of teachers, peers, parents, and media representations a lore has surrounded the more prestigious professions. These myths have as their chief function the exaltation of the professional (Nilson and Edelman, 1979). Moore (1976, p. 14) offers a succinct summation when he states that the professional produces a product that is "only formally alienable and is inextricably bound to the person and personality of the producer." Such conditions contribute to the influence and power the professional has over the relationship with the client.

Situational Context of the Situation

One of the accepted dimensions of a service is the consumer's involvement with the creation and consumption of the service. In the case of professional services this dimension is intensified in that the service exists as it is being performed, its consumption is for the most part, simultaneous with the performance of the act. This user participation in production and consumption intensifies what Triandis (1977) terms the particularism of the service. He explains that "it makes a great difference who the particular person is whom the act interacts with." Each diagnosis is dependent on the individual patient, each court plea is tailored to individual circumstances. Particularistic resources are exchanged in a private setting and generally involve intimate behavior; witness the lawyer/client relationship where information is exchanged in confidence, and indeed a lawyer has been referred to as a possessor of guilty knowledge.

In many cases a professional service is not contracted or retained until a need for one is acute; e.g., a broken bone, fever, accident, etc., This urgency may enter into the purchase equation as a compression effect on the prospective client's decision process.

Implications for Future Research

The above discussion provides a venue for examining numerous research opportunities, it also points out several obstacles that may impede research progress.

One concept that seems worth research effort is perceived risk. In dealing with professional services it appears that the perception of risk may be somewhat different. The traditional model suggests two central points, uncertainty and consequences. The consumer, in dealing with a professional, is faced with circumstances that would appear to impact on those factors. First, there are two decisions of importance, the initial one, which professional to retain. This is within the client's control. The second decision, though, how the act is to be performed and results thereof, lies within the professional's locus of control. Additionally, the evaluation of the consequences is two-sided. The client obviously has a concern with the results, while professionals will tend to evaluate the performance in terms of technique, not results (Moore, 1976).

The risk literature informs us that while it may be beyond consumer's power to change the consequences of a poor decision, they can increase their certainty that the choice they make is the correct one (Sheth and Venkatesan, 1968). This procedure is called risk reduction strategy and includes such behavior as brand loyalty, reliance on information seeking. Two points to make; one is the issue of brand loyalty. A consumer's relationship with professionals, the requirement that they divulge personal information, tends to develop what Moore (1976) calls norms of continuity, that is a client's tendency to persist with their original choice among professionals. Second, the issue of information search in relation to seeking a professional service is hindered by the reluctance of many professionals to advertise despite the often cited lifting of bans on such activities.

Another focal point of research may be the atmospherics issue alluded to in the discussion. What effects do atmospherics have on an individual's perception of quality? With the emergence of "Doc in the Box" clinic operations, the appearance of dentistry in retail outlets, optometry in mall stores, this issue seems especially ripe for research.

Is there such a concept as routinized response behavior, or limited problem solving in purchasing professional services, or is it all extensive problem solving? One would expect familiarity and experience to play a role but what is the effect of urgency on the decision process.

Lastly, research dealing with professional services provides some obstacles. The first of these is the subjects involved, the second methodology. Who are appropriate subjects for research of this kind? Students in most cases are not a viable population to study. While they may eventually become users of these services, deciders, their immediate needs are met usually by university services or the decision is subcontracted to family. Thus one must obtain "real world" subjects and face the problems inherent with such sample; response rates, non-response bias, time, and money.

Second, to examine many of the questions that emerge relative to a consumer/client search for an acquisition of a professional service, an artificial scenario may be necessary. This requires careful preparation, including input in the creation from both the professionals and consumers, and, of course, pretesting. The alternative would be an observational type of research or case studies approach. This poses two problems, the first is the acceptability of such research in current journals, proceedings, etc. The second problem deals with the confidentiality of the interaction between the professional and the client.

The opportunity to develop a model of "client" behavior and to test the propositions of such models promise to grow with time as the professional service provider continues to emerge into the marketplace.

References

Bateson, John E. C. "Why We Need Services Marketing," in Conceptual and Theoretical Developments in Marketing, AMA Proceedings, editors O. C. Ferrell, Stephen W. Brown, and Charles W. Lamb, Jr. (1979), pp. 131-146.

Carr-Saunders, A. M. in Professionalization, edited by Howard M. Vollmer and Donald L. Mills, Englewood Cliffs, New Jersey: Prentice-Hall, Inc. (1966).

Daniels, Arlene Kaplan. "How Free Should the Professions Be?" in The Professions and Their Prospects, editor Eliot Friedson, Beverly Hills, California: Sage Publications (1973), pp. 39-57.

Enis, Ben M. and Kenneth J. Roering. "Services Marketing: Different Products, Similar Strategy," Marketing of Services, James J. Donnelly and William George, editors Proceeding Series, American Marketing Association (1981).

Friedson, Eliot. "Professions and the Occupation Principles," in The Professions and Their Prospects, editor Eliot Friedson, Beverly Hills, California: Sage Publications (1973), pp. 19-38.

Greenwood, Ernest. "The Elements of Professionalization," in Professionalization, editors Howard M. Vollmer and Donald L. Mills, Englewood Cliffs, New Jersey: Prentice-Hall, Inc. (1966), pp. 10-19.

Gronroos, Christian (1980). "Designing a Long Range Marketing Strategy for Services," Long Range Planning, Vol. 13 (1980), pp. 36-42.

Hempel, Donald and Michael V. Laric. "Marketing Productivity Analysis: Strategic Implications for Consumer Services," in Conceptual and Theoretical Developments in Marketing, editors O. C. Ferrell, Stephen W. Brown, and Charles W. Lamb, Jr. (1979), pp. 554-566.

Leavitt, Theodore. "Product Line Approach to Services," Harvard Business Review, Vol. 52, (September/October 1972), pp. 41-52.

Lieberman, Jethro K. The Tyranny of the Experts, Walker and Company, New York (1970).

Lovelock, Christopher H. "Theoretical Contributions From Service and Non-Business Marketing," in Conceptual and Theoretical Developments in Marketing, editors O. C. Ferrell, Stephen W. Brown, and Charles W. Lamb, Jr. (1979), pp. 147-165.

__________. "Classifying Services to Gain Strategic Marketing Insights," Journal of Marketing, Vol. 47, No. 3 (1983), pp. 9-19.

Moore, Wilbert E. The Professions: Roles and Rules, Russell Sage Foundation, Inc. (1976).

Meyerhoff, Barbara G. and William R. Larson (1965). "The Doctor as Culture Hero," in The Social Dimensions of Work, editor Clifton D. Bryant, Englewood Cliffs, New Jersey: Prentice-Hall, Inc. (1972), pp. 66-73.

Nilson, Linda B. and Murray Edleman. "Consumer Attitudes Toward Professional Services, Professionals, and Professional Service Advertising," Society, Vol. 16, No. 3 (March 1979), pp. 57-64.

Rathmell, John M. Marketing in the Service Sector, Winthrop Publishers, Inc. (1974).

Sasser, Earl W. "Match Supply and Demand in Service Industries," Harvard Business Review, Vol. 54, No. 6 (November/December 1976), pp. 133-140.

Sheth, Jagdish N. and M. Venkatesan. "Risk Reduction Process in Repetitive Consumer Behavior," Journal of Marketing Research, Vol. 5 (August 1968), pp. 307-310.

Shostack, Lynn G. "Breaking Free From Product Marketing," Journal of Marketing, Vol. 42, No. 3 (July 1977), pp. 74-81.

Thibault, John W. and Harold H. Kelly. The Social Psychology of Groups, New York: John Wiley and Sons, Inc. (1959).

Triandis, Harry C. Interpersonal Behavior, Monterey, California: Brookes/Cole Publishing (1977).

Vickers, Geoffrey Sir. "The Changing Nature of the Professions," American Behavioral Scientist, Vol. 18, No. 2 (November/December 1974).

If it feels like the flu, it must be time to go to the bank: Consumer perceptions about alternative health care providers

David Karns, Wright State University

ABSTRACT

Urgent care centers and hospital satellite clinics have emerged as competition for traditional providers of primary health care in recent years. Sears and other financially integrated consumer firms will pose an even greater challenge to traditional practitioners as economic forces in health care shift profitability from service delivery to financial integration. Exploratory analysis of consumer reactions to receiving primary health care from retail firms suggests potential market shares and marketing strengths.

Introduction

In recent years health care consumers have faced an increasing variety of primary health care providers, that is, providers of treatment for ordinary illnesses, minor trauma and preventive medicine. Traditionally, personal physicians were the principal source for primary care, but now, the health care system includes free standing neighborhood clinics, group practices, preferred provider organizations, hospital satellite clinics, and health maintenance organizations.

Even more recently, organizations not traditionally been identified with health care service delivery have begun to move into the field. Sears, for example, a leading nontraditional health care organization, first established a dental clinic in several California stores in 1977. Sears has dental centers in more than thirty stores, and Montgomery Wards has dental centers in more than a dozen stores. Other dental centers have operated in Two Guys, Peoples Drug Stores, Jamesway, and other outlets. Sears and other retailers also have optical and drug departments located within retail outlets for a number of years. Even more recently, Sears has test marketed primary health care in selected retail outlets. The expansion of Sears into the health care field parallels a similar expansion into the field of financial services through the acquisition of Dean Witter and Caldwell Banker to complement its Allstate Insurance operations.

Expansion of retail consumer organizations into the health care delivery field raise two important questions. (1) What is the motivation to enter the health care field? And, (2) what is the potential consumer reaction to retail firms entering this field? The answers to both of these questions have important implications for marketing of health care services by conventional health care delivery providers facing competition from major retail firms.

Profit motives in the health care industry have moved through several stages. In the first stage, the old fashioned family physician held an esteemed position in the community, and derived income from the delivery of services to patients. As medical practitioners became more sophisticated financially in stage two, real estate and other activities affiliated with the practice of medicine provided an increased percentage of income. More recently, there has been competitive pressures due to an increased number of competitors. Reimbursement procedures by the Federal Government under Medicare and Medicaid and insurance companies do not allow physicians to tack on extra profit to services performed outside the office such as lab tests and X-rays. An increasing number of clinics, both single and multi-physician, have begun to generate revenues by bundling services within the clinic including X-rays, laboratory tests, and even inclinic examinations using magnetic and radiographic imaging techniques with inexpensive devices, such as mammography (stage three). Revisions of Federal reimbursement policies through DRG's have pressured health care providers to increase profits by reducing costs rather than increasing revenue in stage four. The same cost reduction motive has encouraged the growth of HMO's and PPO's in response to insurance and corporate cost containment efforts. Profit enhancement focuses on financial leverage and manipulations rather than service delivery in stage five.

Financial factors offering profit enhancement possibilities are: (1) reducing the float time between a patient service and payment; (2) the ability to integrate credit and insurance operations with health care services, thereby shifting the profit margin from medical service to financial service charges; (3) integrating financial services such as insurance policies or consumer loans with provision of health care services; and (4) expansion of rebates and referral fees as explicit transfers payments within the health care industry rather than as indirect payments. For example, surgeons and radiologists will share fees for service with primary care physicians in return for patient referrals. Likewise, hospitals will be expected to share part of the room charges to referring physicians. Formal referral fees are not widespread within the health care industry at the present time, however, some HMO's and corporations are already requesting such fees from hospitals. In addition, referral fees may be encouraged to level the gross disparity in income between physicians, such as surgeons and primary care physicians including pediatricians, obstetricians, and internists.

Clearly, nationally established firms like Sears, which have integrated financial services are prime contenders to take advantage of financial profit enhancements. Sears could contract with a national chain of hospitals to refer patients. Sears could also tie health care insurance to its insurance network and use the combination of convenience of health care services and consumer shopping to enhance both aspects of its operations. One of the first corporations signed up for the new Sears Discovery card in Atlanta was the Hospital Corporation of America (HCA).

The present research explores potential consumer response to a health care delivery system based on a national chain offering record transfer and quality assurance from location to location. Future health care marketing strategies must be based on the response of consumers to the movement of Sears into the health care area in the same way as realtors and stock brokers have had to deal with Sears entering their industries. Sears, in the future, may let us buy and charge artificial hearts to replace worn out hearts, as well as new batteries to replace worn out automobile batteries.

DYNVIEW: An exploratory technique

Focus groups are often used for exploratory research on services not presently offered by health care institutions. Such research offers significant advantages over ordinary survey techniques involving exploratory questions by permitting group interaction and extensive interaction between moderator and participants. Interaction allows a moderator to explain the research subject if respondents fail to understand significant aspects of it. This ability to keep subjects focused on the topic under consideration may be the most significant advantage of focus groups over survey research.

Dynamic interviewing uses telephone interviews as an alternative to focus groups through focus groups with one participant. Interviewers are trained to probe for answers including substantial lengthy discussions of specific points capturing a respondent's in-depth reactions. Interviews are taped recorded, after prior notification, and content analyzed. Thus, the interviews in DYNVIEW are a free flowing, free form set of open ended questions which allow respondents to express fully their own views. The interviewer also interacts more extensively than usual in telephone surveys, thus being able to explain the purpose of specific questions which a respondent does not understand and to provide additional supplementary information in the case of an unfamiliar product.

DYNVIEW provides a relatively low cost alternative to focus groups for exploratory research in situations where subjects can be presented and discussed verbally over the telephone and intersubject interaction is relatively unimportant. In such instances it offers substantial advantages over the focus group approach with relatively few disadvantages compared to the focus group approach.

Thirty four persons in a medium sized, north central metropolitan area were interviewed using a DYNVIEW protocol. Respondents were selected using randomly generated telephone numbers. The response rate exceeded 80 percent, and interviews averaged nineteen minutes in length.

Current primary health care delivery alternatives

Consumer research in health care consumer decision making has indicated that convenience and quality are very important. The DYNVIEW respondents were asked the following question:

> "Now I would like to turn to some things which affect decisions on where to go to a doctor for primary care. Please tell me why you think some people would think each is important while other people would consider unimportant. Assume that the doctor is unfamiliar to you, for example when traveling or in a new community or if you do not have a personal doctor or if you were to change doctors. What about ____ ?"

Respondents discussed seventeen different aspects of primary health care delivery. Perceived quality of service was the most important factor followed by length of wait in the office and convenience. Cost and payment factors were relatively less important. Important provider characteristics mentioned were: doctor concerned about talking to patients (96%), length of wait before seeing doctor (85%), treated by doctor rather than RN or assistant (82%), cleanliness and attractiveness of office (76%), computer access to health records (72%), convenient hours (64%), accepting insurance rather than immediate payment (60%), expectations likely quality of care (50%), feeling comfortable with a national company (46%), close to where you are (42%), refer patients to local hospital (41%), affiliated with national organization (38%), cost of services advertised (35%), availability of credit through credit card (33%), confidence in unfamiliar doctor (30%), cost of services (28%), and location closer to stores and restaurants (24%).

In depth comments helped explain reactions of the respondents to the items. For example, location closer to stores and restaurants is not considered particularly important by most people because the expected health care services scenario involves going to a doctor for a specific treatment; without combining health care shopping with other retail shopping. Conversely, convenient hours were seen as important by people who worked. They preferred services on weekends and evenings, while persons who were retired or did not work felt that convenient hours were not particularly important. Interestingly, preferences for being treated by a doctor rather than a registered nurse, nurse practitioner, or physician's assistant seemed to center primarily on the feeling that the physician was being paid for his or her services. Therefore, the physician should be the person who sees a patient. In addition, some respondents indicated feeling more comfortable with a doctor than with non physicians, and a very small number indicated they felt the doctor was more knowledgeable. Consumer reactions were determined more by aspects of service delivery than they were by the quality of the service being delivered.

The delivery system for primary health care has expanded beyond private physicians offices to include alternative organizations in recent years. In preparation for expanding the discussion to include organizations such as Sears, banks, and grocery stores as health care providers, respondents were asked about primary health care services provided by several alternative providers in comparison with receiving primary care in a physicians office. The alternative providers were a hospital emergency room, a free standing urgent care center or a neighborhood clinic, a health maintenance organization, and a clinic in a mall department store or bank branch. The information contained in Table 1 suggests that health care consumers have definite expectations of the types of services to be obtained from each of the organizations even though substantial numbers of respondents were less familiar with health maintenance organizations than hospital emergency rooms. Better emergency care is expected from hospital emergency rooms and urgent care centers. Respondents expect to wait a longer time for service in a hospital emergency room than they do in an urgent care center. And they expect mall clinics to offer convenient hours. Mall and department store clinics suffer from a lower quality service image in the average health care consumers mind, at present. Urgent care centers, health maintenance organizations and mall clinics were considered to be less trustworthy by a substantial percentage of the respondents. The picture presented in the table strongly suggests that the health care market is divided into segments with very different mental pictures of quality of service provided by health maintenance organizations and urgent care centers. Conversely, consumers are more consistent with regard to the quality of services provided by hospital emergency rooms and mall clinics.

Respondents were also presented with the DYNVIEW core research question:

> "Now consider the following health service system. A regional or national company will establish a network of clinics in local retail locations such as shopping malls. Each clinic will be open from 8 a.m. to 10 p.m. seven days a week and be staffed by doctors and nurse practitioners at all times so that you never wait for more than 15 minutes. If you need medical care in a different city the local clinic doctor could consult your complete health record on a computer terminal and refer you to a local hospital or specialist if necessary. Your national credit card or insurance could pay the treatment cost. A regional or national company would guarantee a uniform quality of care at all local clinics. The organization might also offer health insurance which would be accepted throughout the network. What specific parts of this system do you like? Why?"

Although a majority of respondents previously felt that mall clinics offered lower quality, favorable comments or specific parts of the system were much more frequent than unfavorable comments. Eighty five percent of the respondents found some feature of the proposed health care distribution system attractive. The most attractive aspect was convenience followed by a short waiting time and computer records (see Table 2). Conversely, forty-one percent of the respondents mentioned something which they disliked - most frequently, switching doctors and impersonal of care. Given the relatively strong reactions of the consumers to mall and retail store clinics in the earlier question, the packaging of a health care distribution system similar to the proposed system mitigates objections that consumers raise. That is, the package is attractive even if the idea of having a clinic in a mall is unattractive. In fact, approximately half the respondents are willing to pay a $25 annual fee to join a national health service system. Respondents who have not seen a doctor in the last year, do not have a personal doctor, have changed doctors, are college graduates, and are over thirty-five, and more likely than other respondents to pay the $25 annual fee. Groups that evidenced an unwillingness to pay an annual fee included those persons who have seen a doctor within the last year and have a personal doctor. Their responses indicate they do not feel a need to find a new doctor and, therefore, are less willing to pay.

TABLE 1

MAJOR EXPECTATIONS OF SERVICES PROVIDED BY ALTERNATIVE DELIVERERS COMPARED TO PRIMARY CARE IN A PHYSICIANS OFFICE

	Alternative deliverers			
Expectations	Emergency Room	Urgent Care Center	HMO	Mall Clinic
Better emergency care	30.0%	22.0%	0.0%	0.0%
Immediate treatment	0.0	16.0	0.0	0.0
Convenient hours	5.0	0.0	0.0	17.0
Good service	19.0	9.0	14.0	0.0
Lower quality	0.0	3.0	4.0	14.0
Overworked, understaffed	9.0	0.0	0.0	0.0
Do not trust	3.0	19.0	34.0	39.0
Go to doctor first	7.0	3.0	4.0	0.0
About same as physician's office	11.0	3.0	23.0	4.0
Poor waiting time	12.0	7.0	0.0	0.0
Minor emergencies	0.0	7.0	5.0	7.0
Cannot choose doctor	0.0	0.0	12.0	7.0

Differential acceptance of an annual fee for health care system participation raises questions about segmenting the health care market. There are at least eight attractive target segments for marketing campaigns. The segments are: (1) a segment which has not seen a doctor during the last year (30 percent of the sample); (2) a segment that has no personal doctor (46% of the sample); (3) a market segment for whom the employer pays the insurance costs (52%); (4) a segment that has received treatment away from home (18%); (5) a segment who changed their physician because dissatisfaction with treatment (28%); (6) college graduates (53%); (7) the segment under thirty five years old (41%); and (8) a high income segment (31%). Each market segment offers a prime target in strategic marketing for the system because it is either less tightly linked with a current practitioner or payment for services is more easily collected.

The hypothetical design of the proposed health

TABLE 2

ATTRACTIVE AND UNATTRACTIVE FEATURES IN HEALTH CARE DISTRIBUTION PACKAGE

Attractive Feature	Percent of respondents
Convenience	41.1%
Computer records	25.6
No waiting	25.3
Open seven days a week	15.4
Hours	13.7
Whole package	13.0
Location	10.8
Same level of care	8.0
Less expensive	7.6
Confidence	6.6
Large staff	4.2
Guarantee	2.9
Excess of insurance	1.7
Specialist referral	1.4

Unattractive Feature	Percentage of respondents
Switching doctors	21.0%
Impersonal	21.0
Shopping center	7.0
Hours	7.0
Quality of care	3.0
In for the money	3.0

service delivery system focuses on organizations providing consumer services at a large number of locations. Large organizations have greater negotiating ability with hospitals and specialists. Four organizations were mentioned in the DYNVIEW research as potential organizers for the health care system in addition to Sears: Blue Cross, K Mart, Krogers, a large national grocery store chain, General Electric, and a bank such as CitiBank or Bank One in Ohio. Each of these organizations has demonstrated an interest in establishing the necessary financial services network to generate profitability through financial manipulations.

Consumer response to using the national health care system by the alternative providers varied. Blue Cross had the greatest acceptance followed closely by Sears, although twice as many refused to use Sears as Blue Cross (see Table 3). A majority of the respondents indicated that they would not use the four remaining organizations, although K Mart was acceptable to approximately forty percent. The principal reason for Blue Cross's greater acceptance is that it is perceived as essentially equivalent to the present private physician based health care system. In general, Blue Cross has the most credibility as a health care provider. Sears follows Blue Cross in credibility as a health care provider. K Mart appears to be the third most credible provider appealing to a smaller market

TABLE 3

PERCENTAGE OF RESPONDENTS WILLING TO USE ALTERNATIVE HEALTH CARE DISTRIBUTOR ORGANIZATIONS

Provider	Would use	Might try	Would not use
Blue Cross	40.0%	10.0%	17.0%
Sears	30.0	23.0	33.0
K Mart	23.0	13.0	50.0
Krogers	13.0	0.0	77.0
General Electric	10.0	17.0	77.0
Regional Bank	10.0	7.0	63.0

than Sears or Blue Cross (see Table 4).

Conversely, banks and grocery stores were felt to operate in very different lines of business and that health care service delivery would be an overextension. In addition, respondents felt that banks would enter the field primarily for profits rather than service. GE, Krogers, and banks face substantial consumer resistance in entering health care delivery, although they would have the attributes of large numbers of outlets and significant control of profitability through financial manipulation postulated as key elements in distributive health systems.

TABLE 4

MAJOR REACTIONS TO ALTERNATIVE HEALTH CARE DISTRIBUTION ORGANIZATIONS

Reaction	Blue Cross	Sears	K Mart	Krogers
Similiar to present providers	10.3%	6.1%	0.0%	0.0%
No apparent problems	9.1	6.3	8.7	4.9
Trust them	11.8	3.6	0.0	3.8
Convenient	0.0	5.0	3.6	5.2
Already in health care	0.0	1.4	0.0	0.0
Lesser quality	0.0	0.0	0.0	4.9
Too much profit	3.8	3.6	3.6	3.8
Over extension into health care	0.0	7.0	5.4	21.5
Long wait	5.3	0.0	0.0	0.0
Not familiar with it	10.0	0.0	5.3	0.0
Not sure	0.0	4.0	1.4	0.0

Potential users of a Blue Cross service have a demographic and psychographic profile similar to the general population. Sears users are more likely to have a personal doctor, be male, and have less education. Non-users of both services are likely to have an established physician relationship and have a stable lifestyle.

Segmentation of the total health care market into the eight target markets suggests that Blue Cross has a comparative advantage in acceptability across all target segments. Blue Cross is least attractive to the small market segment that has received emergency treatment away from home. Conversely, the same segment offers the greatest potential for Sears. Sears would appear to have the least potential for market penetration among the population under 35 and high income segments. Sears also has an attractive market due to quality assurance among the third of the health care market that has changed doctors because of dissatisfaction with previous treatment. Finally, convenience is a major attraction both in the younger market segment and in the market segment that has not seen a doctor in the last year. Blue Cross on the other hand would build its appeal upon trust since their long association with quality health care delivery leads significant proportions of most of the target segments to trust Blue Cross.

Sears and Blue Cross are perceived as comparable to present physician office charges in the relative cost of service. The two organizations most perceived to offer lower quality service, K Mart and Krogers, are expected to cost less than private physicians. Finally, banks and General Electric are perceived as being relatively more expensive than the other alternative providers.

Conclusion

This paper presents an investigation of consumer reaction to an emerging health care system in which profit is generated through financial manipulation rather than service delivery. The key elements to the system are creation of a national network of primary care facilities distributed throughout existing local outlets of national firms such as Sears or K Mart. The national firm would provide national quality assurance as well as credit and free interchange of records between local locations. Control of the credit float and power in negotiating referral fees from hospitals and specialists would be significant profit generating factors.

Such a national system appears to be acceptable to a significant proportion of the health care consumer market, although, current primary care clinics in malls or department stores tend to suffer from a perception of lower quality. Nevertheless, access to records, quality control, and convenience bundled into one package appear to make the distributive health care system an attractive alternative to the current primary care system. On the basis of the dynamic interviewing research, a national distributive health care system presents a significant challenge to traditional health care providers. Segmentation of the overall health care market into target markets which are most profitable or least tied to the current health care providers system suggests that with the exception of Sears, national retail based organizations may have trouble penetrating the health care market to a significant or profitable extent.

Clinic practices have emerged as a major force in the primary health care delivery system in the last few years due to an apparent surplus of physicians in certain market areas paralleling an earlier surplus of lawyers and dentists. The financial pressures which bearing on a physician beginning a practice and competing for new patients are likely to increase the percentage of new physicians choosing to work for a salary at clinic operations located in a mall or in a urgent care center. This economic factor paralleling legal and dental practice economics is reinforced by a tendency on the part of new physicians to opt for the convenience and leisure involved in group or salaried practices. Unfortunately, neighborhood clinics and private office practices are unlikely to survive the financial competition offered by the enhanced profitability of the proposed national distributive health care system.

In conclusion, Sears has already entered the primary medical and dental care markets. The present research indicates that if Sears were to actively pursue this market they could expect a primary health care market share of fifteen to twenty percent after the DYNVIEW perceptions are discounted for changing psychographic and demographic factors, while K Mart might serve ten to fifteen percent of the market. Sears and K Mart will be fighting each other for market share, as well as other providers, since their potential markets are overlapping rather than complementary.

The pool of new physicians emerging from medical schools provides an ample source of recruits for staffing a Sears medical service. Sears has become a major factor in the insurance industry, the investment industry and the real estate industry through Allstate, Dean Witter, and Caldwell Banker. It is presently attempting to become a major factor in the credit side of financial services through the development and test marketing of the Discover card and Sears Savings Bank. Dental clinics have been established in Sears stores around the United States. Sears may also become the single largest force in the delivery of primary health care services to the American population, although, profit generation will be through the Sears integrated financial services network.

A FRAMEWORK FOR CONSUMER BEHAVIOR ANALYSIS IN DENTAL CARE MARKETING

C.P. Rao, University of Arkansas
L. Joseph Rosenberg, University of Arkansas

Abstract

Expanded opportunities and related choice behavior make it imperative that an indepth knowledge of consumers be gained by providers of dental care services so that more effective marketing efforts can be designed and implemented. In view of these perspectives, this paper is concerned with investigating the dental consumers' perceptions and satisfactions in relation to providers of dental care services.

Introduction

Health care service markets in general and dental care service markets in particular are characterized by many competitive developments. While the total demand for dental services is declining in the U.S., because of declining birth rates and improved dental health in general (Wall Street Journal, 1980), competition among the service providers is becoming more intensified. This is caused by the increased number of dentists (Time, 1980). Additionally, new and unconventional forms of dental care delivery systems are being introduced throughout the country (Business Week, 1981). These developments are forcing the dental care services providers to respond to these emerging competitive pressures. As one researcher observed: "Dentists throughout the United States are discovering that managing their practice is an increasingly challenging and complex task. The business aspects of their practice is requiring greater attention and making more demands of their time" (Rodgers, 1982). The net result is that providers of dental care services are required to develop and implement appropriate marketing strategies for success in dental practice.

In line with the above developments, one notices increasing emphasis on the application of modern marketing methods to dental practice. In recent years ten professional journals in dentistry and related fields are full of exhortations indicating the need to use marketing methods (Dental Economics, 1981; Denton, 1982; Aguiar, 1982; Krauth, 1982; Bonner, 1982; and Rodgers, 1982). However, most of these writings while emphasizing the importance of the application of marketing methods to dentistry, they are typically devoid of consumer behavior perspectives as bases for the suggested marketing practices. A detailed knowledge of the underlying consumer behavior is vital for any modern marketing management practice. Such need for consumer behavior knowledge is especially pressing in the dental care services area.

Scope of the Research Study

Consumer needs and the related satisfactions (or dissatisfactions) provide the focal points for developing and implementing marketing strategies. In the dental marketing literature there is lacuna with regard to the various aspects of dental consumer patronage behavior. Hence, the scope of the research reported in this paper is limited to the following research questions.

1. What attributes are considered salient by consumers in choosing or patronizing dental practitioners?
2. In relation to salient attributes of dental practitioners, how satisfied or dissatisfied are consumers?
3. What are the marketing implications of the salient attributes and related consumer satisfactions (or dissatisfactions) for dental marketing practice?

Research Methodology

To generate the appropriate information in relation to the questions included in the scope of the research study above, a primary source research investigation was conducted in a SMSA (Standard Metropolitan Statistical Area) in one of the Southwestern states of the United States. The following research procedures and methodologies were utilized in carrying out the primary source research.

1. An extensive background study of the available secondary source materials in the general area of dental care services marketing was undertaken. This phase of the research was necessary to identify emerging trends in dental professional services marketing so that the rest of the research investigation would be made more realistic.
2. A limited number of indepth personal interviews were conducted with the selected dental care service providers in the area. The major purpose of these interviews was to gain greater insight into the changing marketing environment in the area as well as to gain an understanding of consumer behavior from the perspectives of the service providers.
3. A limited number of focused group interviews were conducted with small groups of typical consumers of dental care services in the service market area. In recent years focused group interviews have proved to be most effective means of gaining first hand understanding of the various facets of consumer behavior in the purchase of any product or service. Also, focused group interviews are the appropriate first step to developing a research questionnaire for a subsequent more intensive consumer survey.
4. Following the above mentioned three phases of background research, a mail

questionnaire survey was conducted in the service market area during December, 1983 through January, 1984. This phase of the research involved the following specific activities:

a) Development of a research instrument in the form of a structured questionnaire;

b) Pre-testing the questionnaire and finalizing the same for the subsequent mail questionnaire survey;

c) Preparation of an area sampling design so that a representative sample of the area consumers could be developed.

5. As mentioned earlier a mail questionnaire survey was conducted during December, 1983 through January, 1984. A total of 1,000 questionnaires were mailed to a representative sample of the area households. The following are the details of the responses to the mailed questionnaire survey.

Total Questionnaires mailed	1,000
Questionnaires returned without being delivered	80
Effective potential respondents	920
Usable responses received	250
Responses as percentage of Effective potential respondents:	27.2%

6. An exhaustive list of 18 pertinent attributes of dental practitioners was identified through secondary source research, indepth interviews with dental practitioners and focused group interviews. These 18 attributes of dental practitioners formed the basis for measuring the salience and satisfactions from the perspectives of consumers. In the relevant questions in the questionnaire the 18 attributes were arranged alphabetically to avoid any possible order bias in responses. To indicate the salience, the respondents were asked to rate each of the attributes on a six point "importance" scale with 1 representing least importance and 6 "most importance." Similarly, to measure the consumer satisfaction in relation to the same attributes, the respondents were asked to rate each of the attributes on a six point 'satisfaction' scale with 6 representing "most satisfied" and 1 "most dissatisfied." The data relating to consumer perceived salience of the attributes and satisfactions in relation to these attributes are presented in Tables 1 and 2 respectively. The research data presented in Tables 1 and 2 formed the basis for the discussion of the following research findings.

TABLE 1

IMPORTANCE OF PATRONAGE CONSIDERATIONS: DENTAL GENERAL PRACTITIONERS

Attribute	Mean	Most Important		Somewhat Important		Least Important		No Response	
		No.	%	No.	%	No.	%	No.	%
Location	3.83	98	39.2	88	35.2	58	23.2	6	2.4
Parking Facility	3.53	78	31.2	95	38.0	73	29.2	4	1.6
Hours of Operation	4.18	122	48.8	82	32.8	41	16.4	5	2.0
Quality of Service	5.74	233	93.2	10	4.0	2	.8	5	2.0
Reputation	5.41	211	84.4	31	12.3	2	.8	6	2.4
Professional Competence	5.77	237	94.8	5	2.0	1	.4	7	2.8
Personality & Attitude of Dentist	5.23	192	76.8	52	20.8	1	.4	5	2.0
Attitude of Support Personnel	4.97	180	72.0	59	23.6	6	2.4	5	2.0
Fee Charged for Services	4.92	166	66.4	70	28.0	7	2.8	7	2.8
Fee Payment Plan	4.41	134	53.6	74	29.5	36	14.4	6	2.4
Ease of Appointments	4.76	151	60.4	85	34.0	9	3.6	5	2.0
Advertisements	2.08	30	12.0	44	17.6	169	67.6	7	2.8
Office Atmosphere	2.92	43	17.2	93	37.2	105	42.0	9	3.6
Appointments Not Required	3.07	67	26.8	67	26.8	104	41.6	12	4.2
Waiting Time	4.73	165	66.0	57	22.8	21	8.4	7	2.8
Availability of Emergency Services	5.16	189	75.6	48	19.2	6	2.4	7	2.8
Methods of Pain Control	4.93	178	71.2	52	20.8	15	6.0	5	2.0
Service Available on Saturday	3.72	94	36.6	76	30.4	67	26.8	13	5.2

TABLE 2

CONSUMER SATISFACTION WITH VARIOUS ASPECTS OF DENTAL GENERAL PRACTITIONERS

Attribute	Mean	Most Important		Somewhat Important		Least Important		No Response	
		No.	%	No.	%	No.	%	No.	%
Location	5.02	159	63.6	68	27.2	4	1.6	19	7.6
Parking Facility	4.89	150	60.0	70	28.0	11	4.4	19	7.6
Hours of Operation	4.92	154	61.6	68	27.2	8	3.2	20	8.0
Quality of Service	5.20	176	70.4	50	20.0	5	2.0	19	7.6
Reputation	5.27	178	7.12	47	18.8	2	.8	23	9.2
Professional Competence	5.25	181	72.4	43	17.2	7	2.8	19	7.6
Personality and Attitude of Dentist	5.15	172	68.8	52	20.8	8	3.2	18	7.2
Attitude of Personnel	5.03	165	66.0	57	22.8	9	3.6	19	7.6
Fee Charged For Services	4.39	115	46.0	97	38.8	19	7.6	19	7.6
Fee Payment Plan	4.64	132	52.8	70	28.8	20	8.0	28	11.2
Ease of Appointments	4.86	149	59.6	73	29.2	9	3.6	19	7.6
Advertisements	4.25	93	37.2	82	32.8	28	11.2	47	18.8
Office Atmosphere	4.80	141	56.4	77	30.8	11	4.4	21	8.4
Appointments Not Required	4.18	88	35.2	87	34.8	30	12.0	45	18.0
Waiting Time	4.61	136	54.4	74	29.6	19	7.6	21	8.4
Availability of Emergency Services	4.79	147	58.8	63	25.2	15	6.0	25	10.0
Methods of Pain Control	5.10	168	67.2	56	22.4	5	2.0	21	8.4
Services Available on Saturday	4.03	92	36.8	86	34.4	39	15.6	33	13.2

Research Findings and Discussion

The major purpose of this research effort, as pointed earlier, was to investigate the critical consumer behavioral aspects in relation to dental services. To achieve major research goal the mail-questionnaire included two major questions dealing with the following aspects of consumer perceptions:

1. What attributes of dental practitioners are perceived important by consumers?

2. With regard to what attributes are consumers satisfied or dissatisfied in their experiences with dental practitioners?

The above questions address the core aspect of consumer behavior which are significant for developing and implementing appropriate marketing strategies by dental practitioners. In the following discussion of the research findings comparisons are made between salient set of attributes and the set of attributes with which consumers are satisfied or dissatisfied and implications for marketing practice are indicated.

On the basis of the data in Table 1, the following have emerged as the top six most important and the bottom six least important attributes as perceived by dental consumers. These lists of attributes are based on the mean importance scores of the attributes which are indicated within parenthesis.

firm stand as to their satisfaction or dissatisfaction with the various attributes of general dental practitioners. In spite of such 'ambivalence', it is significant to note that a very high proportion of the respondents are either "very satisfied" or "somewhat satisfied". The proportions under the "very dissatisfied" category are quite small for a number of attributes, the highest for any attribute being only 15.6 percent.

Top six most important attributes in order of most importance	Bottom six least important attributes in order of least importance
1. Professional competence (5.77)	1. Advertisements (2.08)
2. Quality of service (5.74)	2. Office atmosphere (2.92)
3. Reputation (5.41)	3. Appointments not required (3.07)
4. Personality and attitude of dentist (5.23)	4. Parking facilities (3.53)
5. Availability of emergency services (5.16)	5. Services available on Saturdays (3.72)
6. Methods of pain control (4.93)	6. Location (3.83)

From the above listings of salient attributes, it may be concluded that three key characteristics dominated the dental consumers' decisions to choose and patronize the dental practitioners. These three characteristics are related to professionalism, overall reputation and congeniality of the dental practitioner. From the list of least important attributes, it is interesting to note that a number of ancillary services provided by dental practitioners are not considered salient. This research finding is significant in the light of the growing emphasis placed on these ancillary services as means for effective marketing of dental services. It is also important to note that "advertising" ranked lowest as a salient attribute. This seem to indcate that undue emphasis on advertising of dental services may be counter productive in effective marketing of dental services. In the initial stages of extending marketing to any field of activity, there is a typical tendency to misconstrue that marketing mainly consists of advertising. The low salience of advertising in the context of dental marketing clearly indicates the importance of integrated marketing.

The data on dental consumer satisfaction (dissatisfacton) in dealing with dental general practitioners are presented in Table 2. By summarizing the data, the following six areas of consumer satisfaction and six areas of dissatisfaction can be identified. The mean values for each of the six attributes are indicated within parenthesis.

Thus, it is evident from the data that most of the respondents are reasonably satisfied with various attributes of dental general practitioners. This is also reflected in the mean values computed for the various attributes in Table 2.

While the overall consumer satisfaction level as reported by the respondents is generally high, a comparison of the "importance" sets of attributes with "satisfaction" sets of attributes will provide important insights for dental marketing practice. The data presented below provides a comparison between the top six most important attributes and the top six attributes of consumer satisfaction.

From the comparison of the top salient attributes and the top attributes with which the dental consumers are satisfied, some very interesting conclusions, which appear at the top of the next page, emerge which have significant implications for marketing dental services. First, it may be noted that with the exception of one attribute, viz., "method of pain control" for all the top salient attributes the mean importance ratings are consistantly higher than the corresponding mean satisfaction ratings. Thus, the top five salient attributes consumers' performance expectations, as reflected in the mean importance ratings, are higher than the consumer perceived satisfaction levels as reflected in the mean satisfaction ratings. This performance-satisfaction gap could potentially provide a basis for designing the appropriate dental marketing strategies so that

Six attributes of consumer satisfaction:	Six attributes of consumer dissatisfaction:
1. Reputation (5.27)	1. Services available on Saturdays (4.03)
2. Professional competence (5.25)	2. Appointments not required (4.18)
3. Personality and attitude of dentists (5.15)	3. Advertisements (4.25)
4. Methods of pain control (5.10)	4. Fee charged for services (4.39)
5. Quality of service (5.03)	5. Waiting time (4.61)
6. Attitude of support personnel (5.03)	6. Fee payment plans (4.64)

Before drawing any definite conclusions about consumer satisfaction or dissatisfaction it is important to note some of the critical aspects of the data. First, from the data in Table 2, it can be observed that on all items included, the "no response" category is quite considerable, in some cases reaching as high as 19 percent of the total respondents. This appears to indicate that some of these respondents were not willing to take a

greater parity can be achieved between consumer performance expectations and perceived satisfactions. For individual dental practitioners, this research finding can provide a basis for differentiating their dental service offering and thereby deliver greater consumer satisfaction. For example, with regard to the attribute "quality of service", one can observe a wide gap between the performance expectations of consumers and their

Attribute:	Perceived Importance Mean	Rank	Perceived Satisfaction Mean	Rank
Professional competence	5.77	1	5.25	2
Quality of Service	5.74	2	5.03	5
Reputation	5.41	3	5.27	1
Personality and attitude of dentist	5.23	4	5.15	3
Availability of emergency services	5.16	5	4.79	10
Method of Pain control	4.93	6	5.10	4

perceived satisfaction. In the light of this finding, dental practitioners can gather additional information about consumers' perceptions and expectations as to what constitutes "quality of service" and, equipped with such knowledge, improve the quality of service or emphasize the same in their promotional efforts. A careful analysis of the performance-satisfaction gap with regard to each of the top salient attributes will provide guidelines for improving the marketing of dental services. Such detailed analysis and identification of specific marketing management implications are highly situation specific which is beyond the scope of this paper.

Similarly, a comparison of the bottom six least important attributes and the six attributes of consumer dissatisfaction yielded the following insights.

analysis of importance-performance gaps of various attributes should form the basis for developing a well integrated marketing program for effective marketing of dental services. From this perspective, it is significant to note that two attributes ("fee charged for services" and "fee payment plans") which appeared in the six attributes of customer dissatisfaction have not appeared in the six "least important" attributes. Thus, these two attributes are important to consumers, and consumer dissatisfaction in relation to these attributes will be detrimental to effective marketing of dental service. With regard to one attribute in particular, viz., "fee charged for services" while the mean importance rating is 4.92, the corresponding consumer satisfaction rating is 4.39. The gap between these two ratings clearly provides a good basis for an appropriate marketing effort. From the above discussion, it is evident

Attribute:	Perceived Least Importance Mean	Rank	Perceived Satisfaction Mean	Rank
Advertisement	1.08	1	4.25	3
Office Atmosphere	2.92	2	4.80	
Appointments not required	3.07	3	4.18	2
Parking facilities	3.53	4	4.89	
Services available on Saturdays	3.72	5	4.03	1
Location	3.83	6	5.02	

It is evident that consumer mean satisfaction (dissatisfaction) ratings are consistantly higher for all the six attributes which are identified as "least important." From this, it may be concluded that the performance of dental practitioners on these six 'least important' attributes is more than adequate from the consumer perspective. A detailed look at some of these "least important" attributes seem to indicate that these are likely to be the attributes emphasized in adapting a marketing approach to dental services marketing. For example, advertisements, office atmosphere, and services available on Saturdays are likely to be some of the attributes which may be emphasized in dental marketing efforts. But the research evidence shows that the consumers are already adequately satisfied with the present level of these attributes. Any additional emphasis on these attributes will not result in any significant benefits to the dental practitioners. A careful

that clues for effective dental marketing flow from a careful and detailed analysis of consumer needs as reflected in their importance ratings and corresponding performance as reflected in consumer satisfaction ratings.

Conclusions

One of the health service areas to which marketing approach is being extended in recent years is dental services. Application of marketing methods to dental services is necessitated by declining demand for dental services while at the same time the number of services providers is increasing. Such intensifying competitive environment emphasis on the use resulted in increasing marketing methods and innovations. However, while the growing literature in the dental marketing area has numerous exhortations concerning the need for marketing approach, systematic research studies providing consumer perspectives as inputs for effective dental marketing practice are lacking. In this paper, the salience of dental practitioner attributes are determined from the perspectives of dental consumers. In relation to the same set of attributes the degree of dental consumer satisfaction (dissatisfaction) is determined. The resulting data were used to perform an importance-performance gap analysis of the dental practitioner attributes. The gaps between consumer perceived importance ratings and consumer satisfactions ratings were identified and the implications for dental services marketing indicated. One general conclusion that emerged from the empirical research reported in this paper is that importance-performance gaps existed with regard to more important dental practitioner attributes which in turn should form the basis for marketing efforts. On the otherhand, with regard to a number of less important attributes, the performance as perceived by consumers exceeded the attached importance. Additional improvements in these attributes will not be beneficial for dental services marketers. While the empirical findings are limited to one dental services market area in the Southwestern part of the United States, the overall research and analytical framework provides a useful approach for generating significant dental consumer behavior information inputs for effective dental service marketing practices.

References

Aquiar, Albert V. (1982), "Are You Marketing Your Practice Effectively?," Dental Management, (May) pp. 30-40.

Bonner, Phillip (1982), "Patient Relations Hold the Key to Future Success," Dental Economics, (November) pp. 67-70.

Business Week (1981), "Moving the Dentist's Chair to Retail Stores," (January 19), p. 56.

Dental Economics (1981), "Market Dentistry or Perish!" (May, pp. 40-46.

__________ (1981), "How to Communicate," (June), pp. 56-70.

__________ (1981), "The Role Advertising Plays" (July), pp. 38-44.

Denton, David (1982), "Modern Marketing for Traditional Dentistry," Dental Practice, (September), pp. 24-28.

Rodgers, William C. (1982), "Improving and Expanding Dental Patient Care: A Market Research Perspective," Journal of Health Care Marketing vol. 2, No. 4, (Fall), pp. 34-40.

Time (1980), "Drilling for New Business," (December 1), p. 110.

Wall Street Journal (1980), "Dentists Ponder Case of Missing Patients as Appointments Lag," (October 10), p. 1.

DYADIC PERFORMANCE IN A NONPROFIT SERVICE SETTING: THE IMPORTANCE OF MATCHING

Irene M. Thorelli, University of Wisconsin-La Crosse

Abstract

Within the broad area of marketing of nonprofit service organizations, the matching of volunteers to clients within social service agencies has received no attention in the marketing literature. Three theories were successfully applied to matching in a direct-service setting. The theory of referent power, based on an analogy with the buyer-seller dyad, was used to predict success in a volunteer-client dyad. Additional theories were Schutz' theory of compatibility and Bierman's model of interpersonal facilitation.

A total sample of 502 participants in 251 relationships was gathered from Big Brothers/Big Sisters of Austin. Dyads most compatible in their interpersonal needs were most successful in the program (Schutz). Volunteers who were active and affectionate with their clients instead of passive and rejecting were more effective (Bierman). Finally, volunteers were more successful if they were older and of higher occupational status than the clients, showing the importance of identification within the framework of referent power.

Introduction

Voluntary nonprofit organizations have increasingly recognized that marketing is an activity which must be successfully practiced by other organizations besides businesses. As Kotler and Levy (1969) argued in their classic article, the marketing concept should be broadened to include the nonprofit sector of society. Since that breakthrough article, Kotler has significantly advanced the field of knowledge about nonprofit marketing and has been one of its prime proponents, including the publication of a text that is now in its second edition (Kotler 1975, 1979, 1982). Although only briefly alluding to volunteers in his book, Kotler does make clear that volunteers--the focus of the current research--need to be treated as a target market as much as other publics nonprofit organizations must cater to. As Kotler (1982, p. 413) states, "the proper way to attract and motivate volunteers is to recognize them as a distinct market segment with certain needs and expectations with whom the organization exchanges benefits." Similarly, "a marketing approach means understanding the volunteers' needs and meeting them in a way which draws their support and hard work" (p. 51).

One critical area within nonprofit marketing that has not previously been explored within the marketing literature is the matching of volunteers with clients within a special type of nonprofit organization--the social service agency. Many social service agencies engage in the pairing of a volunteer with a needy client, and to do this, some set of matching criteria is needed. Criteria used to match volunteers with clients are typically subjective and based on the experience of individual agency personnel with previous matches.

Turning to the published research on volunteers for possible answers, much of the existing literature is in the form of speculative pieces or else descriptive narratives, presenting a particular volunteer program. Discussions of program effectiveness or characteristics of volunteers are of the impressionistic variety, not based on empirical data.

The research literature has been particularly scant on the issue of matching volunteers to clients in the myriad one-to-one relationships typical in direct-service voluntarism. Only five studies were found which in any way examined the match in characteristics between volunteer and helpee. None of these measured more than one or two traits and several did not consider any outcome measures. Some of the most sophisticated studies of matching between a helper and a helpee have been attempted in the mental health field. However, the research has failed to yield meaningful or consistent results, as reviewed by Goldstein and Simonson (1971) and later by Parloff, Waskow, and Wolfe (1978) in the first two editions of the Handbook of Psychotherapy and Behavior Change.

Thus, very little research exists on the matching of volunteers to clients in social service or other settings. In order to provide a basis for the research, then, theoretical perspectives were introduced which might throw light on volunteer-client matching. These will be discussed below. The specific context chosen was the nationwide Big Brother/Big Sister program. The Big Brother program combines the friendship of a volunteer with the skill of a social worker to help boys from fatherless homes develop into mature manhood.

Literature Review

There are several different approaches that could be used as a basis for matching volunteers to clients within a social service agency. Each of these approaches was used in the current research as a theoretical framework.

Buyer-Seller Dyad. One approach that has found favor within the marketing literature is the concept of the buyer-seller dyad. The relationship between a buyer and a seller can be compared to the relationship between a volunteer and a client in a nonprofit social service agency along several dimensions. Both relationships are one-to-one. Both relationships are between people who were not previously acquainted. Both relationships have a specific goal in mind. The goal in the buyer-seller dyad is a successful sale. The goal in the volunteer-client relationship is improvement in the functioning of the client. Both relationships may be long-term. This would be especially true in settings such as the Big Brothers/Big Sisters program and in much industrial buying.

On the basis of the above analogy, the buyer-seller literature was examined to provide dimensions relevant to dyadic interation. Evans (1963) opened a new vista in consumer behavior research when he hypothesized that characteristics of the seller and the buyer in interaction would be the most accurate determinants of the sale. The more similar the parties in the dyad are, the more likely a favorable outcome, a sale. Specifically, Evans studied a group of male life insurance agents and their prospects. He found that the more alike the salesman and his prospect were, the greater the likelihood for a sale. This was true for physical characteristics (age, height), other objective factors (income, religion, education), and variables tangentially related to personality factors (politics, smoking).

Several research projects have been conducted since Evans' study, the vast majority supporting the results he found. It appears that one important area in the interaction between a salesperson and a customer is the referent power of the salesperson as perceived by the customer (Assael 1981, 1984). If the customer can identify with the salesperson due to the similarity in characteristics between them, then the salesperson's referent power is increased. The salesperson in this case is seen as a means of personal identification, or a source of friendship, attraction, or shared identity. The referent power of the salesperson will also increase the likelihood of a sale (Brock 1965; Gadel 1964; Churchill, Collins, and Strang 1975; Riordan, Oliver, and Donnelly 1977).

Based on the notion of referent power, it was hypothesized that the more similar the volunteer and client within a nonprofit setting, the greater the likelihood for a successful relationship. This is founded on the hypothesized identification between the volunteer and the client due to their perceived similarity. The dimensions that were chosen to examine the usefulness of the similarity concept were ethnic origin, age, occupation, education, area of residence within city, social class, and the clinical assessment of each volunteer or child as to their suitability for the program.

Interpersonal Compatibility. A second theoretical framework for the study was the theory of interpersonal compatibility. This is the theory developed by William C. Schutz (1958, 1966, 1978) emanating from his work at the Naval Research Laboratory. The relevance of Schutz' theory to matching research is 1) it provides a theoretical framework in which to examine the interpersonal compatibility of the volunteer and the client; 2) it specifically predicts that those dyads that are more compatible will be more successful than those dyads that are less compatible; 3) the theory is directly tied to a measuring instrument, the FIRO-B, that can be administered to both the volunteer and the client; and 4) the theory and therefore the FIRO-B have generated a substantial amount of research, the vast majority of which is supportive.

Schutz claims that the three interpersonal needs of inclusion, affection, and control are sufficient to explain and predict interpersonal behavior. The unusual need here is inclusion. Inclusion refers to the need for being included in activities of others (wanted inclusion) and the need to include others in one's own plans (expressed inclusion). The use of both wanted and expressed needs was a novel dimension in the theory. Inclusion, then, has to do with interacting with people, with prominence.

The critical part of Schutz' theory states that if the compatibility of one group, h, is greater than that of another group, m, then the goal achievement of h will exceed that of m. Goal achievement (g) refers to the degree of optimal performance toward a goal. Examples of group goals are productivity, cohesion, and satisfaction. The relevant overall hypothesis for the purposes of the present research would be that the more compatible the volunteer and client are in their interpersonal needs, the more successful the relationship.

Interpersonal Facilitation. A third and final framework for the research was the notion of interpersonal facilitation. Interpersonal facilitation is clearly what is occurring in the case of a volunteer-client relationship. The volunteer is the facilitator and the client is the person to be helped.

Bierman (1969) has postulated that interpersonal facilitation can be adequately described by the two dimensions of activity-passivity and affection-rejection. After conducting an extensive literature review, Bierman filtered out two central dimensions which accounted for significant findings. These are active expressiveness versus passive restrictedness, called activity-passivity, and the affection-rejection dimension. Activity-passivity includes such dichotomies as structured versus ambiguous, concrete versus abstract, confronting versus evading, and genuine versus guarded. Affection-rejection includes such dichotomies as rejecting versus prizing, hostile versus loving, and cold versus warm.

Bierman's model considers the outcome of dyadic interaction as dependent on the characteristics of the helper. He postulated that the more active and affectionate the facilitator, the more successful the outcome of the relationship between the two. Conversely, the more passive and rejecting the helper, the less successful the dyadic outcome will be.

Method

Subjects were 251 volunteer-child dyads who were actively participating in the Big Brothers/Big Sisters of Austin program at the beginning of data collection. Of these dyads, 150 were Big Brother-Little Brother dyads and 101 were Big Sister-Little Sister dyads. This made a total of 502 subjects in the research. Subjects were also the six agency caseworkers who provided the judgments of success of the volunteer-client relationships.

Defining what is to mean success in an interpersonal relationship is difficult, and finding a way to measure that indicator of success is more difficult still. Ultimately, success was defined as a criterion composed of two parts. One requirement of a successful dyad was one where the volunteer and the child appear to be enjoying a mutually satisfying relationship. The second requirement of a successful dyad will be one where the child is making significant progress toward alleviating some of his/her difficulties (such as improved grades in school, better relations with teachers, improved relations with mother).

To provide the success judgments, caseworkers were asked to perform a Q-sort on their caseload. Thus, they were asked to sort their caseload into three piles of varying effectiveness, from least effective (bottom 20%) to moderately effective (middle 60%) to most effective (top 20%) relationships. Two months later, a second evaluation was obtained, using an open scale from 0-20, with 10 representing average success.

An instrument was developed to test Bierman's (1969) model of interpersonal facilitation. Some items looked at the affection-rejection side of the relationship, such as whether the volunteer and child feel close to each other and whether the volunteer is physically or verbally affectionate toward the child. Other items addressed more the activity-passivity aspect of the match, such as whether the child ever asks the volunteer for advice, whether the two of them talk about personal concerns, and the frequency and length of their meetings.

Information on the seven variables used to test the similarity model emanating from the buyer-seller dyad literature was abstracted from agency files. Ethnic origin, age, area of residence, education, and occupation were easily gleaned from application and interview materials. Social class and a clinical assessment as to overall suitability for the program was assessed by the investigator after reading all agency documentation--the application and the interview materials.

A final part of the study involved the actual administration of Schutz' compatibility instruments and the interpersonal questionnaire to the subjects. The agency director felt that a mail survey was the only viable approach. Thus, each of the 251 volunteers was sent a packet of materials. Each packet included three surveys and a cover letter explaining the purposes of the study. One survey was the FIRO-B for the volunteer to complete, and a second survey was the children's version, called the FIRO-BC, for the child to complete. A third survey was the questionnaire designed to assess the dimensions of interpersonal facilitation. This was intended for the volunteer to complete. The volunteers were requested to return all three surveys in a return envelope.

Results

Each of the 251 relationships was evaluated as to success by agency caseworkers. Information on each of the seven background variables was obtained for each of the 502 study participants from the agency files. However, after two follow-up letters were sent, complete FIRO-B and FIRO-BC data were obtained for only 77 matches, representing about one-third of the total respondents. In much similar work with volunteers, response rates of 10 percent would be typical, so results were encouraging. A correlation of .67 ($p < .001$) was obtained between the first and second caseworker ratings, which was quite high given the ultimate subjectivity of the caseworker judgments and the variability in the client's behavior being assessed.

A total of 93 volunteers returned the interpersonal questionnaire,representing approximately 37 percent of the sample. However, based on a t-test comparison of the nonrespondents with the respondents on the demographic variables, there were no significant differences between respondents and nonrespondents. Distribution statistics were computed for all variables used in the study, as well as Pearson product-moment correlations.

To test the theory of compatibility and the theory of interpersonal facilitation, Pearson product-moment correlations were used as the statistical measure. The total score on the interpersonal questionnaire was used as the measure of the degree of activity and affection expressed by the volunteer. The questionnaire had been scored such that a higher numerical score on any particular item indicated a higher degree of activity or affection. To test the hypothesis of referent power or similarity, the third framework for the study, seven one-way analyses of variance were conducted using the caseworker rating as the dependent variable and the various demographic groupings as the independent variables.

Interpersonal Compatibility. The main hypothesis related to compatibility of interpersonal needs received moderate support. Although there was no significant relationship between compatiblity and effectiveness using the Q-sort rating, there was a significant relationship using the open scale ($r = .27$, $p < .05$). When both caseworker ratings were combined to form a composite rating, a significant relationship was also obtained ($r = .25$, $p < .05$). Thus, Schutz' overall hypothesis was supported. Single-parent children showed more improvement in their behavior when matched with adult volunteers they were compatible with than when matched with volunteers they were not compatible with. Looking at the various partial compatibility indices, there was a significant relationship between success and reciprocal compatibility for the second caseworker rating ($r = .26$, $p < .05$) and the composite caseworker rating ($r = .25$, $p < .05$). Reciprocal compatibility refers to the extent that the things one person needs are the things the other wants to give and vice versa. To the extent that the needs of the volunteer and the client complement each other, then, the two will work together successfully.

Examining other compatibility indices and individual needs, the most critical area appeared to be the area of inclusion. The single variable emerging from the FIRO surveys with all three caseworker ratings was the total originator of inclusion index for children ($r = -.24$, $p < .05$; $r = -.33$, $p < .01$; $r = -.29$, $p < .05$, respectively). This means that the volunteer-child relationship has the best chance of turning out well if the child has a preference for being included in others' activities or being invited to join others in what they are doing rather than if the child has a preference for being the person who does the including or inviting. An attempt can be made to interpret this finding. The volunteer will by design usually be the one to invite the child to participate in activities. The volunteer will usually be the one to arrange and plan out the details. So the relationship will be much smoother if the child is happy to be in the position of receiving inclusion behavior instead of wanting to be the one who initiates it. behavior.

Interpersonal Facilitation. The main hypothesis of the activity-affection model was also supported. The overall score on the interpersonal questionnaire correlated significantly with all three caseworker ratings ($r = .26, .24, .27$, respectively, all with $p < .05$). Thus, the volunteers that were more active and affectionate with the Little Brothers and Little Sisters were more successful as volunteers than were those volunteers who were more passive and rejecting with their charges. So, activity and affection are related to successful outcomes in volunteer-client relationships.

Buyer-Seller Dyad. Considering the theory of similarity in characteristics, based on the concept of referent power gleaned from the buyer-seller literature, some interesting findings arose. Although results appeared initially contradictory, after interpretation support was received for the idea that referent power through "similarity" in backgrounds will lead to more effective relationships.

For the first caseworker rating, there was a significant difference between dyads of differing combinations of ages, using a one-way analysis of variance ($F = 2.55$, $df = 5, 245$; $p < .05$). The combination of volunteer in the oldest age range (36 years old and older) and the child in the youngest age range (6 to 8 years old) yielded the most effective relationships. The opposite combination yielded the least effective matches. For the match in clinical assessment, there was a significant difference between groups of differing assessment ($F = 2.04$; $df = 8, 242$; $p < .05$). The combination of the volunteer in the medium range on suitability and the child in the highest range on suitability yielded the most effective matches, supporting the use of a global assessment of each candidate before being accepted into the program.

For the second caseworker rating, there was a marginally significant difference between dyads of differing combinations of educational backgrounds, using a one-way analysis of variance ($F = 2.40$, $df = 3, 205$; $p < .10$). The combination of volunteer and the child's parent both in the high educational range (college or graduate)yielded the most effective relationships. For the match in occupational status, there was a marginally significant difference between groups of differing occupational background ($F = 1.96$; $df = 7, 199$; $p < .10$). The combination of the volunteer in the highest occupational status and the child's parent in the lowest occupational status yielded the most effective relationships. The opposite combination yielded the least effective relationships.

Discussion

Buyer-Seller Dyad. Several important findings emerge from the research. First, consider the hypothesis of referent power based on the analogy with the buyer-seller dyad. This is the hypothesis discussed at the end of the previous section. The main result obtained is that peer-oriented matches do not seem to do as well as those that are separated by a larger age difference. Those volunteers who are the youngest do not have very successful relationships with the oldest children. Those volunteers who are the oldest do the best with the youngest children. Intuitively, this has appeal. In a program such as Big Brothers/Big Sisters, the crux of the program is the provision of an adult role model to a single-parent child. For there to be the respect and admiration necessary for effective role modeling, the volunteer needs to be significantly older than the child. If the two are close in age, there will not be that element of sex-role modeling of an adult by a child. The relationship would be more one of equals, which might not yield the kind of progress and improvement in the child that is crucial for an effective match.

Following the same logic, similar reasoning applies to the results obtained on the variable of occupational status. The best relationship occurred when the volunteer was of high occupational status and the child's parent was of low occupational status. Once again, it appears that if the volunteer has the upper hand, as it were, the relationship between the two members of the dyad will work out for the best, whereas if the child has the upper hand, the relationship will not work out as well.

The results on clinical assessment and education show direct support for the similarity model. Most successful relationships occurred if the volunteer and the child's parent were both of high educational background. Most successful relationships also occurred if the volunteer and child were both of medium to high suitability for the program. In viewing the findings on all four variables where significant differences were found, it would appear at first blush that the results are contradictory. However, the results do fit the hypothesized model, if similarity and referent power are distinguished from each other.

In a volunteer-client relationship, there is an unequal relationship. The volunteer is the "superior" person, and the client is the "inferior" person. The volunteer is to help the client in the client's functioning. This relationship, possibly more complicated than a typical buyer-seller relationship, may account for the findings obtained. It may well be that the volunteer and client must be similar to each other on some characteristics in order to achieve a minimal level of rapport. They should both be suitable for the program and of about equal suitability. They should come from somewhat analogous backgrounds, in that the educational levels will be similar. So this foundation of common ground lends support to the similarity view proposed in Evans' (1963) classic article.

But since the relationship is this case is based on the role modeling of the volunteer by the child, it is also necessary for there to be true referent POWER, the kind of difference in status between the two that will enable the client to identify with the volunteer and try to emulate him or her. For there to be role modeling, the volunteer almost by necessity must be older than the client in the case of the Big Brothers/Big Sisters program. And the occupational status of the volunteer can serve as an additional basis for a role modeling effect to occur. So in this sense one finds both the influence of similarity in providing a common frame of reference for dyadic interaction and the influence of referent power in providing the client with a volunteer that he or she can truly identify with and that can serve as a role model. From this latter perspective, the older age and higher occupational status of the volunteer provides the necessary referent power for the child.

Interpersonal Compatibility. The results of the current research support the use of Schutz' theory of compatibility in the area of dyadic interaction. If a volunteer and a client are involved in a one-to-one relationship, then they will be most productive together if they are compatible with each other. Specific areas of most importance are reciprocal compatibility and inclusion compatibility. Most successful dyads are those where the needs of the two members are complementary, i.e., the behavior that one person expresses is the same as the behavior the other person wants to receive, and vice versa. In addition, most successful matches are those where the client is willing to be on the receiving end of invitations to meet. The volunteer would do the initiating, and the client would accede to the suggestions. The implication of the study for nonprofit social service agencies is that use of the FIRO-B--a short, simple, self-administered survey with extensive reliability and validity data (Schwartz 1978)--would help these agencies to better match prospective volunteers with prospective clients in a one-to-one relationship.

Interpersonal Facilitation. The third area for consideration is Bierman's two-dimensional model of interpersonal facilitation. Results indicated that activity and affection expressed by the volunteer toward the client was associated with successful relationship outcomes. Although the statistical relationship was not tremendously strong, it was significant. Thus, if agencies want to have the highest success rate in their matches, they should try to select volunteers from among their applicant pool who are the most active and affectionate.

As most direct-service volunteers are involved in one-to-one relationships with clients of various kinds, the results of the study have general applicability. With so many Americans involved in volunteer service, proper selection and matching of these volunteers with clients becomes a critical issue. An inappropriate pairing of a volunteer with a client means that the organization has not fulfilled its side of the exchange process, an exchange process that is as vital to the nonprofit sector as to the profit sector. Appropriate selection and placement of volunteers is the primary means of efficient volunteer use by social service agencies. In this way, nonprofit service agencies can make the best use of their primary manpower market--volunteers used to carry out the goals of their programs.

References

Assael, Henry (1981), Consumer Behavior and Marketing Action, Boston, MA: Kent Publishing Company.

Assael, Henry (1984), Consumer Behavior and Marketing Action (Second Edition), Boston, MA: Kent Publishing Company.

Bierman, Ralph (1969), "Dimensions of Interpersonal Facilitation in Psychotherapy and Child Development," Psychological Bulletin, 72 (5), 338-352.

Brock, Timothy C. (1965), "Communicator-Recipient Similarity and Decision Change," Journal of Personality and Social Psychology, 1 (6), 650-654.

Churchill, Gilbert A., Robert H. Collins, and William A. Strang (1975), "Should Retailing Salespersons be Similar to their Customers?" Journal of Retailing, 51 (3), 29-42, 79.

Evans, Franklin B. (1963), "Selling as a Dyadic Relationship--A New Approach," The American Behavioral Scientist, 6 (9), 76-79.

Gadel, M. S. (1964), "Concentration by Salesmen on Congenial Prospects," Journal of Marketing, 28, (April), 64-66.

Goldstein, A. P. and N. R. Simonson (1971), "Social Psychological Approaches to Psychotherapy Research", In A. E. Bergin and S. L. Garfield (Editors), Handbook of Psychotherapy and Behavior Change: An Empirical Analysis, New York: Wiley.

Kotler, Philip (1975), Marketing for Nonprofit Organizations, Englewood Cliffs, NJ: Prentice-Hall.

Kotler, Philip (1979), "Strategies for Introducing Marketing into Nonprofit Organizations," Journal of Marketing, January, 37-44.

Kotler, Philip (1982), Marketing for Nonprofit Organizations (Second Edition), Englewood Cliffs, NJ: Prentice-Hall.

Kotler, Philip and Sidney J. Levy (1969), "Broadening the Concept of Marketing," Journal of Marketing, January, 10-15.

Parloff, M. B., I.E. Waskow, and B.E. Wolfe (1978), "Research on Therapist Variables in Relation to Process and Outcome," In S. L. Garfield and A. E. Bergin (Editors), Handbook of Psychotherapy and Behavior Change: An Empirical Analysis (Second Edition), New York: Wiley.

Riordan, Edward A., Richard L. Oliver, and James H. Donnelly, Jr. (1977), "The Unsold Prospect: Dyadic and Attitudinal Determinants," Journal of Marketing Research, 14 (4), 530-537.

Schutz, William C. (1958), FIRO-B: A Three-Variable Theory of Interpersonal Relations, New York, NY: Rinehart.

Schutz, William C. (1966), The Interpersonal Underworld, Palo Alto, CA: Consulting Psychologists Press.

Schutz, William C. (1978), FIRO Awareness Scales Manual (Revised Edition), Palo Alto, CA: Consulting Psychologists Press.

Schwartz, Susan (1978), "Research and Empirical Applications of FIRO Awareness Scales (1958-1977)," in FIRO Awareness Scales Manual (Revised Edition), Palo Alto, CA: Consulting Psychologists Press.

IMPLEMENTING THE MARKETING CONCEPT: A CASE OF CHANGE MANAGEMENT

Danny R. Arnold and Louis M. Capella, Mississippi State University

Abstract

By combining a strong cultural emphasis and an external orientation dictated by implementating the marketing concept, a firm can improve its chances of being successful over the long run despite changing environmental and competitive situations. This paper focuses on providing an overview of the change process as it relates to strengthening a firm's culture and implementing the marketing concept.

Introduction

Various companies have adopted the marketing concept as an operating philosophy and have implemented it by incorporating specific techniques in their business practices. When adopted and implemented, the marketing concept becomes an integral part of a firm's culture. The underlying framework of the marketing concept consists of four basic cornerstones: customer orientation, integrated marketing, customer satisfaction, and organization goals. Companies that can establish each of these cornerstones are in a much better position to cope with rapidly changing environments and customer preferences and, therefore, be successful. The primary benefit of the marketing concept is that it provides a central, external focus for company planning and decision making--the customer.

A major study of executives found virtual unanimity that marketing is the critical management function in their firms from a strategic viewpoint and that it will become even more important in the 1980s. One senior executive noted (Webster 1981):

> ...getting the marketing concept understood and accepted is still the biggest challenge faced by any organization, despite the fact that the concept is now more than a quarter century old... marketing tends to degenerate into a sales orientation and an exclusive concern for marketing communications.

Many feel, for example, that AT&T's success in its new ventures may well depend upon the development of a strong marketing and customer orientation (Uttal 1983).

Many managers have recognized the potential benefits of the marketing concept, but have then encountered major difficulties in attempting to move their organization toward adopting and implementing it. Unfortunately, very little sound advice is readily available for those managers interested in creating a genuine marketing and customer orientation in their company. Kotler's popular textbook is one of the few available sources, for example, but he devotes less than two pages to this vital issue. His advice, however, is sound (Kotler 1984):

1. The president's leadership is a key prerequisite. The vice president of marketing cannot unilaterally direct other company officers to bend their efforts to serve customers.

2. The president should appoint a marketing task force to develop a plan for bringing the marketing concept to the company. It should consist of the officers responsible for each functional area and other key individuals.

3. The task force should seek the guidance of outside consultants.

4. Establish a corporate marketing department that is responsible for reviewing each division's marketing resources and needs.

5. Sponsor in-house marketing seminars first for top management and, then, for all other managers and employees. These seminars should focus on modifying the beliefs, attitudes, and behavior of the various groups toward marketing and customers.

6. Try to promote market-oriented individuals to positions in management.

Although Kotler's advice is useful, many managers need much more guidance in this critical area. Consequently, this article focuses on a variety of issues related to the process of change and managing those changes needed to embrace the marketing concept as part of the overall organizational culture.

The Organizational Change Process

Before attempting a major change in a company, managers must understand the overall change process in an organization. Change is not an event--it involves a dynamic balance of forces working in opposite directions (Lewis 1947). A status quo situation is in a state of equilibrium when forces constantly pushing against one another are balanced. Resistances to change tend to act to maintain the status quo, while pressures for change are acting in the opposite direction. The combined effect of these two sets of forces results in a "frozen" or equilibrium situation.

Initiating change is an attempt to "unfreeze" the equilibrium situation. Change initiative must therefore involve at least one of the following:

1. Increase the strength of the pressures for change.

2. Reduce the strength of the resisting forces or remove them completely.

3. Change the direction of a force or convert a resistance into a pressure for change.

Successful initiation of change requires that managers become skillful at diagnosing and understanding the forces pressing for change and the resistances to change. Further, managers must understand which forces they can and cannot effect. Very often managers waste precious time considering actions related to forces over which they have little or no control.

Is Change Necessary?

Before any major decisions are made and implemented, management must carefully evaluate the organization's need for the marketing concept and the cost of the corresponding organization changes. Essentially, management must perform a cost/benefit analysis.

Management must determine the costs of the change process. Two tough facts must be faced--change is time consuming and expensive. Keep in mind that moving an organization toward adopting the marketing concept also involves changing the organization's culture, which cannot be done overnight. Some researchers estimate that such changes require all employees to devote an average of 5 to 10 percent of their time to the change process for an entire year. The cost of this time equates to 5 to 10 percent of a firm's annual salaries and wages (Deal and Kennedy 1982). In addition to this cost, consultants must generally be hired to assist management in such major changes.

To determine the benefits of developing a planned change program, management must determine the present situation (where the firm is now) and the desired situation (where the firm needs to be) relative to its culture and a marketing and customer orientation (Arnold and Capella 1985). The gap between the actual and desired positions represents the amount of change needed by the firm. Management should probably consider efforts to reshape culture when (Deal and Kennedy 1982):

1. The environment is undergoing fundamental change and it is clear that traditional cultural values will lead to serious decline in performance, if not organizational destruction.

2. The industry is highly competitive and the environment often changes rapidly.

3. The company's past performance record is mediocre, or worse.

4. The company is growing very rapidly.

Since a firm's culture has a large influence on its ability to adopt and implement the marketing concept, it can also be helpful to consider both culture and the marketing together. One way to do this is with the simple 2x2 matrix shown in Figure 1 (Arnold and Capella 1985).

FIGURE 1

ORGANIZATION CULTURE GRID

STRENGTH	ORIENTATION: closed	ORIENTATION: open
high	Strong, closed culture	Strong open culture
low	Weak, closed culture	Weak, open culture

Weak-Closed Cultures

A weak-closed culture (quadrant 1) has nonuniform individual attitudinal and behavioral patterns and an internal focus; the internal focus indicates that the firm has not adopted and implemented the marketing concept. This is the least desirable situation because of the lack of unified activities and direction and the inability to respond to environmental changes. Newer firms may face this problem more frequently than firms with a long, successful history.

This situation is characterized by a lack of understanding by employees of "what to do" and "what the firms stands for." Employees generally have little sense of personal belonging to the firm and little personal investment in the goals or direction of the firm. This weak culture does not lend itself to implementing an external orientation (the marketing concept) when the internal situation is so fragmented.

A hospitable environment for a firm of this type would probably involve reasonable growth opportunities and unorganized or weak competition. However, firms in this quadrant will find it difficult to compete in a dynamic environment or one with strong competition. Firm's finding themselves in this situation must initiate a change strategy that both (1) strengthens its overall culture and (2) improves its external orientation, such as with the marketing concept.

Strong-Closed Cultures

A strong-closed culture (quadrant 2) has relatively uniform core attitudinal and behavioral patterns, but an internal orientation. A firm in this quadrant knows "who they are and what they are about", but lacks the external relationship with the environment needed to cope with changing situations. Implementation of the marketing concept may or may not be difficult, depending on why the external orientation has not previously been developed. Firms in the utilities industry, banking, and the steel industry may fit into this quadrant.

In this situation, the strength of the culture can benefit the firm only if the firm operates in a relatively stable environment. Conversely, a firm with a strong but internally focused culture typically has trouble coping with rapid environmental changes. The firm must therefore develop a change strategy that adds an external orientation to its cultural characteristics.

Weak-Open Cultures

A weak-open culture (quadrant 3) has nonuniform individual attitudinal and behavioral patterns and an external orientation. The weakness of the overall culture, however, actually limits the degree to which a firm can effectively adopt and implement the marketing concept and, therefore, maintain a true external orientation. For example, the non-uniform individual attitudinal and behavioral patterns imply that only a few individuals (perhaps the marketing department) have an external focus. Or, the marketing concept might be adopted in theory, but not implemented or practiced by many in the organization. Some larger retail organizations are in this cell.

An openness to the environment and little internal identification with the organization indicates a high degree of flexibility or possibly an unorganized, fragmented situation. Increased identification with the organization and more structure and managerial control is probably necessary to fully implement the marketing concept.

Firms in this quadrant can probably succeed in situations where creativity and innovativeness are necessary for survival. However, the success of the firm is highly dependent on individuals with an orientation outside the firm. Results may be positive at various periods, but a continuity of effectiveness may not be present.

Without hindering the creative process, a stronger culture needs to be implemented. Firms with this type of culture must strive to develop a change strategy that creates more uniform attitudinal and behavioral patterns while building upon the existing external focus.

Strong-Open Cultures

A strong-open culture (quadrant 4) has relatively uniform attitudial and behavioral patterns and an external orientation. This type of firm knows who and what they are and employees generally understand and agree with the culture. An external orientation provides a basis for effective marketing decisions and adapting to environmental changes. Many successful firms would fit into this quadrant, including some of the firms mentioned by Peters and Waterman in their book In Search of Excellence such as IBM, 3M, and Delta Airlines.

A firm in this situation should be able to succeed in most competitive environments. Since this type of culture is the most desirable, firms in this quadrant should simply monitor its culture to help ensure that it stays strong and open.

Determining a Firm's Position on the Matrix

Previous research has been undertaken to address the matrix issue presented in Figure 1. Since the research was not designed for this particular purpose, the measuring instruments require modification and validation. This process is on-going and should be completed in 1986. Firms could use those measuring instruments to determine their position in the 2x2 matrix.

Attaining a Strong-Open Culture

The changes required within an organization to move in the direction of a strong-open culture will, of course, depend on the quadrant in which a firm is presently situated. Increasing the strength of an organization's culture requires the development of beliefs, attitudes, values, and behaviors that focus on a core issue of what the organization is, what it stands for, and how it fits into the existing environment. A strong philosophy of purpose or mission must be established and inculcated through-out the organization.

Establishing the marketing or external orientation within an organization requires a focusing of efforts toward the constituencies served by the organization. Designing the organizational structure along with an external orientation of attitudes, values, and behaviors outside the organization must be accomplished. Giving marketing a wider range of decision influence and gathering more external data for decision making are minimal requisites for implementing the marketing concept.

Resistance to Change and to the Marketing Concept

Management must anticipate resistance to any efforts to change the existing culture and specific resistance to the marketing concept. This resistance can arise from individuals within the organization and from the organization itself. The key to coping with this resistance involves understanding the underlying reasons for the resistance.

Individual Resistance to Change

1. Habit: In relatively stable situations, individuals generally respond to stimuli in their accustomed way.

2. Selective attention and retention: People resist change because they tend to read or listen only to those things that agree with their present views and ways of doing things, by conveniently forgetting any knowledge that could lead to opposite viewpoints, and by misunderstanding communication that would be incongruent with their preestablished attitudes.

3. Dependence: Dependency on others can lead to resistance to change if people have not developed self-confidence and self-esteem.

4. Security: Many people are comfortable and secure in their job--they know how to do the job well and like those with whom they work. Security threatening changes, such as

restructuring an organization to improve customer service, can encounter resistance.

5. Fear of the Unknown: Confronting the unknown makes most people anxious and each major change in an organization carries with it an element of uncertainty.

6. Economic Reasons: Since money weighs heavily in people's considerations, they usually resist changes that pose the possibility of lowering their income directly or indirectly.

Organizational Resistance to Change

Organizations are designed to promote continuity and therefore, to a certain extent, resist change. Strong defenses are often created to resist undesirable changes, thereby fostering stability and ensuring reliability of the prescribed operations. Although there are positive aspects to this situation, the major problem is that organized resistance (relative to the present functioning of the organization) to any change initiative can arise, including adopting the marketing concept.

To fulfill its responsibility, marketing must naturally seek to obtain some influence on such decisions that influence customer satisfaction. Other departments tend to resent what they perceive as marketing attempting to take center stage in the firm. Marketing personnel therefore face a marketing problem of their own. They must convince other organization members that the focus should be on the customer--not on marketing.

Organized resistance is especially conspicuous in industries where the marketing concept is being introduced or proposed essentially for the first time, such as the legal and accounting professions, public utilities, libraries, hospitals, and colleges. The lawyers, accountants, professors, and others tend to think that marketing their services would be degrading.

Five categories of reasons for organizational resistance to change are identified (Hellriegel, et al 1983).

1. Power and territory: Many people derive satisfaction from their ability to exercise power and influence in their "territory." These people resist encroachment in any form, whether from other employees or from organizational change.

2. Organizational structure: Rigid organizational structures tend to be self-reinforcing and highly resistant to change. Change initiatives often get screened out, buried, or lost because they threaten the status quo.

3. Resource limitations: Some forms would like to change the status quo, but simply do not have the necessary resources.

4. Sunk costs: Some firms experience resistance to change because of sunk costs in terms of money and people.

5. Interorganizational agreements: Proponents of change may find their plan delayed by arrangements with competitors, commitments to suppliers, pledges to public officials in return for licenses or permits, promises to contractors, and so on.

Selecting a Change Approach

Considerable controversy exists over the best approach for changing an organization or its employees. Although many different approaches have been successfully used in organizational change efforts, what works for one organization may fail in another. Since there is no single best approach to change, management must select one or a combination of approaches. Unfortunately, neither is there a ready-made or agreed-upon formula for determining the best approach or combination of approaches. The choice, therefore, should be based on an accurate diagnosis of organizational problems and the firm's position in the matrix discussed above (Burke 1982). The four major steps involved with selecting a change approach are discussed.

Define the Change Problem

As with any problem solving process, the problem must be precisely defined. Management must recognize that specific problems and behavior are the product of many interacting forces or causes. Management must also be careful to distinguish between problems (causes) and symptoms (results)--failure to do so can lead to serious errors. For example, increased attention on marketing issues will not lead to increased sales if the real problem lies in R&D or production. Determine the Organization's Readiness and Capability for Change.

At this point, management must be willing and able to commit the necessary resources for changing. Approaches that require a massive commitment of funding and personal energy and time will probably fail if the company has few resources and its people do not have time to think through the issues. In such situations, the company may benefit most from starting with a more moderate, less demanding approach and increasing the depth and breadth of the change as additional resources become available.

Determine the Change Goals

Management must determine the change goals or desired results. Part of this determination involves choosing the initial focus of change activities. The choice is based on addressing the following questions:

a. Do attitudes need changing? If so, whose and which ones?

b. Does behavior need changing? If so, by whom and to what?

c. Does knowledge and understanding need changing? If so, where?

d. Do organizational procedures need changing?

e. Do practices and ways of work need changing? If so, whose?

Planned change can focus on any of four interacting variables: task, structure, people, and technology variables (Hellriegel, et al 1983). Each general approach mentioned can be viewed as a category that consists of more specific change strategies.

The people variable consists of the individuals working within the organization, including their attitudes, personal styles, and motivations to work in the organization. The people approach attempts to change organizations by modifying the attitudes, values, behavior, and interpersonal process of the organization's members. Specific people-focused strategies include survey feedback (Hellriegel, et al 1983; Nadler 1977), team building (Beer 1980; Beckhard 1972; Sherwood 1972), and process consultation (Scheing 1969; Kaplan 1979).

The task variable involves the job and whether it is simple or complex, novel or repetitive, or standardized or unique. The task approach therefore focuses on the jobs performed by employees. Specific task-focused strategies include job design (Griffin and Woodman 1983) and management by objectives French and Hollmann 1975).

The technology variable is the problem-solving methods or techniques in the organization, such as computers, typewriters, and drill presses. The technological approach focuses mainly on problem-solving methods. The same strategies are often used for both task and technology approaches.

The structure variable involves the system of communication, authority, and responsibility in the organization. Note that an organization's structure specifies power relations among individuals. The structural approach therefore focuses on changing the interal structure of organization, such as the responsibilities and relationships, the number of levels, and so on.

Choose a Change Strategy

Management should now be ready to choose a game plan involving a specific strategy or combination of strategies. Each change strategy requires the gathering of data, organizing data, diagnosis of the specific problems, planning a change program, implementation, and evaluation of the changes. Although a detailed discussion of specific change strategies is beyond the scope of this article, a variety of strategies are briefly described below.

Conditions Required for Successful Change

Although the specific details of successful change programs will vary, these situations have several common prerequisites (Beckhard 1973).

First, organization members must recognize that change is needed. Without this recognition, member involvement and participation will be minimal and half hearted.

Second, organization members must be committed to changing. To build this commitment, participation and involvement of members in reexamining problems and practices is necessary. This participation also helps enhance consensus-building processes.

Third, the scope of early change efforts should generally be somewhat limited. For example, small scale, trial-and-error projects can be initiated. This can help insure early success and prevent major failures that can slow down the momentum of change.

Fourth, new ideas and concepts should be brought in from the outside to help organization members find new approaches to improve effectiveness.

Fifth, there must be two-way trust in all matters pertaining to the change. Communication channels must be numerous and open.

Sixth, those effected by the change must have the skills necessary to cope with the new situation. It may help to think of change as skill-building and include training as part of the change process.

Seventh, the organization must allow enought time for the change to take hold. The time needed is a function of the distance the organization must move to close the gap between its present and desired situation. For firms with a closed system and internal orientation, the time may be measured in years.

Pitfalls of the Change Process

Managers must be aware of the potential problems encountered in change efforts. Some of the key problems are discussed.

First, many change initiatives have poorly defined goals. Poorly defined change goals are likely to create uncertainty and anxiety for those whom the change effects. Properly defined goals help ensure that the correct change strategies are chosen. Further, when people are informed of an understand participation in the change process, they are more receptive to the change itself (Marrow, Bowers, Seashore 1967).

Second, change attempts are often characterized by poorly defined problems. Symptoms are too often mistaken for problems, which results in misguided change initiatives. For example, poor sales volume may be a symptom of an underlying problem, such as poor products, poor sales training, and so forth.

Third, change attempts are often characterized by poor implementation tactics. For example a job design change strategy that looks good on paper can be so poorly implemented that everyone continues to do the same thing.

MARKET SEGMENTATION IN THE COLLEGIATE BASKETBALL MARKET

Kent L. Granzin, University of Utah
Janeen E. Olsen, University of Utah

Abstract

This study investigates the characteristics of three market segments based on patronage in the collegiate basketball market and provides suggestions for marketers who operate in this market. This research gives special recognition that this "semi-professional" product competes with the true professional offering in a number of markets. Those segments investigated were non-attenders, low attenders, and high attenders. They were characterized in terms of their general market orientation, interests in leisure pursuits, opinions about the competing product, professional basketball, and demographics.

Introduction

Americans are a leisure-oriented society, one that spent 141.3 billion dollars on recreation in 1983, including 2.6 billion on spectator sports (U. S. Dept. of Commerce 1985). In particular, Americans have turned collegiate athletics into a multi-million dollar business. This study investigates the characteristics of one important part of this market, the market for collegiate basketball. Its magnitude may be gauged by the level of attendance during the season of 1982-83, when members of the National Collegiate Athletic Association drew 31,471,135 spectators to their games alone (U. S. Dept.of Commerce 1985).Assuming an average ticket price of $7.00, one can estimate revenues of 220 millions dollars for this service offering.

Clearly, from an economic standpoint, collegiate basketball provides a professional service, the legal definition of amateur athletics notwithstanding. In fact, professionalism on the part of collegiate athletic organizations has often been charged -- and often been substantiated through formal investigation. Sports Illustrated magazine reported that the Executive Director of the NCAA feels that "Many college sports programs are already semiprofessional, and he's merely suggesting that administrators end the hypocrisy and acknowledge as much." (McCallum 1984). It appears that many colleges sponsor basketball teams that are professional in all but name. Given the professionalism of the service provided to spectators, it is apparent that they compete in a broadly defined market that in many areas includes acknowledged professional teams in basketball and other winter sports, teams that appear both in person and on television. Given the size of these markets, collegiate basketball can easily be called "big business."

Thus, the body of knowledge that has been developed to aid decision-makers in industry can be of potential benefit to decision-makers responsible for the success of collegiate basketball programs. In particular, these managers face a continual need to make marketing decisions at the strategy level. Given their need for marketing information upon which to base their decisions, these managers can benefit greatly from the managerially-oriented research into the nature of their markets. This paper provides information that can be of such use in planning marketing strategies for reaching their markets.

The purpose of this study is to characterize the market for collegiate basketball in terms of managerially useful variables. Measures of the market are associated with patronage, the important criterion variable for those charged with finding success in this market. The research serves further to show how managers in this service industry can benefit from marketing research to find information that will aid the success of their business operations. Also, this report includes specific recommendations on how the research findings can be translated into elements of marketing strategy.

Conceptual Scheme Underlying This Study

The broadly defined market includes both professional basketball and hockey teams. The criterion used to indicate success in this market is patronage, the extent to which persons in the target market support the service offerings of the team from the local university. The conceptualization specifies that segments based on patronage of college games can be isolated, and these segments can be predicted by characteristics of this market that are useful for marketing decision making. The characteristics treated in this study fall into four broad categories of variables: general market orientation, interest in leisure pursuits, interest in sports, and demographics.

Space limitations prohibit a full discussion of the rationale for expecting each of the relationships between patronage and the potential predictor variables. However, illustrative variables from each set of potential predictors in the conceptual scheme will be introduced. These variables were selected on the basis of their potential usefulness for decision making for marketers in the target market investiated by this research.

The first three sets of variables represent what has become known as psychographics or AIO's. As mentioned, the AIO's used in this study reflect the attributes potential customers seek in the marketplace, their interest in leisure pursuits, and the opinions they hold about about issues relevant to sporting events (including the professional alternative).

Market Orientation reflects the predisposition of the customer to engage in a range of marketing activities such as pre-purchase planning, and to respond to attributes of marketing offerings, such as price and product quality. The measures include items such as information search (Bettman 1979) and product involvement (Traylor 1981). The rationale for including these variables is that the general market orientation of the customer may influence his behavior in a specific market such as that investigated in the present study. The potential value of these variables for management in the collegiate basketball market stems from their demonstrated usefulness in guiding marketing decisions in other contexts.

Interest in Leisure Pursuits relates more directly to the market in question. The sources for research findings involving these measures found them predictive of behavior involving the general market for recreation services and products. Here, recreation-oriented behavior was found linked to such predictors as the influence of early experiences in sports (Sofranko and Nolan 1972; Andreasen and Belk 1980); the desire for companionship during leisure pursuits (Martens 1971), and a person's preferred use of leisure time (Holbrook and Lehman 1981).

Even more directly, Opinions about Sports reflects the nature of the market in which the collegiate basketball must compete. In 23 of the largest metropolitan markets, the National Basketball Association fields teams that vie for the customer's entertainment dollar. And various admitted semi-professional men's teams, women's teams, and other winter sports attractions add to the clutter of competition that must be overcome by collegiate basketball offerings. The extent to which spectators receive and identify with these offerings can considerably influence the financial success of collegiate programs.

Opinions about Sports includes variables previous research has found predictive of participation, attendance, and interest in sporting events. Variables in this category include the nature of the interaction between the individual spectator and the crowd (Hocking 1982), the perceived intensity of the rivalry between competing teams (Ruder and Gill 1982), one's use of athletes as a reference group (Chorbajian 1978), and intrinsic satisfaction with a recreation activity (Hawes 1978; Unger and Kernan 1983).

Method

The hypothesis of a relationship between membership in a market segment defined by patronage and the four types of potential predictors was tested with data collected in a large metropolitan area. This area features direct competition between the state university basketball team and an NBA franchise, as well as professional hockey and other competing forms of entertainment. Trained interviewers personally administered a self-completion questionnaire to an age-and-sex quota sample of 225 adults aged 18 and over. Socioeconomic representation of respondents was ensured by assigning the interviewers to various sections of the metropolitan area.

AIO's were measured using six-point rating scales. For example, the item for quality proneness asked: When you are buying a product, how important is it to get the highest quality? This item was anchored with "Not at all important" and "Extremely important."

The broad category of demographics featured both socioeconomic measures and media preferences. In addition, it included items on attendance at contests of the local professional basketball and hockey teams. Measures of demographics used the format of both forced choice and free response items, as indicated in Table 1. Type of dwelling and preferred radio programming were collected as nominal measures and subsequently coded as dummy variables for analysis. The criterion measure of patronage came from an open-ended question that asked how many games of the university team the respondent attended during the preceding basketball season.

Many respondents had limited or no interest in the offerings of the university team. Thus, 62.2 per cent of the sample attended none of the games. Those attending one or more games were coded in accordance with Twedt's (1964) concept of the light and the heavy halves of the market. Those attending one or more games were split as closely as possible at the median number of games attended, giving 19.6 per cent who attended one, two, or three games, and 18.2 per cent who attended four or more games. For convenience, these three categories of patrons will be referred to as the None, Low, and High patronage groups.

With a categorical measure of patronage, and continuous measures for the predictor variables, univariate analysis-of-variance and multiple discriminant analysis (MDA) were selected as techniques for analysis. Each of the four sets of predictor variables was treated separately for multivariate analysis of the hypothesis of relationship between patronage and the predictor set in question. MDA results were interpreted by using those loadings that had an absolute value of .30 or greater.

Results

Table 1 presents the results from analyses of the hypothesized relationship between membership in a patronage segment and each of the statsitically significant sets of hypothesized predictor variables. Three of the four multiple discriminant analyses produced one root significant at the .05 level. Thirteen predictors reached significance in univariate analysis-of-variance. No variables in the Market Orientation set reached significance in ANOVA; nor was the set significant in MDA.

The MDA involving Interest in Leisure Pursuits was significant at p=.000, and produced one significant root. The probability of a Type I error for the second root was p=.057; loadings for this root are given to provide supplementary information to that for the significant root. The centroids for the first root increased monotonically from the None segment, through the Low segment, to the High segment. The first root is defined by four variables: taking pleasure from sporting events, preferring active (as opposed to passive) pursuits, having a self-image as being athletic, and attending more sporting events as a child relative to other children. The four significant ANOVA's

TABLE 1

Characteristics of the Market for College Basketball

Variables	Means None (n=140)	Means Low (n=44)	Means High (n=41)	F-Ratio	p	Loadings I	Loadings II
Interest in Leisure Pursuits[a]							
Need for change from work routine	4.15	4.27	4.59	1.56	.214	.23	.23
Need for independence in leisure choice	4.91	4.66	5.17	2.20	.113	.03	.58
Need for companionship during leisure	4.81	5.11	5.05	1.68	.189	.24	-.14
Preference for active (vs. passive) pursuits	3.57	4.30	4.88	14.20	.000	.72	.33
Self-image as athletic	3.61	4.70	4.56	11.04	.000	.64	-.29
Childhood attendance at sporting events	3.35	3.93	4.44	8.86	.000	.57	.28
Pleasure from sporting events	3.09	4.00	4.31	14.46	.000	.75	.08
Opinions About Professional Sports[b]							
Pro athletes as a reference group	3.51	3.20	2.76	4.59	.011	.42	
Excitement from enthusiastic crowd	2.59	2.43	2.44	.30	.740	.11	
Excitement from animosity between teams	3.74	3.30	2.88	4.85	.009	.44	
Acceptance of alcoholic beverages at pro games	2.81	3.18	3.37	1.63	.199	.26	
Enjoyment from large crowds	3.84	4.30	4.39	3.25	.041	.36	
Enjoyment when standing at games	3.43	3.52	3.76	.78	.458	.17	
Excitement of professional basketball	4.05	4.23	4.56	2.68	.071	.32	
Satisfaction from professional basketball	3.23	4.07	4.56	16.58	.000	.82	
Importance of a winning team	2.61	2.32	2.22	1.50	.226	.24	
Demographics[c]							
Years in local area (no. of years)	24.97	21.66	18.17	3.05	.049	-.27	
Sex (0=female, 1-male)	.39	.59	.68	6.90	.001	.40	
Marital status (0=single, 1=married)	.62	.48	.51	1.81	.166	-.18	
Household size (no. of persons)	3.14	3.22	3.20	.05	.953	.03	
Rents Apartment (0=no, 1=yes)	.20	.36	.27	2.53	.082	.16	
Rents a House	.06	.14	.15	2.34	.099	.23	
Owns a House (0/1)	.62	.43	.36	5.60	.004	-.36	
Owns a Condo (0/1)	.05	.00	.10	2.19	.114	.07	
Occupational prestige of self (NORC scale)	67.95	79.93	70.80	1.63	.199	.19	
Job leaves evenings free for entertainment	.850	.932	.902	1.19	.360	.13	
Prefers easy listening radio programming (0/1)	.37	.30	.37	.43	.652	-.04	
Prefers Contemporary Popular music radio (0/1)	.17	.27	.24	1.08	.341	.13	
Prefers Rock music radio (0/1)	.12	.20	.24	2.19	.115	.23	
Prefers Country-Western music radio (0/1)	.15	.16	.09	.42	.659	-.08	
Prefers Talk & News radio programming (0/1)	.09	.05	.02	1.40	.250	-.18	
Education (years of schooling)	13.00	13.88	15.10	7.69	.000	.43	
Age (years)	42.46	35.27	33.54	6.67	.002	-.39	
Annual Household Income	5.05	4.77	5.17	.69	.504	.01	
Monthly Personal Expenditures on entertainment for household (dollars)	92.33	89.66	106.22	.348	.707	.07	
Attendance at professional basketball games (last year)	.81	3.09	5.85	19.61	.000	.68	
Attendance at professional hockey matches (last year)	1.00	1.98	2.56	2.46	.088	.24	

[a]Canonical discriminant analysis significant at 0=.000, first function significant. Centroids for the market segment groups are None, -.37; Low, .51; High, .72. Second function significant at .057. Centroids for the second function are None, .02; Low, -.41; High, .36.
[b]Canonical discriminant analysis significant at p=.000. Centroids for the market segment groups on the first function are None, -.35; Low, .38; High, .79.
[c]Canonical discriminant analysis significant at p=.001, first function significant. Centroids for the market segment groups are None, -.43; Low, .38; High, 1.11.

support this portrayal of the three segments, with the exception of a slight reversal from monotonicity.

The second, marginally non-significant root defines a function for which the highest value of the centroid falls to the High group, and the lowest to the Low group. Thus, this function contrasts the two segments which do attend university games, wherein the Low group is less likely to need independence in making a decision on how to spend leisure time and to prefer passive, rather than active, pursuits.

Opinions about Sports also reached significance in MDA at p=.000. The function for the single significant root is dominated by finding intrinsic satisfaction in professional basketball games. Other variables contributing to this function are gaining excitement from animosity between teams, supporting the use of professional athletes as a reference group, enjoying large crowds, and finding excitement in professional basketball. The centroids show the High group to score highest and the None group lowest on this function. ANOVA's found the first four variables significant, with the means falling in monotonic order from the None to High segments. Thus, one measure relating to the professional sport clearly distinguishes among the segments, and another such measure provides marginal distinction.

Demographics, too, produced one significant root in an MDA that was significant at p=.001. Again, the centroids for the groups fall in monotonic order from None to High. The function was defined by attending more professional basketball games, having a higher level of formal education, having a greater likelihood of being male, being younger, and being less likely to own a house. In addition, its significant univariate F showed the High group to have spent fewer years in the local area than the None group.

Implications for Marketing Management

The results show that the market segments for collegiate basketball can be characterized with respect to a variety of measures suggested by previous studies in related areas. Clearly, marketing research can help the managers of collegiate sports programs to better understand their spectator markets. Demographics again help to portray the nature of the market in question. With respect to AIO's, the variables that are more specific to recreation services, which here range from leisure pursuits to basketball, relate statistically to patronage; the general measures of Market Orientation do not. Thus, further research into this market should concentrate on those variables that reflect more specific interests and opinions, and avoid those more general marketing measures that have been useful for marketing research into food, clothing, automobiles, etc.

This section summarizes the findings on the nature of the market for collegiate basketball, and offers suggestions for marketing management (while recognizing that many of the organizations to which these findings apply have not organized around a truly marketing orientation).

High Attenders

The demographics for the High segment show the most frequent patrons of collegiate basketball games tend to be youthful, educated males who are less established in the community. In some respects, their aggregate characteristics suggest they are older versions of the students who constitute an obviously large part of the market for these games. In other respects, however, they represent the general characteristics of all residents of the geographical area. That is, they do not differ from members of the other segments with respect to income, marital status, occupational prestige, and preferences for radio programming.

While they do not differ significantly in the total amount of money they pay for entertainment, they do prefer to allocate more of their funds to spectator sporting events. More broadly, analysis of the AIO's shows they gain more pleasure from athletics, both as spectators and as participants. Their interest in sporting events was developed early in life. These frequent patrons find intrinsic satisfaction from the professional alternative to collegiate basketball and identify with its performers. They like the excitement of games in general and the excitement of the combative nature of the contests in particular.

It is clear that the members of this segment are basketball enthusiasts in general. The data suggest they are sports fans first, basketball fans second, and collegiate basketball fans third. In any case, while there may be conflicts from split loyalties toward the professional and collegiate teams, the data do not support the oft-heard contention that an NBA offering tends to cannibalize the offering of a local university.

On this basis, an appropriate marketing strategy for the university's athletic department would be to encourage patrons to first maintain their interest in sports in general, then their interest in basketball in particular. To the extent these marketers can increase interest in a variety of sporting events, they will sustain the overall interest of the fans, who will likely allocate a portion of their money and time to the college offering. Although the data do not provide direct evidence on this matter, it would of course seem advantageous to emphasize interest in university teams.

College athletes could make visible appearances at a number of lesser sports contests, at health clubs and gymnasiums, and at other athletic events in the metropolitan area, thereby encouraging fans to identify with the university when it comes to sports. To the extent these athletes become known to younger participants (e.g, those in "little" leagues and public school leagues), they will be communicating a message to the paying spectators of the future. The university could provide sponsorship for some local athletic contests, particularly those that involve the younger participants.

To further build identification with these athletes, public relations and promotional materials could convey information on several of the players, who would be portrayed as the "good guys" in the athletic struggles with the "bad guys" of the opposition. To attract younger fans, on dates when the visiting team cannot draw enough spectators to fill the arena, special prices could be advertised for the entire family, or at least for younger fans.

The programs, and perhaps free handouts, could further build the fans' identification with the players through action shots of their athletic heroes. Verbal portraits, concentrating on the athletic deeds and statistics of these players, would satisfy the rabid sports fans in the audience and build their desire to return to see their team in action again.

The sense of action could be accentuated through public address announcements at the games that are designed to heighten the excitement of the moment. The overall appeal would be that one who is a spectator is an important part of a great crowd of active people who are at the center of considerable excitement. The radio announcers chosen or accepted by the athletic department can be trained to further this feeling of excitement and combativeness at the games. In this vein, all references to the games would stress that they are activities, that is, frought with action. To further this feeling of activity and spectator involvement, spectators could be drawn by lot to engage in short contests during halftime, such as free-throw or field-goal shooting contests.

Low Attenders

The Low segment falls between the High and the None segments in almost all significant measures of the market. Both individual items and the overall pattern of the data suggest that many of these infrequent patrons attend games because they want to accompany someone else, likely someone who has a greater interest in the proceedings. Left to their own choice, they would probably select another way to spend the evening (or afternoon).

Marketers might possibly make some inroads with this segment by using the same strategy suggested for the High segment. More likely, rather than using an appeal based on excitement and action, these patrons may be reached by pointing to the social aspects of the game, and the chance to get out with a wide variety of different kinds of people. In this vein, even the person with a passive orientation may be attracted by the human spectacle of thousands of interesting people in attendance. More, directly, it may be more effective to appeal to members of the High segment to create members of the Low segment by taking others to the game.

Non-Attenders

Those who do not attend these games are older, more established persons who nonetheless do attend a small number of professional basketball and hockey contests. The results provide only limited evidence upon which to base recommendations for marketing the collegiate game to these persons.

Ads in the programs sold at the professional contests may be used to remind them there is an appeal in collegiate basketball, as well. They may respond to attempts to link them with "their" local school, whether they attended it or not. They may be shown how their college team represents their community in intra- and interstate basketball wars, and this may furnish a point of identification with the team. Also, the non-attenders may be shown that tickets to games provide an appreciated gift for someone else who is a sports fan.

Persons in this segment form the basis for further marketing research to determine what they like to find in leisure time pursuits. Perhaps collegiate basketball does possess some of the attributes they seek, and these characteristics could be properly promoted to the non-attenders to spark their interest.

Summary

This study examined the nature of the market for collegiate basketball, with a special recognition of its part in the larger market for winter spectator sports. Demographics and two types of AIO's served to distinguish among the High attenders, the Low attenders, and the Non-attenders. Once again, marketing research was shown to provide useful information for managers charged with running a profitable operation in a service industry that has not yet fully embraced the marketing concept.

References

Bryant, Jennings et al. (1982), "Sports and Spectators: Commentary and Appreciation," Journal of Communication, 32 (No. 1), 109-19.

Burge, Rabel J. (1969), "Levels of Occupational Prestige and Leisure Activity," Journal of Leisure Research, 1 (No. 3), 262-74.

Chorbajian, Leon (1978), "The Social Psychology of American Males and Spectator Sports," International Journal of Sports Psychology, 9, 165-75.

Cunningham, David A. et al., "Active Leisure Activities as Related to Occupation," Journal of Leisure Research, 2 (No. 2), 104-11.

Hawes, Douglass K. (1978), "Satisfactions Derived from Leisure-Time Pursuits: An Exploratory Nationwide Survey," Journal of Leisure Research, 10 (No. 4), 247-64.

Hocking, John E. (1982), "Sports and Spectators: Intra-Audience Effects," Journal of Communication, 32 (No. 1), 101-8.

Lewko, John H. and Martha E. Ewing (1980), "Sex Differences and Parental Influence in Sport Involvement of Children," Journal of Sport Psychology, 2 (No. 1), 62-68.

(Additional references available from the first author.)

IS THE MARKETING OF ART EXHIBITIONS ECONOMICALLY JUSTIFIABLE?

James A. Brunner, The University of Toledo
J. Marc De Korte, The University of Toledo

Abstract

As art museums are in the nonprofit sector, they are oftentimes perceived as economic drains. However, as is demonstrated in this research, museums also have a major economic impact when they present major art exhibitions. The economic contribution of an international exhibition on one region is estimated to have been approximately $18 million, and was considered to have been an outstanding success, economically as well as culturally.

Introduction

Art museums, while renowned for their contributions to the cultural enhancement of their communities, are frequently perceived as economic burdens. Although financial support is provided by their endowments, in recent years most museums have experienced economic strains, and their need for public support is evident. Unfortunately, limited research has been conducted on the economic impact these institutions have on the communities in which they are located. The objective of this study has been to measure, quantitatively, the economic impact of a major art exhibition and to demonstrate its economic significance to the local economy.

In 1982, El Greco of Toledo: An International Exhibition was shown in The Toledo Museum of Art in Toledo, Ohio, as well as other museums: Madrid, Spain; Washington, D.C.; and Dallas, Texas. The exhibition was an outstanding cultural success, resulting in record breaking attendance in Washington, D.C. and Toledo, Ohio. Over 182,000 visitors, including approximately 10,000 school children, attended the showing in Toledo, and it was considered by G. L. Olsen, Director of the Toledo Chamber of Commerce Convention and Visitors Bureau, to be a "block-buster" art presentation.

Objectives

Several objectives justified this research on the economic impact of the El Greco show. The magnitude of the exhibition's impact on the Toledo, Ohio area provided a gauge of the contribution of The Toledo Museum of Art, not only as a major institution which enhances the quality of life of the Toledo area inhabitants, but its impact upon the region's economy as well.

The economic impact data provide a basis for comparison with similar data from cultural institutions in other cities. The data also serve as a measure of the effectiveness of the museum in economically enhancing the geographic region in which the museum is located. The success of the El Greco exhibition will undoubtedly serve as an inspiration for future efforts to create new exhibitions which will be beneficial to the region, aesthetically as well as economically. Further, one of the principal benefits of the El Greco exhibition has been to broaden the awareness of Toledo, Ohio, as the location of a nationally significant art museum. A concomitant result has been an increased sense of pride within the city's inhabitants. The national reputation gained should serve to identify Toledo as a desirable place to live; it should attract visitors, not only to the museum, but to Toledo's other attractions as well. Finally, businesses have been made cognizant of the economic impact of the museum's exhibition on the local economy and should have a greater appreciation of the mutuality of interest in future art exhibitions.

Data Collection Methodology

The El Greco exhibition was held for eight weeks, and attendance was 168,891, excluding students through high school age. To ascertain the spending patterns of these visitors, as well as their demographics, 1,626 persons were questioned on a systematic sampling basis by interviewers of The Management Center of The University of Toledo, using a structured questionnaire. Of these respondents, 429 were from the Toledo area, 1,197 were from other regions, and 196 came on packaged tours. Interviews were conducted during 109 time periods throughout the eight-week period, and on 44 of the 49 days on which the exhibition was held.

Visitors' Demographics

Reflecting the effectiveness of the marketing program of the museum, 74 percent of the visitors were from outside the Toledo SMSA. Of the total number of visitors, 45 percent were men and 55 percent were women. Thirty-one percent were 18-34 years of age and 58 percent were in the 35-64 age group. Thirty-five percent were college graduates and an additional 29 percent had either completed some post-graduate work or had advanced degrees. Forty-eight percent of the household heads were in professional fields, 11 percent managers, and 9 percent retired. Only 6 percent were from households whose heads were craftsmen or operatives. The inference can clearly be made that the visitors were predominantly from the upper socioeconomic strata.

Economic Data

The economic information gathered in this survey is based, primarily, upon estimates by the visitors of their anticipated expenditures while in the Toledo area. Visitors were questioned immediately after they left the exhibition, the assumption being that they could provide reasonably accurate estimates of their expenditures while in Toledo.

Visitors were queried as to the amounts they had spent or expected to spend for specific items directly related to their visit to the exhibition, such as transportation to and from museum, parking, meals, and babysitters. Visitors from outside the Toledo Standard Metropolitan Area were asked an additional set of questions regarding their expenditures for lodging, food, other entertainment, and for shopping while in the area. The non-Toledo visitors were also asked whether they came to Toledo specifically for the El Greco Exhibition in order to differentiate them from other non-Toledo visitors who came primarily for a reason other than to attend the exhibition.

The respondents were also asked what they expected their total expenditures would be in connection with their visit to Toledo and the exhibition. These estimates were compared with the summation of average expenditures for the specific items to measure the accuracy of the estimates. Following the pattern of other economic impact studies, respondents were asked to provide all these estimates for their group or party rather than for themselves individually; it was found to be easier to estimate expenditures on a group basis. These estimates were then divided by the number in the party in order to reduce expenditures to a per person basis.

Summarized Average Expenditures for Specific Items

A primary objective of the economic analysis was to estimate the total expenditures. To determine this, it was necessary to estimate the average visitor's expenditures for various items, taking into consideration the fact that not all visitors purchased all the items. For example, a Toledo area visitor may have spent $4.95 for a restaurant meal in connection with the exhibition visit, but as only a certain percent actually did this, the average for all Toledo area attendees was estimated to be considerably less, or $2.81.

When all the expenditures directly related to visiting the exhibition were totaled, visitors from the Toledo area spent an average of $12.18 per person. Those from outside the region who came specifically to attend the exhibition spent $18.17, while those who had come to Toledo for other reasons than to attend the exhibition spent, on average, $17.09. Persons on packaged tours spent an average of $30.79 on items directly connected with their museum visit (Table I).

Visitors from outside the Toledo region were also queried concerning expenditures which were not directly related to their visit to the exhibition, such as lodging, meals and shopping. For these non-exhibition items, those who specifically visited Toledo to attend the exhibition spent an average of $4.63, and those on packaged tours spent $3.59. The average expenditure of $17.80 by those who had not planned to visit the exhibition, however, was not included in the determination of the exhibition's economic impact.

To summarize briefly, the typical Toledo area visitor's expenditures were estimated to have been $12.18; those of non-Toledoans were $22.80; those on packaged tours spent on average of $49.64 per person in the Toledo area, of which $15.26 was for the tour's expenditures made in Toledo. Those who had not planned to attend the exhibition spent $17.09 personally on those items directly related to the exhibition, and $17.80 on purchases not related to their attendance at the exhibition (Table I).

TABLE 1
AVERAGE TOTAL EXPENDITURE PER VISITOR

Type of Purchase	Toledo SMSA Resident	Average Expenditures: Non-Toledo SMSA Visitor (not in Tour Group) — Planned to attend exhibition	Average Expenditures: Non-Toledo SMSA Visitor (not in Tour Group) — Did not plan to attend exhibition	Packaged Tour
In Connection with Visit to Exhibition	$12.18	$18.17	$17.09	$30.79
Additional Expenditures in Toledo Area	______	4.63	17.80*	3.59
TOTAL	$12.18	$22.80	$17.09	$34.38
Packaged Tour Cost (50%) - not spent in Toledo				15.26
TOTAL SPENT BY THOSE ON PACKAGED TOURS				$49.64

*Not included in analysis.

Summarized Visitor and Museum Expenditures. Utilizing these summaries of average expenditures, the total expenditures by the three types of visitors are presented in Table 2. To determine the total expenditures, the visitor's average expenditures were weighted by the appropriate proportion of the three classes of visitors: Toledo area (26 percent), non-Toledo area (62 percent), and tour group members (12 percent). The total number of visitors, 162,714, was multiplied by these percentages in order to determine the number of visitors from the Toledo area, non-Toledo area, or tour group members. Thus, of the total audience, 42,306 were estimated to have been from the Toledo area, 100,883 from outside the Toledo area, and 19,526 on packaged tours. This number of visitors was then multiplied by the average expenditure per person for each group in order to derive the total amount spent by each of the three groups. The Toledo area visitors spent $515,288 (42,306 x $12.18); non-Toledo visitors spent $2,233,675; while those on packaged tours spent $671,304, for a grant total of $3,440,267 (Table 2).

In addition, The Toledo Museum of Art spent approximately $750,000 locally for such items as temporary staff, additional guards, publicity, posters, installation, tour brochures, special evening showings, and extra utilities. Thus, the total expenditure related to the exhibition was estimated to be $4,190,267 (Table 2). The expenses associated with bringing the exhibition to Toledo, as well as the shipping and insurance, were covered by a special grant by a source other than the museum, and therefore are not included in these calculations.

Economic Multiplier Effect

In order to estimate the full economic impact of the exhibition, using the conservative estimates presented in Table 2, the secondary spending or "rippling" effect was determined by applying an appropriate "multiplier" to these estimates. This "multiplier effect," as explained in a Baltimore Arts study (1977), describes the phenomenon whereby a dollar directly spent in a community is expected

TABLE 2
VISITORS' AND MUSEUM'S EXPENDITURES
(By Summing Estimated Amounts Spent on Specific Items)

Type of Visitor	Percent of Sample		Adult Visitors		Estimated Number of Visitors		Per Person Expenditure		Total Expenditures
Toledo SMSA	26%	x	162,714	=	42,306	x	$12.18	=	$ 515,288
Non-Toledo									
Planned to attend exhibition	57%	x	162,714	=	92,747	x	$22.80	=	$ 2,114,631
Did not plan to attend*	5%	x	162,714	=	8,136	x	$17.09	=	$ 139,044
Packaged	12%	x	162,714	=	19,526	x	$34.38	=	$ 671,304
TOTAL									$ 3,440,267
Museum's expenditures not included in in purchases by visitors									$ 750,000
Total									$ 4,190,267
Economic Multiplier									x 3
Economic Impact of Exhibition									$12,570,801

*Includes only expenditures for activities directly related to exhibition of those who have not planned to attend the exhibition.

to successively generate some multiple of its original impact on the local economic base. For example, a proportion of wages paid to extra guards employed during the El Greco exhibition by The Toledo Museum of Art was later spent by these people on goods and services in the Toledo area, and the balance was spent on items purchased elsewhere. Further, the Toledo area businessmen from whom goods and services were purchased, in turn, spent a proportion of this income in the Toledo area, and the balance was spent for goods from companies located elsewhere. This process continues until this "leakage" to sellers not in the Toledo area eventually exhausted the primary spending effect. The final impact of the initial expenditure is some multiple of this expenditure, varying directly in size with the fraction respent locally and inversely with the amount of "leakage" to suppliers outside the Toledo spending cycle. Various multipliers have been used. In the Dallas study (1983) of the economic impact of the El Greco exhibition, mention was made of multipliers of 6 and 8, but none were applied in that study. Economic impact of the arts studies in both Chicago and Indianapolis used multipliers of lesser magnitudes.

As the Toledo metropolitan area has a diversified economic base and, thus, is somewhat self-supporting, a significant proportion of the expenditures made in this area was retained and respent in the Toledo area. This study used a multiplier of 3, which was considered by the Toledo Chamber of Commerce to be a fairly accurate indicator of secondary effects of spending in the Toledo area. This multiplier is viewed as conservative (an average of those used by other cities), and has been used in other economic impact studies in the Toledo area.

Utilizing a multiplier of 3, the economic effect of the El Greco exhibition was estimated conservatively to have been approximately $12.6 million (Table 2); if the estimate is based on what the visitors expected to spend, the amount increases to $18 million (Tables 3 and 4). Expenditures by visitors in retail stores after they attended the exhibition could be added to these estimates, but no valid measure of the dollar value of these purchases could be determined. Nevertheless, it is reasonable to assume that the amount was not inconsequential.

Visitors' Estimates of Total Expenditures in Toledo

The visitors were also asked to estimate the total amount their group would spend on their El Greco excursion, and these overall estimates are presented in Table 3. An interesting pattern evolved: the estimated expenditure per individual rose from $17.62 for Toledo area visitors to $30.87 for non-Toledoans, and was considerably higher for those who came on packaged tours: $76.62.

TABLE 3
ESTIMATED EXPENDITURES IN TOLEDO AREA BY EL GRECO EXHIBITION VISITORS, BY GROUP AND INDIVIDUAL

Type of Visitor	Average Expenditure in Toledo Area: Per Individual	Per Group
Toledo SMSA	$17.62	$ 49.33
Non-Toledo area		
Planned to attend exhibition	$30.87	$ 92.60
Did not plan to attend	$17.09	---
Packaged Tour	$76.62	$137.91

Size of average Toledo area group was 2.8 persons; non-Toledo, 3.0 persons; and packaged tour groups, 1.8 persons.

Utilizing the same proportions for the three classes of visitors used in Table 2 with these estimates of their expenditures provided personally by the visitors, Toledo area visitors spent $745,432; non-Toledoans spent $2,991,919, including $151,725 by those who had not planned to attend the exhibition and those on packaged tours who spent $1,496,608 for a total of $5,233,959. Adding to this the $750,000 spent by the museum and applying the economic multiplier of 3, the economic impact of the exhibition was $17.5 million, approximately $7.0 million higher than the total based on the summary of the individual item expenditures.

Estimated Impact

TABLE 4
VISITORS' AND MUSEUM'S EXPENDITURES BASED ON VISITORS' ANTICIPATED TOTAL PURCHASES

Visitor Type	Percent of Sample	Estimated Number of Visitors	Per Person Expenditure	Total Expenditure
Toledo SMSA	26%	42,306	$17.62	$ 745,432
Non-Toledo				
Planned to attend exhibition	57%	92,005	$30.87	$ 2,840,194
Did not plan to attend*	5%	8,878	$17.09	$ 151,725
Packaged Tour	12%	19,526	$76.62	$ 1,596,082
TOTAL				$ 5,233,959
Museum's expenditures not included in purchases by visitors				$ 750,000
Total				$ 5,983,959
Economic Multiplier				x 3
Economic Impact of Exhibition				$17,951,877

*Includes for those who had not planned to attend the exhibition only their expenditures directly related to attendance at the museum, $151,725.

Conclusion

El Greco of Toledo: An International Exhibition, was a major success in Toledo, Ohio, not only culturally, but economically as well. Similar exhibitions enhance not only the reputations of the museums which present them as major cultural features of their communities, but they contribute substantially to the economic well-being of the area. Thus, these exhibitions raise the quality of life culturally and economically in the regions in which they are presented and can be justified on both bases.

References

Andreasen, Alan R. 1982. "Nonprofits: Check Your Attention To Customers." *Harvard Business Review* 60 (May-June) 105-110.

Cwi, David and Katherine Lyall 1977. *Economic Impacts of Arts and Cultural Institutions: A Model for Assessment and A Case Study in Baltimore*. Research Division Report #6, National Endowment for the Arts, Washington, D.C.

Weiss, S. J. and E. C. Gooding 1966. *Estimation of Differential Employment Multipliers in A Small Regional Economy*. Research Report to the Federal Reserve Bank of Boston, No. 37. Boston.

EVALUATING THE DEMAND FOR A NEW SERVICE

Daniel J. Brown, Oregon State University

Abstract

Many service organizations contemplate the introduction of a new service for which the demand is uncertain. Surveys may be used to forecast reactions of the market. This case study of a credit union's introduction of share draft accounts indicates that some types of survey information may be useful in predicting adoption of new services.

Introduction

Service organizations are often faced with the decision to offer a new service. The organization may see that new services are the key to growth, or the organization may be reacting to a change in the environment which provides either threats or opportunities (Judd 1968; Thomas 1978). In either case, any information which can be used for forecasting demand for the new service may be very useful.

Credit unions are a special breed of service organization. Historically, they have operated on a non-profit basis for the benefit of their members, and they have been entitled to tax exempt status. Their traditional service offering consisted of simple savings accounts and consumer loans.

Credit unions were affected like other financial institutions by the process of deregulation started in the late 1970's. Competition has become much more intense. But restrictions on the service offerings of credit unions have been lifted -- so that the sky is the limit for those credit unions who want to go for big changes.

An early change in financial deregulation allowed credit unions to offer share draft accounts. These accounts are like checking accounts in that drafts can be drawn on them, but they are like savings accounts in that they pay interest. The advantage to the credit union is that they are low contact services (Chase 1978). Due to lack of experience with checking, in the beginning, the business of checking services was considered to be risky and appropriate for only the most innovative credit unions. By now many credit unions offer such services as a matter of course.

The present study reports the experience of a university credit union as it began to cope with the changes allowed under deregulation. It decided to study the introduction of share drafts in order to better understand the reactions of its members in accepting or rejecting this new service. The decision was to sell new core services to the existing market (Carman 1980). New knowledge was to be used in evaluating the introduction of additional new services.

The first construct to be investigated was adoption of the new service. At the end of the study period, either a member had adopted a share draft account or had not adopted an account. From the standpoint of the study, it was hoped that adoption would be related to independent measures of the members themselves, taken from questionnaire information or from member records. These included: a statement of intentions, a measure of attitude toward the credit union, measures of usage of other credit union services, convenience to the credit union, and demographic variables.

The second construct to be measured, for adopters, was the relative time of adoption. All those members in the study could have adopted at the same time, but some chose to adopt early and others chose to adopt later. The same list of independent variables was investigated for association with the time of adoption as with the adoption decision itself. The purpose was to see if early, middle and late adopters had different or similar characteristics.

Method

The study began with cross sectional data gathered through a survey. This was followed by a longitudinal analysis of changes in members' behavior over time, based on member records.

A questionnaire was mailed to a systematic sample of adult members of the credit union taken from the membership list. A response rate of 73 percent was achieved, resulting in 528 usable questionnaires and a representative sample. The survey was completed just before the share draft program was launched.

Following the survey, the activities of the members were tracked for 36 months to trace out share draft adoption behavior. From this behavior, it was determined if the member adopted the new service and how long after introduction the adopters adopted the new service.

Results

Crosstabulation and x^2 tests of significance were used to analyze the data. These results are summarized in TABLE 1, "An Analysis of Adoption and Non-Adoption of Share Draft Accounts," and TABLE 2, "An Analysis of the Relative Time of Adopting Share Draft Accounts."

Adoption and Non-Adoption

Overall, approximately 37 percent of the surveyed members had adopted the share draft service at the conclusion of the longitudinal analysis. For specific identified subgroups, the adoption rates were much higher or much lower.

TABLE 1
An Analysis of Adoption and Non-Adoption of Share Draft Accounts

Variable	Adopters as % of Group
Interest in Share Draft:[1]	
Yes	52%
Need More Information	30%
No	12%
Overall Satisfaction with Credit Union Compared to Other Financial Institutions:[1]	
Much Better	47%
Somewhat Better	36%
About the Same	24%
Somewhat Worse	11%
Savings Account Status:[1]	
Active	44%
Inactive	8%
Under $500	34%
$500 and Over	46%
Loan Status:	
Loan Outstanding	38%
No Loan Outstanding	42%
Type of Member:[1]	
On Campus	44%
Off Campus	19%
Age:[1]	
20-34	42%
35-54	40%
55+	24%
Income:[1]	
$30,000 and below	40%
Over $30,000	27%

[1]Differences between groups significant beyond the .05 level in x^2 tests.

The first question in TABLE 1 is a simple intention question which asked respondents to make a judgement about share drafts after a short description of this new service was provided. Most of those who said they would not use the new service, in fact, did not adopt it. On the other hand, those who said they were interested in the new service were much more likely to adopt it. A third category of members who needed more information fell in between. Within the membership there was a linear relationship between intentions to use the new service and adoption of the service. The second question in TABLE 1 involved a global evaluation of the credit union, overall satisfaction compared to other financial institutions. Among those who liked the credit union, adoption was common, but among those who did not like the credit union it was uncommon. There was a positive linear relationship between feelings about the credit union and adoption of the new service.

Three questions investigated the relationship between measures of credit union activity, as surrogates for identification with the credit union and the level of adoption behavior: savings account activity, savings account balances, and loan activity. Within the membership, adoption was strongly associated with activity in the accounts; members with current savings accounts were more likely to adopt share drafts. In addition, members with more savings in their accounts were more likely to adopt. On the other hand, use of loan services did not seem to be associated with adoption.

Several more questions related to personal characteristics. The first measured whether or not the member worked on campus, as a measure of identification with the university community and convenience to the location of the credit union building. Those on campus were more likely to use the share draft service.

The next measure was age. Older members were less likely to adopt the new service than younger members. Age may be related to more traditional attitudes, but it may also be related to established relationships with other financial service organizations. Either way, the reaction of younger members was more dramatic.

The final measure was income. Members with lower incomes were more likely to adopt the new service than members with high incomes. Clearly there should be some association between age and income so this result is not surprising. Also the new service is a "good deal" for those who do not have substantial balances tied up with financial institutions.

Time of Adoption

Adopters were divided into four groups. The dividing lines were drawn for Group 1 at the end of the first 30.9 percent of adopters, for Group 2 at the end of the first 70 percent, for Group 3 at the end of the first 90.6 percent, and finally for Group 4 at the end of the 100 percent mark. Each independent variable was crosstabulated with these adopter categories. The results are shown in TABLE 2.

The only significant discriminator was the question about intentions to use share drafts. Members who gave different responses showed different adoption behavior. Those who indicated that they wanted share drafts were, in fact, the most eager to obtain them.

The remaining questions did not achieve significant associations with the different adopter categories.

TABLE 2
An Analysis of the Relative Time of Adopting Share Draft Accounts

Variable	First 1-31%	Second 32-70%	Third 71-91%	Fourth 92-100%
Interest in Share Drafts:[1]				
Yes	49%	35%	13%	3%
Need more Information	11%	46%	26%	17%
No	0%	33%	50%	17%
Overall Satisfaction with Credit Union Compared to Other Financial Institutions:				
Much Better	34%	37%	0%	9%
Somewhat Better	33%	44%	16%	7%
About the Same	30%	41%	19%	11%
Somewhat Worse	100%	0%	0%	0%
Savings Account Status:				
Active	25%	50%	25%	0%
Inactive	34%	39%	18%	9%
Under $500	27%	37%	22%	14%
$500 and over	38%	40%	16%	6%
Loan Status:				
Loan Outstanding	40%	37%	15%	8%
No Loan Outstanding	28%	41%	21%	10%
Type of Member:				
On Campus	19%	46%	15%	19%
Off Campus	35%	39%	18%	8%
Age:				
20-34	36%	49%	16%	8%
35-54	35%	35%	19%	10%
55+	22%	48%	19%	11%
Income:				
$30,000 and Below	35%	39%	17%	9%
Over $30,000	14%	50%	21%	14%

Note: the "Adopter Category" heading spans the First, Second, Third and Fourth columns.

[1]Differences between groups significant beyond the .05 level in x^2 tests.

Summary

The topic, introducing new services, is not one that has been extensively researched. However, changes in the environment sometimes force service organizations into a position where decisions must be made. Anything which can help forecast the result is welcome and beneficial.

This paper looks at a credit union, a unique kind of consumer cooperative, known for offering more "service" than other financial institutions. The new service was better than previous offerings, combining the advantages of savings accounts with the advantages of checking accounts. So it was a service concept which should be fairly easy for potential users to comprehend. Therefore, they should be able to evaluate the concept and make judgments about it.

And in fact, the best predictor of subsequent adoption, in this study, was an intention-to-use question which was part of a survey administered before the new service was introduced. This question discriminated well, first, in users' decision to adopt or not adopt, and second, in the time of adoption. However, an estimate based on users' intentions would have to be discounted from the absolute magnitude of the survey result.

Other measures were also associated with adoption. These included a question about overall attitude toward the credit union and a behavioral measure, use of a savings account, the service closest to the new share draft account the credit union had previously offered. Other measures may be related to share drafts but not to other dissimilar services.

One would expect that intentions, attitudes about the organization and use of similar services should be acceptable predictors of adoption. It was encouraging to find that they were in fact associated. These measures are being used in subsequent surveys to predict adoption of review services contemplated by the credit union.

References

Carman, James M. and Eric Langeard (1980), "Growth Strategies for Service Firms," Strategic Management Journal, 1 (January/March), 7-22.

Chase, Richard B. (1978), "Where Does the Customer Fit in a Service Operation?" Harvard Business Review, 56 (November/ December), 137-142.

Judd, Robert C. (1968), "Similarities or Differences in Product and Service Retailing," Journal of Retailing 43 (Winter), 1-9.

Thomas, Dan R.E. (1978), "Strategy is Different in Service Businesses," Harvard Business Review, 56 (July/August), 158-165.

PROFILING THE USERS OF AUTOMATED TELLER MACHINES

Dale L. Varble, Indiana State University
Jon M. Hawes, University of Akron

Abstract

Automated teller machines that are capable of handling most routine banking transactions are now widely available. This innovation in the exchange process has not been adopted as quickly as many had expected, however, and a minority of bank customers currently utilize this service. This paper examines the characteristics of consumers who have used ATM's and presents a profile of this segment.

Introduction

During the 1960's, a significant technological innovation took place in the banking industry. Automated Teller Machines (ATMs) were introduced to the market place enabling consumers to conduct routine banking transactions on a "self-service" basis. For the first time, the customer was able to make deposits and loan payments, withdraw cash, or verify account balances without the assistance of or interaction with a bank employee. Customers were reluctant, however, to adopt this innovation. Even though ATMs greatly expanded the geographic and time availability of banking services, it was many years before the initial resistance to the automated transaction began to fade.

During the late 1970's, ATMs began to have a major impact on the banking industry. While only 4,056 ATMs were being used in the United States during 1975, almost 20,000 were in operation by 1980 (Zimmer 1983). The rate of growth continued to increase and during 1982 approximately 40,000 ATMs handled a total of more than 3 billion financial transactions in the United States (Zimmer 1983). By 1984, approximately 55,000 ATMs were in operation (Akron Beacon Journal 1985).

Some industry analysts originally viewed the introduction of ATMs as a "marketing gimmick" (van der Velde 1983). As the availability and capability of ATMs increased, however, these systems became important factors in the increasingly competitive banking industry (Helming 1982). Furthermore, ATMs have also become a very cost effective method of doing business (Briggs and Cox 1983). A typical transaction that involves a human teller usually costs the bank between \$.50 and \$2.00. The same transaction conducted by an ATM usually costs between \$.15 and \$.50 (Sanger 1983). Consequently, the cost advantages offered by ATM transactions have created much enthusiasm for this system among members of the financial community.

An important reason for the growth and development of this automated form of exchange is the improvement in bank marketing practices. Much has been learned from the multitude of mistakes that characterized the marketing efforts for ATM systems in the 1960's and early 1970's. One of the more interesting mistakes was committed by New York's Citibank. Its "promotion" of the ATM system involved forcing customers with account balances of less than \$5,000 to use the ATMs rather than human tellers. Customer reaction was so negative that the policy had to be abandoned (Sanger 1983).

Even though some bankers still view ATMs as "a cost effective delivery system (saving money by shortening banking hours) rather than a marketing tool" (Helming 1983), most of the successful firms have adopted the marketing concept as the guiding philosophy in securing acceptance of the ATM system. In fact, many banks have attempted to personalize ATMs by giving them names such as Tillie, George, or Dolly. The software that guides ATM operations has also been improved by upgrading the "user-friendly" style of communications (Barkow 1982).

In general, banks have found that production oriented approaches for marketing ATM systems are much less effecctive than customer based strategies that encompass the tenets of the marketing concept. In fact, many banks now employ segmentation strategies for their ATM systems (Savings Bank Journal 1983). The purpose of this paper is to examine the market for ATMs and to identify the demographic characteristics of the segment utilizing this innovative form of exchange. This information should enable banks to better understand customer characteristics relating to ATM usage which is a prerequisite for the effective implementation of the marketing concept.

Review of Previous Research

Four previous studies relating to consumer usage of automated banking services were identified through a relatively thorough review of the literature. This section presents a brief summary of these studies.

An innovative check approval/cashing system was introduced by a major banking organization in a Southeastern metropolitan area in 1976. This automated system was implemented in most of the local supermarkets and consumers were required to use it in order to cash checks at the check-out counter. Adcock, Yavas, and Alessandra (1976) interviewed 279 adult food store shoppers to gauge their reactions to the system. The demographics of users and nonusers were also examined. The consumers who utilized the system were younger, better educated, and more affluent. Sex and race did not distinguish between users and nonusers.

A study specifically pertaining to ATMs was conducted by Hood (1979). He supervised the administration of 229 personal interviews in a Southern city where ATMs were available. Hood (1979, p. 71) concluded that "the typical user of the ATM was likely to be young, from middle-income to high-income groups, male, and Caucasian."

A comprehensive study of consumer behavior relating to bank marketing practices was conducted by Ingram and Pugh (1981). Panel data representing the views of 1,112 residents of North and South Carolina were examined. Approximately 29 percent of the respondents had used an ATM. Users of ATMs were more likely to be 29 years old or younger, have at least a college education, and earn over $20,000 per year.

Stanley and Moschis (1983) have also studied the characteristics of ATM users. They surveyed 662 households in the top income quartile of a major city located in the Eastern section of the U.S. Rather than analyze actual usage of ATMs, this study focused on predisposition to use the system. Approximately 45 percent of the respondents indicated that they would use an ATM if one was located near their home or place of work. The same proportion indicated that they would not use an ATM, while the remaining 10.9 percent of the respondents had no preference or opinion. The results of the demographic analysis indicated that the ATM-prone respondent tended to be younger and more educated. Surprisingly, income was not related to ATM-proneness.

Thus, the results of these four important studies are not completely in agreement. This is not surprising when one considers the dynamic nature of the market and the potential for regional differences. Furthermore, research methodologies differed across the studies. Additional research is needed before any ultimate conclusions can be developed. The following sections of this paper describe a study which adds to our knowledge of this market.

Methodology

The present study involved an examination of the feasibility of installing an ATM in a hospital in a small Midwestern SMSA. Consequently, the sample was confined to the employees of this hospital. A questionnaire designed to examine current ATM usage patterns and demographic characteristics associated with this form of exchange was developed. The survey instrument was pretested with the hospital's Radiology Department.

The questionnaire was subsequently revised and mailed to each of the hospital's remaining 1,288 employees. An incentive for responding was provided and a response rate of 42 percent was achieved as 542 completed questionnaires were returned.

Results of the Research

In order to use an automated teller machine, some type of access card is required. The possession or nonpossession of this card can therefore be used as an indication of consumer acceptance and intended usage of an ATM. Additional insight can be gained by examining the frequency of card use. In this research, 29 percent of the respondents had an ATM access card and had used it at one of the bank's existing locations for transactions. Table 1 reports the frequency of use for the ATM card holders. While a wide range of usage was reported, over 38 percent of the card holders used the ATM at least once a week.

TABLE 1
FREQUENCY OF USE OF AN ATM*

Use	Number	Percent
Twice a week	23	14.6
Once a week	37	23.6
Once in two weeks	18	11.5
Once a month	35	22.3
Other	44	28.0
	Total 157	Total 100.0

*385 of the 542 respondents (71 percent) indicated that they did not currently have an ATM card and consequently did not use an ATM.

TABLE 2
REASONS FOR INFREQUENT OR NONUSE OF AN ATM*

Reason	Number*	Percent
No need to use	174	37.3
Not available	133	28.4
Don't know what it does	36	7.7
Like contact with bank personnel	36	7.7
Lack of trust in the machine	32	6.9
Afraid of the machine	7	1.5
Other reasons	49	10.5
	Total 467	Total 100.0

* 75 respondents (13.8 percent) did not answer this question.

TABLE 3
CROSSTABULATION OF CONSUMER PERCEPTION OF CONVENIENCE OF BANKING HOURS AND POSSESSION OF AN ATM CARD*

Chi Square
Level of Significance: .5679

		Possession of an ATM Card: No	Possession of an ATM Card: Yes
"Do you consider the financial institution where you do most of your business to have convient hours for your needs?"	No	f = 118 E(f) = 121.26	f = 51 E(f) = 47.74
	Yes	f = 263 E(f) = 259.74	f = 99 E(f) =102.26

*Where: f = frequency of occurrence, E(f) = expected frequency of occurrence under the hypothesis of statistical independence.

TABLE 4
CROSSTABULATION OF SEX AND POSSESSION OF AN ATM CARD*

Chi Square
Level of Significance: .0062

		Possession of an ATM card: No	Possession of an ATM card: Yes
Sex	Female	f = 302 E(f) = 289.33	f = 102 E(f) = 114.67
	Male	f = 79 E(f) = 91.67	f = 49 E(f) = 36.33

*Where: f = frequency of occurrence, E(f) = expected frequency of occurence under the hypothesis of statistical independence.

Many respondents, however, had never used an ATM or did so on an infrequent basis. Table 2 reports the results of a question which measured the frequency distribution for various hypothesized reasons for this lack of ATM usage. As was the case in previous research (e.g., Adcock, Yavas, and Alessandra 1976; Barkow 1982; Ingram and Pugh 1981), the most prevalent reason for lack of use was the perception of "no need." The second most frequently mentioned reason for lack of use was the perception that ATMs were "not available." This was not the case as ATMs were conveniently located throughout this Midwestern community. Many respondents simply did not realize that ATMs were available. These two obstacles to ATM use could be addressed through well designed promotional programs that stress the advantages and availability of ATMs.

The time availability of banking services that is so frequently mentioned in the promotion of ATMs may be a less salient attribute than originally thought, however. While Mochis and Stanley (1983) found that the ATM-prone consumer was very "time sensitive," the present research failed to identify a significant statistical relationship between possession of an ATM card and the perceived convenience of the hours of operation for local banks (see Table 3). Thus, in the present study there was no reason to believe that dissatisfaction with traditional "bankers hours" led to the procurement of an ATM card in order to increase the time availability of banking services.

Several demographic variables were also examined over the ATM card holder groups. Chi Square analysis indicated that sex was not independent of card possession. As reported in Table 4, men were more likely to have ATM cards. This finding is consistent with Hood's (1979) results. Adcock, Yavas, and Alessandra (1976), on the other hand, reported that females were just as likely as males to use an automated check approval system.

Income was also related to possession of ATM cards. As shown in Table 5, higher income respondents were more likely to have ATM cards. This finding is consistent with the studies reported by Adcock, Yavas, and Alessandra (1976), Hood (1979), and Ingram and Pugh (1981). No relationship between income and ATM usage was found, however, in the Stanley and Mochis (1983) study.

If both spouses work outside the home, time constraints might suggest a greater need for the convenience offered by ATM banking facilities. This hypothesis was not supported by the results of this study. As shown in Table 6, the level of significance associated with the Chi Square test was .2466.

A T-Test was employed to test whether there was a statistically significant difference in the years of education completed by the ATM card groups. The results of this analysis are shown in Table 7 and indicate that ATM card holders held significantly higher levels of education. This result is consistent with previous research (Adcock, Yavas, and Alessandra 1976; Ingram and Pugh 1981; Stanley and Moschis 1983).

The number of children living at home was also compared across the two groups. The presence of children may restrain the household's mobility and limit the time available for bank transactions. The results did not, however, support this hypothesis (see Table 7).

A T-Test was also used to compare age across the two ATM card holder groups. No statistically significant differences were found (see Table 7). This finding is inconsistent with previous research which reported that younger consumers were more likely users of such facilities (Adcock, Yavas, and Alessandra 1976; Hood 1979; Ingram and Pugh 1981; Stanley and Moschis 1983).

Conclusions

Automated teller machines have recently become important factors in bank marketing. This innovative form of exchange represents a significant potential for competitive advantage to banks that can effectively implement this service into their operations. The major constraint on this implementation is <u>not</u> technological. Customer resistance has long been the more important restraint on the widespread penetration of this service option.

Bank marketers must design programs that offer salient benefits to customers. While each market is unique and dynamic, the description of ATM users presented in this paper may assist bank marketers as they design particular research programs for their respective markets. For example, evidence was presented whcih suggests that sex, income, and education are often related to use of ATMs. Some of the research studies examined in this paper also suggest that age may be a relevant basis for segmenting this market.

Major productivity improvements are possible for banks that successfully integrate ATMs into their service mixes. These gains are only possible, however, if consumers elect this "self-service" transaction form. Future research should expand our knowledge of consumer behavior relating to the automated transaction by examining the psychographic characteristics of the users of ATMs. In addition, importance-performance analyses and motives-for-use studies are needed in order to better understand this segment so that more effective marketing strategies can be developed and implemented.

TABLE 5
CROSSTABULATION OF INCOME AND POSSESSION OF AN ATM CARD*

Chi Square
Level of Significance: .0020

		Possession of an ATM Card: No	Possession of an ATM Card: Yes
Income	$0 - 9,999	f = 80 E(f) = 70.16	f = 18 E(f) = 27.84
	$10,000-11,499	f = 64 E(f) = 58.70	f = 18 E(f) = 23.30
	$12,500-14,999	f = 38 E(f) = 35.08	f = 11 E(f) = 13.92
	$15,000-17,499	f = 27 E(f) = 30.07	f = 15 E(f) = 11.93
	$17,500-19,999	f = 118 E(f) = 117.41	f = 46 E(f) = 46.59
	$20,000-22,499	f = 10 E(f) = 10.74	f = 5 E(f) = 4.26
	$22,500-25,000	f = 7 E(f) = 10.02	f = 7 E(f) = 3.98
	Not Reported	f = 34 E(f) = 45.82	f = 30 E(f) = 18.18

*Where: f = frequency of occurrence, E(f) = expected frequency of occurrence under the hypothesis of statistical independence.

TABLE 6
CROSSTABULATION OF FAMILY EMPLOYMENT PATTERN AND POSSESSION OF AN ATM CARD*

Chi Square
Level of Significance: .2466

		Possession of an ATM Card: No	Possession of an ATM Card: Yes
Family Employment Pattern	Both Spouses Work	f = 202 E(f) = 195.55	f = 70 E(f) = 76.45
	Only One Spouse Works	f = 174 E(f) = 180.45	f = 77 E(f) = 70.55

*Where: f = frequency of occurrence, E(f) = expected frequency of occurrence under the hypothesis of statistical independence.

TABLE 7
T-TESTS OVER POSSESSION OF ATM CARD GROUPS

Variable	T-Value	Level of Significance	Mean Values, Possession of an ATM Card: No	Mean Values, Possession of an ATM Card: Yes
Years of education	3.13	.002	15.31	18.47
Number of children living at home	.42	.676	1.09	1.04
Age	.35	.725	37.61	38.10

References

Adcock, William O., Jr., Yavas, Ugur, and Alessandra, Anthony J., 1976. "Consumer Reactions to a New Money Machine." Atlanta Economic Review 26 (September-October) 52-54.

Akron Beacon Journal. 1985, "Automated Teller Machines: Some Facts." (October 7) B,2.

Briggs, Alden and Cox, Edwin B., 1983. "ATMs -- To Share or Not to Share?" United States Banker XCIV (March) 53-58.

Helming, Ann. 1982. "ATMs Deliver Goods Faster For the Banks." Advertising Age 53 (January 25) 5-12.

Hood, Jerry M. 1979. "Demographics of ATMs." The Bankers Magazine 162 (November/December) 68-71.

Ingram, F. Jerry and Pugh, Olin S., 1981. "EFT and Bank Cards: Household Attitudes and Practices." Journal of Retail Banking III (March) 45-61.

Sanger, Elizabeth. 1983. "Staking Out Automatic Tellers." Barron's LXIII (June 20) 8-9.

Savings Bank Journal. 1983. "Fine-Tuned Marketing Introduces ATMs." 64 (April) 32.

Stanley, Thomas J. and Moschis, George P., 1983. "The ATM-Prone Consumer: A Profile and Implications." Journal of Retail Banking V (Spring) 45-51.

van der Velde, Marjolÿn. 1983. "Two New Models Tell How Much an ATM Transaction Really Costs." The Magazine of Bank Administration LIX (June) 34-40.

Zimmer, Linda Fenner. 1983. "ATMs: In the Wake of the Network Scramble." The Magazine of Bank Administration LIX (May) 26-30.

APPLYING LOVELOCK'S SERVICES CLASSIFICATION SYSTEM TO RESIDENTIAL ALTERNATIVE LONG-DISTANCE TELEPHONE SERVICES

William E. Warren, Northeast Louisiana University
David L. Loudon, Northeast Louisiana University

Abstract

Lovelock's system for classifying services is applied to alternative residential long-distance telephone services in an attempt to better understand those services. Other services organizations are identified that are similar to these services along each of the dimensions suggested by the classification system. In addition, marketing insights and implications are offered for each analysis matrix.

Introduction

The service sector is the fastest growing segment of the American economy and now accounts for about half of the gross national product. Despite the long-recognized importance of the services sector among practicing marketers, it is only recently that services marketing has attracted the attention of academic researchers and enough literature has begun to accumulate on the subject to constitute a critical mass (Berry 1980).

Three basic assumptions pervade the growing body of literature on services marketing: (1) a number of unique characteristics (intangibility, inseparability of production and consumption, heterogeneity, and perishability) separate services from goods, (2) these characteristics pose vexing problems for services marketers that are not faced by goods marketers, and (3) the services marketing problems require services marketing solutions; that strategies developed from experience in goods marketing are insufficient (Ziethaml, Parasuraman, and Berry 1985). Moreover, while generalizations about the characteristics of services and service businesses are useful, it is equally important to recognize that significant differences exist among various services and among the firms that market them (Ziethaml, Parasuraman, and Berry 1985, p. 43).

Lovelock's Services Classification Approach

The services industries are quite heterogeneous and cover a wide range of product categories. However, Lovelock (1983) posits that development of greater sophistication in services marketing will be aided if one can find ways to group services other than by industry classification. After reviewing various attempts that had been proposed, he offered six classification dimensions based on the assumption that there are some characteristics of services that transcend industry boundaries and that affect the way marketing is practiced (Lovelock 1984). Services marketing managers, by recognizing which characteristics their own service shares with other services--often in seemingly unrelated industries--will learn to look beyond their immediate competitors for new insights into how to resolve the marketing problems they face. Recognizing that the products of service organizations that have previously been considered as "different" actually face similar problems, or share certain characteristics in common, can yield valuable managerial insights (Lovelock 1984, p. 63).

Service characteristics can be understood by answering the following questions: (Lovelock 1984, p. 51)

1. What is the nature of the service "act"?
2. What type of relationship does the service organization have with its customers?
3. How much room is there for customization and judgment on the part of the service provider?
4. What is the nature of the demand for the service?
5. How is the service delivered?
6. What are the attributes of the service product?

Each question should be examined on two dimensions, reflecting a conclusion in an earlier study (Lovelock 1980) that combining classification schemes in a matrix may yield better marketing insights than classifying services organizations on one variable at a time. The matrices provide the manager or researcher with simple and useful tools which can be used to classify service organizations and, in turn, show how various service organizations are similar along specific dimensions.

Purpose of the Study

Although Lovelock identified services industry examples for each of the various matrices, no single industry was analyzed in depth. The purpose here is to apply Lovelock's services marketing classification approach to one industry in order to better understand that industry as well as to explore which other services industries are similar along the various and specific dimensions. Alternative residential long-distance telephone services were selected because: (1) the potential market for the service is huge--virtually all households in which there is a telephone have recently been, or soon will be, forced to consider the adoption of the service; and (2) they are a service innovation for which the adoption and diffusion processes were recently investigated (Warren 1985).

Discussion

The approach in this section is to present an analysis matrix for each of Lovelock's six questions. The rationale for developing each matrix, insights and implications for each matrix, and application of each matrix to alternative residential long-distance telephone services are presented. In addition, other similar services industries are identified in each matrix.

Nature of the Service Act

Berry (1980) identified services as deeds, acts, or performances. Therefore, two basic questions are relevant: At whom (or what) is the act directed? And is this act tangible or intangible in nature? (Lovelock 1984, p. 51). These questions result in a four-way classification approach involving: (1) tangible actions to people's bodies; (2) tangible actions to goods and other physical possessions; (3) intangible actions directed at peoples' minds; and (4) intangible actions directed at intangible assets.

The matrix helps answer the following questions: (1) Does the customer need to be physically present throughout the service, only to initiate or terminate the service, or not at all (2) Does the customer need to be mentally present during the service delivery and (3) In what ways is the target of the services act "modified" by receipt of the service? (Lovelock 1984, p. 52).

TABLE 1

NATURE OF SERVICE ACT

WHAT IS THE NATURE OF THE SERVICE ACT	WHAT OR WHO IS THE DIRECT RECIPIENT OF THE SERVICE	
	People	Things
Tangible Actions	(1) Services directed at people's bodies	(2) Services directed at goods and other physical assets
Intangible Actions	(3) Services directed at people's minds Alternative Residential Long-Distance Services Broadcasting Cable Television	(4) Services directed at intangible assets

Alternative residential long-distance telephone services involve intangible actions directed at people's minds. As shown in Table 1, broadcasting and cable television are examples of other services that are similar along this dimension. For each of these services, the customer-organization relationship is at arms length. In these organizations, the outcome of the service act is very important, but the process of delivery may be of little interest since the customer never goes near the "factory." For example, one can subscribe to cable television or long-distance telephone service by mail or telephone. There is no need to physically visit the facilities of these organizations.

In terms of the diffusion of services innovations falling within this category, the lack of need to go to the "factory" to purchase enhances the ease of adoption and, thus, can speed the process. However, the intangibility of the service is an element that may retard its diffusion. The long-distance telephone services marketer must try to educate and inform potential adopters of the benefits of the service and differentiate the various competing options. For example, some marketers bill in six second, as opposed to 60 second, increments. The more tangible these benefits/differences are made to prospective users, the more quickly a company will be able to gain adoption. Another approach to making such a service more tangible is to connect it with a tangible item having relevance for customers. For example, providing such items as a plastic calling card with the account number embossed, a log for calls, a stopwatch, etc. free to adopters is a means of personalizing and solidifying the service.

Relationship with Customers

The fundamental questions to be answered here concern the type of relationship the service organization has with its customers and how the service is delivered. A four-way classification is possible involving (1) membership relationships, (2) no formal relationship, (3) continuous service delivery, and (4) discrete transactions (Lovelock 1984, p. 53).

TABLE 2

RELATIONSHIPS WITH CUSTOMERS

NATURE OF SERVICE DELIVERY	TYPE OF RELATIONSHIP BETWEEN SERVICE ORGANIZATION AND ITS CUSTOMERS	
	Membership Relationship	No Formal Relationship
Continuous Delivery of Service		
Discrete Transactions	Alternative Long-Distance Telephone Services Credit Card Companies Theater Season Tickets	

Alternative residential long-distance telephone services involve membership relationships and discrete transactions. Other services (see Table 2) similar along this dimension include credit card companies, theater and sports organizations, and some health clubs/spas.

Membership relationships usually result in customer loyalty to a particular service (Lovelock 1984, p. 55). Although loyalty will ordinarily be dependent on the quality of the service delivery and transaction situation, long-distance telephone services marketers may be able to develop greater loyalty through enhancing the "membership" context. For example, by receiving quantity discounts, premiums, or prizes, subscribers may become more loyal. Similar to the high-mileage fliers clubs, heavy long-distance users may be offered bonuses entitling them to certain rewards. Even effective corporate communications to subscribers, such as newsletters contained in monthly bills, may serve to increase loyalty as customers feel they are treated more individually as members.

Since these "membership" services organizations know (or should know) who their customers are, customer communications and promotional approaches are simplified. It is also easier to conduct market research in order to better understand their customers' characteristics, needs and levels of satisfaction with the services. Such information is critical in segmentation decisions related to present and potential customers on the basis of usage levels, benefits desired, and other dimensions.

Customization and Judgment

Since services are created as they are consumed and because the customer is often involved in the production process, there is more range for tailoring the service to meet the needs of individual customers than is possible for most physical goods. Tailoring of service delivery can be characterized along two dimensions: (1) the extent to which the characteristics of the service and its delivery system lend themselves to customization and (2) the extent to which customer-contact personnel are able to exercise judgment in defining the nature of the service received by individual customers (Lovelock 1984, p. 55).

TABLE 3

CUSTOMIZATION AND JUDGMENT IN SERVICE DELIVERY

EXTENT TO WHICH CUSTOMER-CONTACT PERSONNEL EXERCISE JUDGMENT IN MEETING INDIVIDUAL CUSTOMER NEEDS	EXTENT TO WHICH SERVICE CHARACTERISTICS ARE CUSTOMIZED	
	High	Low
High		
Low	Alternative Long-Distance Telephone Services Credit Card Companies	

As shown in Table 3, alternative residential long-distance telephone services are relatively high on the potential to be customized but rank low on the extent to which service contact personnel can exercise judgment in meeting individual subscriber needs. Each subscriber has an individual phone number and is free to use the number to telephone anyone at anytime, anywhere within the service area. However, customer contact personnel serve each customer in a relatively standardized manner. Other service organizations that are similar along this dimension include automatic teller machines and credit card companies. An important consideration for these and similar service organizations is that customization is not necessarily important to success in services marketing. In fact customization does not appear to be an important criterion for long-distance telephone services. Rather, speed, convenience, consistent high quality, and price savings appear to be more critical to users of these services.

Nature of Demand

One factor that differentiates goods from services is the inability to inventory services as a hedge against supply-demand fluctuations. However, demand and supply imbalances are not found in all service situations. A useful way of categorizing services for this purpose is according to whether demand for the service fluctuates widely or narrowly over time and whether or not capacity is sufficient to meet peak demand (Lovelock 1984, p. 58).

TABLE 4

NATURE OF DEMAND RELATIVE TO SUPPLY

EXTENT TO WHICH SUPPLY IS CONSTRAINED	EXTENT OF DEMAND FLUCTUATIONS OVER TIME	
	Wide	Narrow
Peak Demand Can Usually Be Met Without a Major Delay	Alternative Long-Distance Telephone Services Credit Card Companies Cable Television	
Peak Demand Regularly Exceeds Capacity		

The extent of demand for alternative residential long-distance telephone services fluctuates widely over time: however, peak demand can usually be met without a major delay by most of the alternative suppliers. Other service organizations that are similar along this dimension include utilities, credit card companies, and cable television (see Table 4).

Demand fluctuations may be smoothed by either encouraging customers to change their plans voluntarily, (such as offering special discount prices,) or rationing demand through a reservation or queuing system (Lovelock 1984, p. 59). Alternative residential long-distance telephone suppliers encourage their customers to use off-peak hours to place their telephone calls by offering discounts in the evening and even larger discounts in late night periods and on weekends. In addition, some alternative suppliers offer quantity discounts and/or premiums to customers with specified usage volumes. Other similar services organizations may benefit from such promotional activities.

Method of Service Delivery

Two basic issues must be addressed in order to understand the distribution issues in services marketing. First, is it necessary for the customer to be in direct physical contact with the service organization or can the transaction be completed at arms length? Second, does the service organization maintain just a single outlet or does it have multiple outlets (Lovelock 1984, p. 60)?

TABLE 5

METHOD OF SERVICE DELIVERY

NATURE OF INTERACTION BETWEEN CUSTOMER AND SERVICE ORGANIZATION	AVAILABILITY OF SERVICE OUTLETS	
	Single Site	Multiple Sites
Customer Goes to Service Organization		
Service Organization Goes to Customer		
Customer and Service Organization Transact at Arm's Length		Alternative Long-Distance Telephone Services Credit Card Companies Cable Television

As depicted in Table 5, alternative residential long-distance telephone services are rendered through multiple telephone sites, but the customer and service organization conduct transactions at arms length. Other service organizations that are similar along this dimension include credit card companies and cable television. Each subscriber to an alternative service may make long-distance calls from their home (in some cases they may also make calls away from their home). Direct contact between the customer and supplier is not necessary since transactions can be handled through the mail or through electronic communications.

Although quality control is a problem frequently encountered when service organizations expand the delivery of their services through multiple sites, it is not a problem for alternative residential long-distance telephone services because the equipment necessary to render the services is located at a central site.

Characteristics of the
Service Product

Another way of classifying service organizations is on the basis of the extent to which people-based attributes form part of the service product and the extent to which equipment-based attributes form part of the service product. The people dimension may be expanded to include other customers as well as service personnel; and the equipment dimension may be broadened to include the physical facilities where, or in which, the service is delivered. The important element is consumer perceptions of the service. Taking such a perspective must therefore, exclude equipment and personnel working behind the scenes, since they are not typically seen as part of the service unless there is a breakdown in the system (Lovelock 1984, p. 62).

TABLE 6

CHARACTERISTICS OF THE SERVICE PRODUCT

EXTENT TO WHICH EQUIPMENT/FACILITY-BASED ATTRIBUTES FORM PART OF THE SERVICE PRODUCT[a]	EXTENT TO WHICH PEOPLE BASED ATTRIBUTES[b] FORM PART OF THE SERVICE PRODUCT		
	High	Medium	Low
High			
Medium			
Low			Alternative Long-Distance Telephone Services Cable Television

[a]Could also include such other physical attributes as food and drink.

[b]These could be service personnel, other customers, or both.

Alternative residential long-distance telephone services are low on the extent to which both people-based attributes and equipment-based attributes form part of the service product. Cable television is another service similar along this dimension (see Table 6).

Although the customer may perceive that the equipment-based attributes are low, since they merely use their telephones to access the alternative long-distance suppliers, in fact the equipment necessary to complete the service is quite complex. (This is also true for most of the similar services.) These services organizations may find it desirable to change customers' perceptions by stressing the complexity and superiority of their equipment in their promotional activities, which would then place the services into the category which is high on the extent to which equipment-based attributes form part of the service product. Regardless of the positioning, these services organizations should strive to insure that their customers receive consistent, high quality service. When problems are encountered with a supplier, the focus of the user's perception tends to change from his/her telephone to the supplier's equipment.

Summary

Lovelock's system for classifying services has been applied to alternative residential long-distance telephone services in an attempt to better understand those services. According to Lovelock (1983) the schemes are based on the assumption that there are some characteristics of services that transcend industry boundaries and that affect the way marketing is practiced. Accordingly, other services organizations were identified that are similar to alternative residential long-distance telephone services along each of the dimensions suggested by the classification system. In addition, marketing insights and implications were offered for each analysis matrix, particularly with a view to accelerating the adoption and diffusion process for alternative long-distance telephone services.

Alternative residential long-distance telephone services involve ingangible actions directed at peoples' minds and discrete transactions with membership relationships. They are high in the extent to which service characteristics are customized but low in the extent to which customer contact personnel exercise judgment in meeting individual customer needs. The services experience wide fluctuations in demand over time but peak demand can usually be met without a major delay. The services are delivered from multiple sites and the customers and service organizations make transactions at arms length. Finally, alternative residential long-distance telephone services are low in the extent to which equipment/facility-based attributes form part of the service product and low in the extent to which people based attributes form part of the service product.

References

Berry, Leonard L. (1980), "Services Marketing Is Different," Business, 30, May/June, 24-29.

Lovelock, Christopher H. (1984), Services Marketing, Englewood Cliffs: Prentice-Hall, Inc.

________ (1983), "Classifying Services to Gain Strategic Marketing Insight", Journal of Marketing, 47, Summer, 9-20.

________ (1980), "Towards a Classification of Services," in Theoretical Developments in Marketing, edited by Charles W. Lamb and Paul M. Dunne, Chicago: American Marketing Association, 72-76.

Warren, William E. (1985), "The Adoption and Diffusion of Alternative Residential Long-Distance Telephone Services," D.B.A. dissertation, Memphis State University.

Zeithaml, Valarie A., A. Parasuraman, and Leonard L. Berry (1985), "Problems and Strategies in Services Marketing," Journal of Marketing, 49, Spring, 33-57.

BANK CUSTOMER CONTACT PERSONNEL: TRAINING NEEDS AND ISSUES

John H. Lindgren, Jr., University of Virginia
John M. Gwin, University of Virginia

Abstract

Customer contact personnel in banks face increasingly difficult jobs because of the changes that are taking place in their industry. In recent times, customers have become more and more frustrated with the inability of the customer contact person to successfully explain the myriad new products that financial institutions are offering. At the same time, the financial institutions are becoming increasingly concerned with the inability of its customer contact personnel to successfully cross sell these new products. This paper addresses both sides of the issue, and offers training solutions for the banks.

Introduction

Customer contact personnel have one of the most difficult jobs in our institutions today. Not only do they have to interact with customers, but they have the need for continuing education in the ever changing product portfolio of their institution. In the past, we have trained these personnel in customer relations and cross-selling, but there was little need for product knowledge because the products of financial institutions were simple. Today, with the plethora of new products being introduced and the constant changes taking place in existing products, the need for product knowledge training is obvious. Today, the need for customer relations skills and cross-selling abilities is even greater, because the automated nature of banking services today limits our opportunities to see our customers face-to-face. When we do face that customer, it is critical that our customer contact personnel are fully trained in the skills necessary to fully satisfy the customer's needs.

In order to better understand the role of good skills training in today's financial institutions, three actual customer contact scenarios are presented. Each of these scenarios demonstrates the shortcomings of past training efforts, and provides directions for the future training and support needs of these personnel.

It is shortly before closing time in a typical bank lobby. A customer enters and walks to the nearest teller window. The customer indicates that she has some money to deposit in the bank, but is confused about what account options are available. The teller points to a sign in the lobby which is over the shoulder of the customer. The sign offers information about certificates of deposit. There are two columns on the sign, one showing "interest" and the other showing "yield." The customer asks the difference between the two. An explanation is offered, but the customer doesn't understand the description of the difference. A second teller directs the customer to a Customer Service Representative (CSR), who offers a brochure to read. The CSR then mentions Individual Retirement Accounts, which the customer does not understand. The customer comments that it would "take a banker" to understand the material. The CSR comments that the "average" person should be able to comprehend the information provided. The customer is given a business card by the CSR, and is told to call if more information is needed.

A customer enters the lobby of a larger bank. There are no other customers in the bank. The customer has a confused look on his face. A friendly teller offers help. The customer explains that he has money to deposit, and he wants some advice about the best investment for him. The teller simply points to the desk of a customer service representative without further comment. At the desk pointed out by the teller sit two bank employees engaged in a business conversation. The customer waits for a time, and one of the CSR's says the they will be right with the customer. The customer explains the situation to the CSR. The customer was never offered a chair, but sits down at the desk at his own accord. The customer is offered a brochure which discusses checking accounts, and then one which discusses certificates of deposit. The customer is asked if he wants access to his money. When he replies affirmatively, the CSR explains that CD's are not the investment for him because of the penalties for early withdrawal. To illustrate the point, the customer is told that if he deposits $5,000 in a CD and has to withdraw the money before the certificate matured, he will get back less than his original $5,000. The customer is then offered brochures on various interest checking accounts, but is not clear on the differences between the accounts. He is told not to worry, that isn't what he is interested in anyway.

In neither of the two scenarios above was the customer asked how much money was available for deposit, their name, or any other information which might have been of value is assessing the best products for the customer. In addition, neither of the first two customers were offered chairs, nor was the information they received more than to point to a sign or the offering of some printed material. What little information they were offered by the CSR's in both cases was, at best, ill informed, and, at worst, incorrect.

A fifteen year customer of the bank enters the lobby. This is a familiar face to the employees. Three employees are engaged in a social conversation around a desk. The customer waits, asks for assistance, and is directed to a fourth employee who is most distant from the customer. The customer is making an inquiry for a relative who has recently inherited some money. The relative is interested in ways to invest this newly found wealth. The customer offers the name of the relative, but no note is made of it. Once again, the customer is not asked the amount of money available for investment. The CSR has no basic information on the customer or the potential investor, nor any way to contact either of them. The customer is told that the only investment the relative should consider is an IRA. No brochure or other written material is offered. A brief discussion of certificates of deposit was offered, and a comment about the inappropriateness of savings accounts was made. The customer was then directed to an investment officer, which implied that the CRS thought the amount was large. The customer commented that he was short of time and would come back later. The customer left the bank without anyone asking for further information or a means of contacting him later.

Scenario Implications

The preceeding three scenarios are true accounts of interaction between bank employees and potential customers. (Similar experiences are reported in Iovacchini, 1984). Why did events occur as they did? Remember the "good old days" of the 1970's when banks were a public utility? Prices were regulated, services were limited, and terms were often specified by the regulators. There was little need for financial institutions to market their services aggressively. There was no need to reach out to customers, because they were trained to come to the bank when a loan was needed or a deposit was to be made. In those days, banks were passive toward selling, and waited for business to come to them (Cravens, 1984).

A passive marketing strategy worked so long as the factors which affected the banking industry did not require active selling, and, more importantly, the competitive environment did not require it. The deregulation of the banking industry changed the rules of the game. Passive marketing is not sufficient in an industry where traditional banks are facing intense competition from both other financial institutions and nontraditional institutions such as money market funds and brokerage houses (Walker and Cagley, 1983).

We must point out, however, that businesses do not change because the rules change. Businesses change because the demands customers place on them change. Deregulation has allowed new services and new pricing, but these new opportunities mean nothing unless the customers want them (Russell, 1984). Fortunately, many customers do want these new services, and it is time that banks respond to these new wants by becoming full service institutions that understand their customers and respond to their needs with appropriate marketing mixes. Banks must decide they are in the business of banking.

For years, banks have told their customers that they are full-service institutions. While the banks may have convinced themselves of this, they have not convinced the customers. It is the customer the bank must be concerned with, not the new competition. In the three scenarios presented at the beginning of this article, each bank had an opportunity to be a full-service institution. Each could have taken the opportunity to present a complete portfolio of financial services. In all three cases, however, the CSR's were oriented to the products rather than the needs of the customer. In each case, the CSR should have taken time to get a picture of the needs of the customer by finding out how much money was involved, what other investments the customer had, what their present and future needs were, and how this investment would be used to balance a portfolio of risk and return.

What lessons can be learned from the scenarios? It is obvious that most banks lack skills in three basic areas: product knowledge, customer relations, and selling (Iovacchini, 1984). Three basic areas are the foundation of our platform performance. A number of banks use a personal banker program. These personal banker programs tie the three basic skills areas together, yielding sound product knowledge, good customer relations, and successful selling. These programs allow customers to identify a person in the bank that they know, and this cements the relationship between the bank and the customer. The day when a bank can simply open its doors and let the customers in is over. Bankers need to think of themselves as salespeople who bring business to the bank while serving the needs of the bank's customers.

Training Areas

Product Knowledge

To better understand the three critical areas of skills needs for our marketing personnel, a brief discussion of each is in order. The first are is product knowledge.

It is imperative that banks communicate well with all its customers. Marketing communication includes advertising, sales promotion, publicity, and personal selling. Each of these techniques has a purpose in the total portfolio of marketing communications. For simple products such as checking, simple savings accounts, safe deposit boxes and credit cards, advertising can be used to communicate with our customers. Most of our customers know these products and what they do, and our communication goal is simply to remind and explain any changes. Because customers have prior knowledge of these products, most will come into the bank presold, and the sales job is simply one of order taking. On the other hand, consumer knowledge of more complex bank products, such as IRA's, cash management accounts, financial planning, personal trust accounts, variable rate loans, and brokerage services, is not nearly so complete. Both because of the complexity and the newness of these services consumers have little prior knowledge of them. Advertising can increase customer awareness, but, in most cases, advertising will not presell these services. It is the responsibility of bank personnel to explain features and benefits, answer questions, and discuss alternative investment strategies. To do this successfully, bank personnel must have complete product knowledge (Berry, Futrell, and Bowers, 1983).

In a recent study by Thomas Stanley of Georgia State University, over 1,500 households were tested for their knowledge of specific bank products (Stanley, 1984). Even though the questions were simple, the average score was 36% correct--and the questions answered correctly were mostly focused on simple services like checking and savings accounts. While the poor showing of the "average" bank customer is alarming, the questionnaire was also administered to over 350 bank employees in 5 geographic regions. The truly alarming fact is that the bank employees scored only slightly better, averaging 44% correct!

The obvious implication of these results is that potential customers who need information to make decisions about various bank products are depending on getting that information from bank personnel who may not know any more about the product than the customer seeking the information (Stanley, 1984).

It is probably fair to say that most bank officials feel that the lack of adequate product knowledge on the part of their personnel is the rule. Most bank officials would also agree that this lack is the source of serious problems in the bank's product delivery system. The problem becomes even more acute when we see more off-premisis banking, because we have fewer chances to provide point-of-sale information to the customer (Berry, Futrell and Bowers, 1983 and Stanley, 1984).

Customer Relations

The second area that is a critical skill need for bank employees is customer relations. This skill is an ability to understand customers and become sympathetic to their needs. It suggests that we do the best for our customers. The banking industry has long felt that customers placed great importance on the financial stability and sound management of the institutions they trusted with their money. However, law requires that all banks be financially sound and well managed, and so banks cannot be distinguished from one another on these characteristics. In studies that the authors have conducted over the last three years, the determinant attributes of financial institutions have been tracked (Gwin and Lindgren, 1984). In that time, the results have not changed. The two features which distinguish banks from one another, and which customers use to choose one institution over another are friendly service and personal interest in customers. These two attributes are the basis for a sound program of customer relations. If the platform personnel are friendly and have a true interest in the customers of the bank, the natural result will be increased sales.

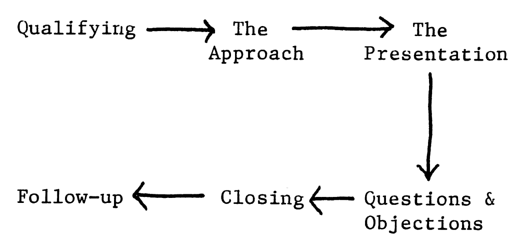
Selling

In order to increase our selling effectiveness, banks not only have to improve their product knowledge and their customer relations, but they also must train their personnel to sell. Most bank sales personnel are being asked to do something they have never done before. The problem banks face is that basic employee attitudes about selling being somehow "dirty" must be changed. Because of this prevailing attitude, bank sales people are still order taking instead of order getting. Sales training and changes in attitudes can turn bank employees into a powerful and capable sales force for the bank. Banks, in turn, must develop into organizations which manage the selling effort. This means that banks must design incentive and reward programs which will motivate employees to become good salespeople, and then develop support and monitoring programs for the overall sales effort. Once these programs are in place and the bank has a trained sales force in place, selling will become an integral part of the marketing effort (Berry, Futrell, and Bowers, 1983).

What is the selling process that bank employees need to be taught? It is a simple six-step set of activities that are structured to assist the employee in discovering the needs of the customer and to present the customer with alternative solutions to those needs (Dalrymple, 1982). See Figure 1 for a graphic presentation of the selling process. The first step in the process is the qualifying function. In all three of the scenarios, the bank employees did not perform an important step in the selling process: they did not qualify the potential customer. Qualifying is finding out what needs the customer has and the amount of funds the customer intends to make part of this investment transaction. As well, it is the process of discovering the role this investment transaction will have in the total portfolio of all investments under the customer's control. It is only after qualifying a potential customer that the bank employee can successfully offer bank products which satisfy the needs of that customer. It is also during the qualifying step that the bank employee should get personal data about the customer, such as name, address, telephone number, and other pertinent data.

FIGURE 1

The Personal Selling Process



The second step in the selling process is the approach. This step is the first time the bank employee actually offers the customer a means of solving an investment problem. In the approach, the bank employee may offer more than one alternative to the customer, to help the customer understand that there may be more than one solution to the problem. The approach is used primarily as a means of assuring the customer that the bank has an understanding of their needs, and has a number of potential ways to satisfy those needs. In the scenarios presented earlier, the approach, when used, was used to offer only a single alternative to the customer. The approach was almost a "take it or leave it" process. While customers should not be confused with a large number of alternatives in the approach, it is often comforting for them to understand that there is more than one way for their needs to be satisfied. Also, and importantly, by offering the customer alternatives, the customer feels that he is in command of his financial affairs, rather than being at the mercy of the bank and its employees. That is, the customer feels that the choice is his to make, not that the bank will decide where his money will go. This is an important psychological need of the customer.

The third step in the selling process is the presentation. In the presentation, the bank employee offers the customer a discussion of each alternative presented, with as much detail as the customer wishes. It is during the presentation that fees are discussed, interest rates made available, the availability of funds for each alternative discussed, and any other information that the customer desires is made available. It is often helpful during the presentation to compare each alternative, so that the customer can see the relative strengths and weaknesses of each alternative. The presentation must be structured in such a way that it responds to the information needs of the customer. Unlike the responses of some of the bank employees earlier, a customer should never hear a bank employee say, "Oh, never mind, this really isn't for you anyway." Even if an investment alternative isn't just right for a customer, it should be fully explained. After the explanation, a comment about the appropriateness of the alternative for that customer ("I believe we have other alternatives which will be better suited for your needs.") may be made. If a bank employee has presented an alternative to a customer, it should be fully explained. Once again, this is an important psychological issue for the customer. If the employee doesn't explain an alternative, there is an implication that the customer is not intelligent enough to understand the explanation, or to decide for himself that the alternative is not appropriate.

The fourth step is responding to questions and handling objectives. After the alternatives have been presented, the customer may have questions about certain features of an alternative, or may resist a commitment because of uncertainty or the belief that another institution may have a better choice. Now that financial institutions are intensely competitive, more and more customers are shopping for the best investment alternatives. Bank employees must not only understand their own products, but they must also understand the products of the competition, so that they can respond to the customer belief that another institution offers a better alternative. If a customer objects to investing in a Super NOW account because he believes that a money market fund account will yield higher interest, a bank employee should be able to respond with the reasons why the Super NOW is a better choice. It was obvious in the earlier scenarios that the bank employees there were poorly equipped to handle objectives, because their product knowledge was incomplete or simply wrong.

The next step in the selling process is the closing. This is asking the potential customer for their business. For many bank employees, as is the case for salespeople generally, asking for a customer's business is the most difficult part of the selling task. No one likes to be told 'no', and this is the point in the sales process where the customer may say just that. There are a number of ways to secure a customer's business without directly asking for them to commit. For example, after a presentation of various demand deposit alternatives, the bank employee might give the customer the sample check book and say, "Why don't you look through here and see what checks you can order while I begin to fill out the account paperwork?" The bank employee has not directly asked the customer if they would like to open an account, and, if the qualifying step was performed correctly, the bank employee will have most of the information needed to fill out the paperwork. This makes buying easier for the customer, and it makes the closing step in the process simplier for the bank employee. This is, of course, only one type of indirect close.

The last step in the selling task is the follow-up. Banks understand the need for following up product sales, but few banks do it. This is an important step in the selling process, because it secures the relationship between the bank and the customer, and it provides another opportunity for cross-selling efforts, which should be an integral part of the whole process.

DISCUSSION

What can be done about the situation that now exists in most banks? The key to the development of skills in the three critical areas that have been discussed is training for all customer contact personnel. It is important that this training include all three components: product knowledge, customer relations, and selling.

At the same time, we have to understand that the product knowledge area is one which is most difficult for the bank's employees. While there is relatively little change in the customer relations and selling areas, there is constant modification and introduction of new products, and it is difficult for the platform personnel in a bank to keep up with these changes and new products. There are two mechanisms which can aid bank employees in their effort to keep up. First is ongoing training on a regular basis. This means not just attendance at training sessions, but testing for knowledge. The second mechanism is help the bank employee keep abreast of product changes and introductions is through the use of printed material and software that aids the selling process. There are a number of microcomputer software packages which are designed to assist the customer service representative in explaining the benefits and features of bank product offerings. An excellent additional benefit that the use of software provides is that the CSR can be prompted to cross-sell services that might not otherwise be presented to the customer.

The conversion of banks from order taking institutions to selling organizations has extensive implications. However, this basic change in focus and philosophy is necessary if the bank is to become the full service institution it has long claimed to be. The market is changing and the bank must change with it.

Like organizations which are in the business of manufacturing, and like organizations which are in the business of retailing, banks have to be organizations in the business of banking. Make no mistake, the name of that business today is marketing. The business requires an organizational commitment and a basic change in focus. It starts with the office of the president and ends with the platform people.

Bibliography

Berry, Leonard, L., Futrell, Charles, Bowers, Michael, Journal of Banking, "The State of Personal Selling in Retail Banking," Volume V, Number 3, Fall, 1983, pp. 1-7.

Conover, C.T., Bankers Monthly, "Is There a Future in Banking?," July, 15, 1984, pp. 8-18.

Conover, C.T., Bankers Monthly, "The Urgent Need for New Powers," May, 15, 1984, pp. 20-25.

Cravens, David W., The Bankers Magazine, "Developing Market-Driven Strategies for Financial Institutions," March-April, 1984, pp. 32-38.

Dalrymple, Douglas J., Sales Management: Concepts and Cases, John Wiley and Sons, New York, 1982.

Dubinsky, Alan J., The Journal of Retail Banking, "Psychological Dimensions of the Job: The Case of the Customer Contact Personnel," Volume V, Number 2, Summer 1983, pp. 30-37.

Gwin, John M. and John H. Lindgren, Jr., "Consumer Bank Choice Decisions: A Determinant Attribute Study," working paper, McIntire School of Commerce, University of Virginia, Charlottesville, Virginia, 1984.

Iovacchini, Arlene, Bank Systems & Equipment, "Platform Officers Must Make Effort to Bring New Business to Banks," September, 1984, pp. 42-46.

Isban, Robert C., Bank Administration, "New Levels of Opportunity for the Financial Industry," July, 1984, pp. 21-23.

Metzger, Robert O., Rau, Susan E., Journal of Retail Banking, "Financial Counseling and Its Delivery," Volume V, Number 4, Winter, 1983-84, pp. 11-18.

Reubenstein, James, Bank Marketing, "BMA Convention Refrain: Consumers Reaching Out for Financial Know-how," December, 1983, pp. 26-28.

Russell, John A., Bank Marketing, "Bank Placekickers May Win the Game," March, 1984, pp. 10-12.

Stanley, Thomas O., The Bankers Magazine, "Inadequate Product Information," pp. 90-94.

Thompson, Thomas W., United States Banker, "It's a Selling Business," December, 1983, pp. 6-8.

United States Banker, "Marketing in a Deregulated Environment," April, 1984, pp. 34-36, 59.

Walker, Robert A., Jr., Cagley, James W., The Bankers Magazine, "Sales Management in Banking," November-December, 1983, pp. 48-51.

RESEARCH METHODOLOGY

POWER AND EFFECT SIZE IN SAMPLE SIZE SELECTION FOR PROPORTIONS

Norman T. Bruvold, University of Cincinnati

Abstract

In experiments with three or more treatments in which individudal test of differences in treatment proportions are to be made, the question arises of how to determine individual treatment sample sizes that will minimize sampling costs while controlling for power and effect size. This general sample size selection question was formulated as a continuous convex programming problem. Optimal sample sizes were obtained with less than one minute of run time for a formulation of a sample size selection problem under typical experimental research conditions.

Introduction

Marketing research practitioners often have specific X-causes-Y hypotheses that need to be examined. For example, which of a 25¢, 35¢, or 45¢ off price coupon could achieve a redemption rate of over 30% or whether a 50¢, $1.00 or $1.50 enclosed incentive will increase the response rate of a mailed survey by 15%. Experimental designs are employed to test these hypotheses where the only change from a control condition is the manipulated value of the cents off variable or of the enclosed incentive amount variable.

The concerned researcher designs the experiment so that a difference sufficiently large to be of practical importance in redemption or response rate is nearly always determined to be significant by the test procedure (Sawyer and Ball, 1981). When well planned, a significant result would indicate that a meaningful difference has probably occured while an insignificant result would indicate that there was probably no difference sufficiently large to be of practical importance. In these comparative experiments, sample sizes are chosen based on the quantities α, δ, β and σ (Davies, 1956, page 31) where:

- α is the risk of asserting a difference when none exists, the Type I error;
- δ is the effect size that it is important to detect;
- β is the risk of asserting no difference when a difference of δ exists, the type II error;

and

- σ is the experimental error standard deviation.

Statistical power, $1-\beta$, is the probability that a statistical test will correctly reject the null hypothesis. Sawyer and Ball (1981) strongly suggest that statistical power and effect size are not considered sufficiently by marketing researchers. How can power and effect size be considered in sample size determination decisions for frequently used experimental designs that employ comparisons of proportions? Arthanari and Dodge (1981) show that these sample size decisions can be formulated as optimization problems. They as well as Bruvold and Murphy (1978), suggest solutions to the problem such as choosing a sample design that either maximizes survey precision for a given cost or minimizes the cost of a survey for a given level of precision. The solutions to the formulated optimization problems did not include power and effect size and the solution utilized main frame software.

The purpose of this article is to provide a solution to the sample size selection problem for comparison of proportions incorporating power and effect size while using personal computer software. The solution procedure will be illustrated by the experimental testing procedures employed by researchers into factors affecting mail survey response rates. References to numerous mail survey response rate experiments can be found in Yu and Cooper (1983). Application of the methodology in designing direct mail coupon redemption tests also will be discussed (Reibstein and Traver, 1982).

Statistical Application Requirements

Sample size determination procedures for the comparison of means or proportions utilize constraints based on the quantities α, β, δ, σ and the sample size n. When n is chosen just sufficiently large to satisfy the constraints, the optimal sample size is found (Davies, 1956; Churchill, 1983). In the Appendix it is shown that power and effect size are explicitly considered when the sample sizes for comparison of proportions from the experimental test pairs (i, j) are chosen to satisfy the following inequality:

$$\frac{p_i(1-p_i)}{n_i} + \frac{p_j(1-p_j)}{n_j} \leq \frac{\delta^2}{(Z_{\alpha/2} + Z_\beta)^2} \quad . \tag{1}$$

The true but unknown population proportions are p_i and p_j, n_i and n_j are sample sizes, δ the effect size and $Z_{\alpha/2}$ and Z_β are upper percentiles of the standard normal probability distribution.

The constraint, Equation (1), was developed under the assumption that sample sizes would be sufficiently large for a normal approximation to be appropriate and that p_i and p_j can be unequal. For the normal approximation to be reasonable, the products n_ip_i and n_jp_j must exceed specific values depending on p_i and p_j. (Here and in the following it is assumed that p_i is the minimum value of p_i and $(1-p_i)$ for each i.) Tables of the specific values are given in Cochran (1977, page 58) and Hald (1952, page 680). Hastings and Peacock (1975) give the rule of thumb that the product np simply must be greater than 25. In order to use the tables, or a rule of thumb, the researcher must choose a value of p_i just lower than what would reasonably be expected in the experiment. For direct mail coupon redemption testing the value of .10 could be chosen since it was the minimum found in Reibstein and Traver (1982). Of course the conditions of Reibstein and Traver's (1982) data should be relevant to the current conditions under design. If .10 was chosen then Cochran's (1977) table would require n to be greater than 600. A conservative estimate of .20 could be chosen for response rates to mailed questionnaires as it was the lower fifth percentile of 183 final response rates reported in Heberlein and Baumgartner (1978). In this case n should be greater than 200 (Cochran, 1977). The choice of the minimum value of n should be based on the specifics of the study while the values of 200 and 600 given above are guidelines based on secondary data.

Since p_i in Equation (1) is an unknown population proportion the researcher must determine an appropriate value of p_i, say p_i^+, so that the inequality would be sure to hold for p_i if it were satisfied for p_i^+. Since $p_i(1-p_i)$ is a parabola with its maximum at $p_i = .5$, a choice of $p_i^+ = .05$ would always be conservative. Under the conditions of Reibstein and Traver (1982) the range of direct mail coupon redemption rates of .10 to .40 was observed. If an upper value of .40 could be chosen for p_i^+ rather than .50, fewer samples would be required. If the endpoint of the confidence range from a predictive model of response rates (Heberlein and Baumgartner, 1978) or direct mail coupon redemption rates (Reibstein and Travor, 1982) could be used, then the probable ranges for the observed proportions could be narrowed and sample sizes potentially decreased.

In summary, the researcher who explicitly considers power and effect size when selecting sample sizes using Equation (1) must supply three bounds for each proportion in the test. The first is a minimum value, p_i^-. The second is a bound b_i so that the requirement $n_i p_i^- \geq b_i$ can be established that allows the normal approximation to be used. The third is the proportion, p_i^+ which leads to a practical upper bound on $p_i(1-p_i)$ ensuring that the inequality in Equation (1) will hold for the unknown p_i when it holds for p_i^+.
General conditions for determining sample size can include several treatment proportions to be estimated and all proportions compared two at a time (see Heberlein and Baumgartner, 1978 and Yu and Cooper, 1983 for many references to individual experiments). If 5 treatments are used there could be 5!/3!2! = 10 comparisons made. In general each comparison could have individual α, β and δ values as dictated by their importance to the researcher. Individual significance levels could be determined by dividing a desired overall α by the number of paired tests to be conducted in order that the per experiment Type I error rate is controlled to α or less (Winer, 1971, page 199). In a later illustration different α and β values will be used for some of the paired tests for demonstration purposes but the researcher need not have them different.

An additional sample size determination objective can be to minimize the cost of sampling when each treatment has a distinct cost per sample. This can easily occur when the contents mailed to a potential respondent of a mailed survey will require additional postage or higher printing costs for one treatment than another. Different sampling costs will be included for each treatment in the illustration. When all costs are equal, the sample sizes selected depend only on power and effect size.

Math Programming Formulation

The sample size selection problem can be formulated as the following integer nonlinear programming problem:

$$\text{minimize} \sum_{m=1}^{t} c_m n_m \tag{2}$$

subject to:

$$\frac{(p_i^+)(1-p_i^+)}{n_i} + \frac{(p_j^+)(1-p_j^+)}{n_j} \leq \frac{\delta^2(i,j)}{(Z_{\alpha/2}(i,j) + Z_\beta(i,j))^2}$$

$1 \leq i < j \leq t \qquad i = 1,\ldots,t-1 \qquad j = 2,\ldots,t$

$n_i p_i^- > b_i \qquad i = 1,\ldots,t$

$n_i \geq 0$ and integer $i=1,\ldots,t$.

In the above, c_m is the cost per individual sample for treatment m, n_m is the sample size for treatment m, and t is the number of treatments. The values of p_i^+, p_i^- and b_i are bounds supplied by the researcher defined earlier. The pair identifiers (i,j) indicate that distinct values of α, β and δ can be chosen for each identified test pair. The n_m's are the variables representing individual sample sizes in the problem.
The solution to the math programming problem will yield the minimum cost solution to the sample size selection problem for comparison of proportions. A useable relaxation of the math programming formulation substitutes x_m for $1/n_m$. When x_m is allowed to be continuous, a continuous convex programming problem results for which several efficient algorithms are available (Bazarra, 1975; Best, 1975; Fiacco and McCormick, 1968; Ritter, 1973). The sample sizes selected from the continuous problem are found by choosing the smallest integer larger than $1/x_m^*$ for each m=1,...,t. For example,if $1/x_1^* = 199.23$ the sample size chosen for treatment 1 is $n_1^*=200$. This relaxation also allows the researcher to use software designed for a micro computer such as the IBM PC (Liebman, Schrange, Lasdon and Waren, 1984).

Illustration

A hypothetical set of data from the design of a mail survey response rate experiment consisting of t=5 treatments will be used to illustrate the computational procedure. In Table 1 the effect sizes and normal deviates for the related Type I and Type II error significance levels are given. From the values it is seen that all treatment comparison pairs are planned but not all have the same Type I and Type II error significance levels. Also it can be seen that the effect sizes for each comparison are not equal. This illustrates that the researcher can structure the problem to allow for additional precision or confidence for specific comparison pairs. The β significance levels of 2.5% and 5% are generally more stringent for this type of design and will result in larger samples sizes being required than when power is not

TABLE 1

VALUES FOR RESPONSE RATE COMPARISONS

Comparison Identifyer (i,j)	Effect Size $\delta(i,j)$	Normal Deviate $Z_{\alpha/2}(i,j)$	Normal Deviate $Z_\beta(i,j)$	Power and Effect Size Bound $\delta^2(i,j)/(Z_{\alpha/2}(i,j)+Z_\beta(i,j))^2$
1, 2	.05	1.960	1.645	.0001924
1, 3	.10	1.960	1.960	.0006508
1, 4	.05	1.645	1.960	.0001924
1, 5	.10	1.960	1.645	.0007695
2, 3	.10	1.960	1.645	.0007695
2, 4	.10	1.645	1.960	.0007695
2, 5	.10	1.960	1.645	.0007695
3, 4	.10	1.960	1.960	.0006508
3, 5	.10	1.960	1.960	.0006508
4, 5	.10	1.645	1.960	.0007695

controlled. Significance levels for α of 5% and 10% are commonly used (Yu and Cooper, 1983).

The required bounds and costs that complete the researcher supplied values to the mathematical programming formulation are given in Table 2. The bound for the normal approximation requirement follows that given in Cochran (1977, page 58) since confidence interval estimates of the differences in treatment proportions may be desired. The researcher has provided distinct ranges in probable expected response rates by choosing p_i^- and p_i^+ in Table 2. An added advantage of developing Table 1 and Table 2 is that the researcher has been required to make relevant, fundamental design decisions at an early step in the experimental process.

The optimal solution was found to the continuous relaxation of the mathematical program (2) by using the GINO procedure (Liebman, Schrange, Lasdon and Waren, 1984). An IBM PC was used and run time to final solution was less than one minute. The optimal solution is given in the first three columns of Table 3. For comparison, the last two columns of Table 3 contain the optimal solution to the sample size selection problem with only the effect size values of Table 1 increased by .05 and all other values in Table 1 and Table 2 unchanged. The sample sizes selected for treatments 1, 2 and 4 are large in comparison to those for treatments 3 and 5 mainly because the comparisons involving the three treatments had the smaller effect sizes. The total number of samples for the 5 treatments of the problem in column 2 was 28,661 and the sampling cost total was $3,305.00. The sample sizes reported in Table 3 were found by raising the continuous solution to the next highest integer.

The total cost of $3,305 is just $1.29 more than the continuous solution. This appears to be a small price to pay for a solution procedure easily implemented on a micro computer.

Conclusion

Power and effect size can be considered in sample size selection procedures for comparisons of proportions from several treatments in an experiment. The standard two at a time sample size selection formula has been extended to multiple treatments in which all possible treatment comparison pairs are tested by the researcher. Each comparison can have distinct Type I and Type II error levels. Individual sample sizes n_i and n_j as well as individual effect sizes for each treatment pair are explicitely allowed.

The sample size selection question can be formulated as a continuous convex programming problem. The formulation minimizes the costs of sampling while assuming that power and effect size constraints are satisfied. Computational results for the sample size selection solution procedure was easily obtained through use of available software on a micro computer such as the IBM PC. Run times for the illustration averaged less than one minute for the full model of five treatments.

This simple and efficient sample size selection model and solution procedure can be easily applied by researchers to numerous experimental conditions such as those encountered in mail survey response rate research and direct mail coupon redemption rate testing that have been reported in recent marketing literature.

TABLE 2

BOUNDS AND COSTS

Treatment m	Normal Bound b_m	Minimum Proportion p_m^-	Maximum of $p_i(1-p_i)$ at p_m^+	Sampling Cost Per Attempt c_m
1	40	.20	.45	$.30
2	32	.25	.50	$.35
3	40	.20	.45	$.40
4	32	.25	.50	$.45
5	24	.30	.50	$.40

TABLE 3

OPTIMAL SAMPLE SIZES

Treatment	Table 1 Effect Size: Sample Size	Table 1 Effect Size: Sampling Cost	Table 1 Effect Size Increased by .05: Sample Size	Table 1 Effect Size Increased by .05: Sampling Cost
1	3398	$1019.00	850	$ 255.00
2	2092	732.20	523	159.90
3	763	305.20	287	114.80
4	2093	941.40	523	235.35
5	767	306.80	289	115.60
TOTALS	28,661	$3305.00	2,472	$ 880.65

Appendix

For each pair of rates or proportions to be compared it is assumed that distinct sample sizes n_i and n_j can be chosen. It is also assumed that p_i and p_j are the true but unknown proportions for the population pair and that n_i and n_j are sufficiently large for the normal approximation to be used. The following is an algebraic manipulation of standard sample size determination procedures for comparative experiments (Snedecor and Cochran, 1967, pages 113 and 222; Fleiss, 1973, page 30).

$$P\left\{\frac{|\hat{p}_i-\hat{p}_j - (p_i-p_j)|}{\sqrt{\dfrac{p_iq_i}{n_i}+\dfrac{p_jq_j}{n_j}}}\right\} > Z_{\alpha/2} \quad < \alpha \tag{1}$$

is the Type I error probability condition that the hypothesis of equal proportions in requected if the observed difference in proportions $|\hat{p}_i-\hat{p}_j|$ is sufficiently large. The standard notation $q_i = 1 - p_i$ is used. $Z_{\alpha/2}$ is the positive normal deviate corresponding to the two tailed significance level α. The critical value c_α, as depicted in Figure 1, is

$$c_\alpha = Z_{\alpha/2}\sqrt{\frac{p_iq_i}{n_i}+\frac{p_jq_j}{n_j}} \quad , \tag{2}$$

Assuming that the true absolute difference is δ and $\delta > c_\alpha > 0$ as Figure 1 illustrates then the Type II error probability conditions for $p_i > p_j$ is

$$P\left\{\frac{\hat{p}_i-\hat{p}_j - \delta}{\sqrt{\dfrac{p_iq_i}{n_i}+\dfrac{p_jq_j}{n_j}}}\right\} < c < \beta_\alpha. \tag{3}$$

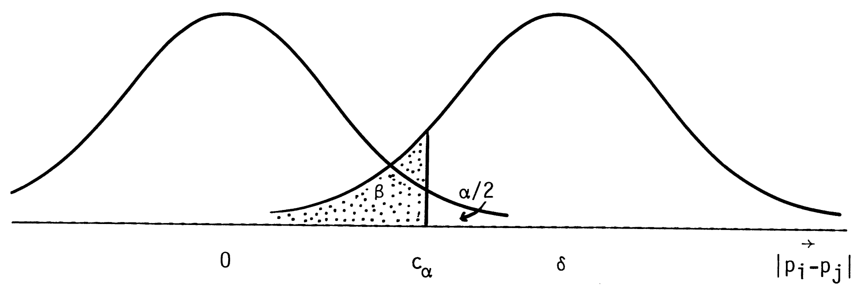
The following inequality must be satisfied for the probability condition in Equation (3) to hold:

$$c_\alpha < \delta - Z_\beta\sqrt{\frac{p_iq_i}{n_i}+\frac{p_jq_j}{n_j}} \tag{4}$$

where Z_β is the positive normal deviate corresponding to the single tailed significance level β. Substitution of c_α from Equation (2) into Equation (4) and performing simple algebraic manipulations yields

FIGURE 1

FREQUENCY DISTRIBUTIONS OF THE MEAN DIFFERENCE BETWEEN TWO POPULATIONS



$$\frac{p_i q_i}{n_i} + \frac{p_j q_j}{n_j} \leqslant \frac{\delta^2}{(Z_{\alpha/2} + Z_\beta)^2} \quad . \qquad (5)$$

If n_i and n_j are chosen sufficiently large so that Equation (5) is satisfied, then the condition $\delta > c_\alpha > 0$ is automatically satisfied. Also if the condition $p_j > p_i$ was assumed then after similar algebraic manipulations Equation (5) would result. Thus Equation (5) is a general inequality as the above two conditions on its development can be lifted.

When the researcher selects values of δ, $Z_{\alpha/2}$ and Z_β and then chooses n_i and n_j sufficiently large to satisfy Equation (5) then power and effect size are explicitely considered in the sample size selection procedure. In addition n_i and n_j need be sufficiently large to allow the normal approximation to be used.

References

Arthanari, T.S. and Dodge, Yadolah, 1981. Mathematical Programming in Statistics. New York: John Wiley and Sons, Inc.

Bazarra, M.S., 1975. "An Efficient Cyclic Coordinate Method for Optimizing Penalty Functions." Naval Research Logistics Quarterly 22, 399-404.

Best, M.J., 1975. "A Feasible Conjugate Direction Method to Solve Linearly Constrained Minimization Problems." J. Optimization Theory Appl. 16, 25-38.

Bruvold, N.T. and Murphy, R.A., 1978. "Sample Sizes for Comparison of Proportions." Technometrics 20 (November) 437-440.

Churchill, Gilbert A., Jr., 1983. Marketing Research: Methodological Foundations. New York: The Dryden Press, Third Edition.

Cochran, William G., 1977. Sampling Techniques. New York: John Wiley and Sons, Inc., Third Edition.

Davies, Owen L., 1956. The Design and Analysis of Industrial Experiments. New York: Hafner Publishing Co., Second Edition.

Fiacco, A.V. and McCormick, G.P., 1968. Nonlinear Programming: Sequential Unconstrained Minimization Techniques. New York: John Wiley and Sons, Inc.

Fleiss, Joseph L., 1973. Statistical Methods for Rates and Proportions. New York: John Wiley and Sons, Inc.

Hald, A., 1952. Statistical Theory with Engineering Applications. New York: John Wiley and Sons, Inc.

Hastings, N.A. and Peacock, J.B., 1975. Statistical Distributions. New York: Halsted Press.

Heberlein, Thomas A., and Baumgartner, Robert, 1978. "Factors Affecting Response Rates to Mailed Questionnaires: A Qua ntitative Analysis of the Published Literature." American Sociological Review 43 (August) 447-462.

Liebman, Judith; Schrange, Limes; Lasdon, Leon and Waren, Allen, 1984. GINO: Palo Alto: The Scientific Press.

Reibstein, David J. and Traver, Phyllis A., 1982. "Factors Affecting Coupon Redemption Rates." Journal of Marketing 46 (Fall) 102-113.

Ritter, K., 1973. "A Superlinearly Convergent Method for Minimization Problems with Linear Inequality Constraints." Mathematical Programming, 4, 44-71.

Sawyer, Alan G. and Ball, A. Dwayne, 1981. "Statistical Power and Effect Size in Marketing Research." Journal of Marketing Research, 18 (August) 275-290.

Snedecor, George W. and Cochran, William G., 1967. Statistical Methods. Ames, Iowa: The Iowa State University Press.

Winer, B.J., 1971. Statistical Principles in Experimental Design. New York: McGraw-Hill Book Co., Second Edition.

Yu, Julie and Cooper, Harris, 1983. "A Quantitative Review of Research Design Effects on Response Rates to Questionnaires." Journal of Marketing Research 20 (February) 36-44.

QUESTIONNAIRE INCLUSION IN A SECOND MAILING: A MATTER OF TIME AND MONEY

P. Greg Bonner, Villanova University;
Dennis J. Scotti, Fairleigh Dickinson University; Alan R. Wiman, Rider College

Abstract

Previous researchers have concluded that the enclosure of a questionnaire in a second mailing has little impact on the overall response rate. However, previous studies have failed to include the timing of the second mailing as a moderating variable. The experiment reported here presents findings which show that the effectiveness of enclosing a questionnaire in a second mailing is moderated by the length of time between the original and second mailing.

Introduction

Although in recent years research interest has broadened to include response time and quality of response issues (Houston and Ford, 1976), it remains fair to say that researchers who utilize mail surveys remain interested in maximizing their response rate given certain cost constraints. Since a follow-up mailing with an enclosed questionnaire costs more than a follow-up mailing which requests the potential respondent to return a previously received questionnaire, an assessment of the effectiveness of both procedures is necessary to the selection of an optimal follow-up strategy. Heberlein and Baumgartner (1978) suggest that the enclosure of a questionnaire does not appear to be any more effective than the reminder itself. However, this finding was not the result of a controlled experiment, and they deemed it worthwhile to inquire further into this question.

Heberlein and Baumgartner (1981) utilize both a literature review and a controlled experiment to address the issue of the cost effectiveness of including a questionnaire in a second mailing. The motivational links between repeat mailings and responses were posited to be: (1) lowering respondent perception of cost, (2) increasing the perceived importance of returning the questionnaire and (3) the possibility of reactance; that is, reduced perceived freedom of choice which may lead to lower response. In their review of the published findings, Heberlein and Baumgartner identified 32 tests of the use of one follow-up contact. Of these, 16 involved the use of a questionnaire and letter while 16 involved use of a letter only. Those studies which included a questionnaire in the follow-up mailing had a slightly lower response rate than those that did not, which gives some credence to the reactance hypothesis. However, the difference was not statistically significant. Since these studies were not controlled, Heberlein and Baumgartner (1981) analyzed a series of 13 experiments and found that the inclusion of a replacement questionnaire was slightly more effective than letters alone. They concluded, based on both their literature review and experimental studies, that the inclusion of a questionnaire in the second mailing had little impact on the overall response rate but, since it does not usually cost much, a second questionnaire should be included.

While we feel Heberlein and Baumgartner (1981) have made a meaningful contribution to understanding the effect of including a questionnaire in a second mailing, their study suffers from their failure to include time as a factor. Nichols and Meyer (1966) suggest that, due to decreasing interest and discarded questionnaires, one would expect the sooner a reminder is sent, the more effective it will be. Their results supported their hypothesis. The experimental study presented here is designed to control for the effect of time, where time is the number of days between the original mailing and the follow-up.

Experimental Procedure

This experiment utilized a 2 X 2 factorial design to test the effectiveness of including a questionnaire in the follow-up mailing. An initial mailing to 1,152 subscribers of a prepaid health maintenance organization (HMO) yielded a response rate of 49.0 percent (564) after two weeks. A total of 140 of the 588 non-respondents were randomly assigned to one of four treatment conditions as outlined below. Other non-respondents were excluded from the experiment due to cost constraints. One half of the sample received a postcard follow-up while the other half received a letter with a questionnaire included. The postcard and letter were worded identically. In addition, the follow-ups were mailed at two week and four week intervals after the initial survey.

	Postcard	Letter with Questionnaire
2 Week Mailing	35	35
4 Week Mailing	35	35

Following Heberlein and Baumgartner (1981), responses received on the second day after the follow-up mailing were considered responses to the follow-up mailing. Results are presented in Table 1.

We chose to compare the letter with questionnaire against a postcard, as opposed to a letter, because if the postcard is as effective as the letter, the cost savings are even greater with the postcard. Moreover, the literature, specifically Sletto (1940) and Watson (1965), appears to be inconclusive as to the incremental effect of the letter over the postcard.

The choice of a four week follow-up may appear unrealistic since researchers almost never wait four weeks to send the initial follow-up. However, the four week interval was chosen for two reasons. First, the intent of this experiment was not to determine when the time variable begins to affect the response decision but rather if the time variable affects the response decision vis-a-vis an enclosure of a second questionnaire. Four weeks was chosen as a reasonable upper bound one may wait. Second, while initial follow-ups are rarely sent four weeks after the initial mailing, subsequent follow-ups often are. If this experiment were to find support for a time effect, it is fair to hypothesize that such an effect is also operative in subsequent follow-ups. However, that possibility is not tested in this experiment.

TABLE 1
RESPONSE COMPARISONS

		N	Responses	Percent	Significance[1]
2 Week Mailing	Postcard	35	11	31.4	A
	Letter/Questionnaire	35	13	37.1	A
4 Week Mailing	Postcard	35	2	5.7	B
	Letter/Questionnaire	35	12	34.3	A

Due to the relatively small sample sizes, the response differential in the two-week mailing is not statistically significant but does tend to support the findings of Heberlein and Baumgartner (1981) that, in a controlled experiment, the inclusion of a questionnaire is marginally beneficial in terms of response. However, the results for the four-week mailing are statistically significant and report a large discrepancy in favor of including a questionnaire. This finding suggests that the Heberlein and Baumgartner finding of "little influence" may be a bit premature in that it is time dependent and not necessarily applicable to all follow-up mailings. Since their results point to 5 studies showing the letter alone to be more beneficial although not significantly so, and 8 studies showing the letter and questionnaire to be more beneficial, two of which were significant, it would be instructive to reanalyze their data with the timing factor added. Postage cost differentials can be directly computed from Table 1 given that the postcard was 13 cents and the letter/questionnaire was 37 cents.

Limitations

There exists a number of limitations to this study. First, the sample size is quite small. Second, although the findings are intuitively appealing, the results presented are those of a single experiment and, until further replicated, should be viewed as suggestive. Finally, no argument can be advanced to support the generalizability of our findings to other survey settings.

Discussion

Our results show that an included questionnaire is slightly more effective in an "early" follow-up but significantly more effective in a "late" follow-up. While the practical significance of these findings is straight-forward, they do raise several theoretical points which are less obvious but noteworthy.

First, we do not mean to suggest that as time passes from the initial survey mailing that the importance factor as a motivational mechanism (Heberlein and Baumgartner, 1978) decreases in relevance and that the respondent cost factor increases in importance. Heberlein and Baumgartner (1981, p. 107) state: "the importance factor, that is the follow-up without the questionnaire, accounts for about 90 percent of the effectiveness of the follow-up, and that the reduction in respondent cost factor accounts for about 10 percent as responses increased by 3 out of a total of 30 percent when a new questionnaire was included." Heberlein and Baumgartner are ostensibly correct, from a practical standpoint, in assigning 90 percent of the effectiveness to the follow-up and 10 percent to the inclusion of the questionnaire. The results from our two-week mailing parallel those of Heberlein and Baumgartner in that 85 percent of the effectiveness can be assigned to the follow-up; in other words, 31.4 percent of the total 37.1 percent increase in response rate is attributable to the postcard follow-up. Applying their reasoning to the results of our four-week mailing, we would be forced to conclude that only 17 percent of the increased response rate is attributable to the follow-up while questionnaire inclusion accounts for 83 percent of the increased response. It is possible that questionnaire inclusion also increases the perceived importance of the study to the respondent and that the larger improvement gained from including the questionnaire results from both lower perceived respondent cost and increased perceived importance. In addition, the utility of enclosing a questionnaire is enhanced if the previous survey instrument has been lost or discarded, which is more likely at the four-week interval.

A further note on the use of the time variable in our experiment. The difference between the four-week and two-week letter and questionnaire mailing is not significant while the difference between the four-week and two-week postcard mailings is significant (See Table 1). At least in this experiment, the change in effectiveness of the follow-up resulted from a decrease in the effectiveness of the postcard and no change in the effectiveness of an enclosed questionnaire. A series of tests would be required to accurately pinpoint the time at which decreasing postcard effectiveness makes the questionnaire inclusion more cost effective. Also, as suggested above, tests should be conducted to see whether this interaction of time with type of follow-up applies to subsequent follow-ups, which may more realistically be mailed at the four-week time interval.

In summary, the inclusion of a time factor in our experiment leads to a different interpretation than that reported earlier regarding the efficacy of placing a questionnaire in a follow-up mailing. The longer the time lapse from the initial mailing, the greater the advantage of including the questionnaire.

---

1. All A s are significantly different from B but not from each other, $P < .05$, (Snedecor and Cochran, p. 215).

References

Heberlein, Thomas A. and Robert Baumgartner (1978), "Factors Affecting Response Rates to Mailed Questionnaires: A Quantitative Analysis of the Published Literature." American Sociological Review Vol. 43 (August):447-462.

Heberlein, Thomas A. and Robert Baumgartner (1981), "Is a questionnaire necessary in a second mailing?" Public Opinion Quarterly 45:102-08.

Houston, Michael J. and Neil M. Ford (1976), "Broadening the Scope of Methodological Research on Mail Surveys," Journal of Marketing Research Vol. 13 (November) :397-403.

Nichols, Robert C. and Mary Alice Meyer (1966), "Timing Postcard Follow-Ups in Mail Questionnaire Surveys," Public Opinion Quarterly 30: 306-307.

Sletto, Raymond F. (1940), "Pretesting of Questionnaires," American Sociological Review Vol. 5 (April) :193-200.

Snedecor, George W. and William G. Cochran (1967), Statistical Methods, 6 ed., The Iowa State University Press: Ames, Iowa.

Watson, John J. (1965), "Improving the Response Rate in Mail Research," Journal of Advertising Research Vol. 5 (June) :45-50.

SIMULTANEOUS OPTIMIZATION OF QUESTIONNAIRE LENGTH AND SAMPLE SIZE IN MARKETING RESEARCH: A MATRIX SAMPLING APPROACH

Ram Kesavan, University of Detroit
Oswald A.J. Mascarenhas, University of Detroit

Abstract

This paper introduces the Matrix Sampling Approach for optimal research designs in Marketing Research. Specifically, the paper presents models for a simultaneous optimization of both questionnaire designs and corresponding sample sizes for each design, using the matrix sampling methodology. The first model incorporates no overlap, which the second does. Solution procedures for both models are indicated, and simulation results presented to illustrate the use and implications of the models. The models are then applied to a known data base, and empirical findings indicate the timely usefulness of this joint optimization process in data collection procedures.

Introduction

In the last few decades there has been a growing research effort in two major areas of marketing research methodology: questionnaire design research and sampling design research. However, these two research traditions have progressed at tandem, with no interaction between them. Basically, the questionnaire design research effort tries to reduce non-sampling errors by reducing respondent and response biases, while the sampling design research tradition tries to reduce sampling errors by reducing errors resulting from non-randomness and non-representativity. Can both these error-reduction objectives be achieved simultaneously by an interactive combination of these two research traditions? This would imply, among other things, such joint objectives like optimizing questionnaire length while optimizing over the sample of respondents that the questionnaire will be sent to, deriving higher number of responses over items of high variance, while soliciting less number of responses over low variance items given a fixed cost budget. The procedures suggested in this paper are a preliminary effort in this direction. We will first present the theory aspects of this combined approach, and then illustrate this theory with simulation and empirical results.

Seeking consumer information these days is becoming increasingly challenging. In the future marketing research will have to contend with reduced access and hence higher cost structures of such information (Toffler 1985). Given this the task of constructing optimal questionnaire and sampling designs should not only optimize on sample sizes given cost budgets, but also optimize on consumer time and response rates, given their own time budgets. The theory to be presented in the next section will incorporate the two cost functions of company and household budgets. The major theoretic framework used is that of matrix sampling methodology (Shoemaker 1974).

Theory Background and Model Formulation

Assume a typical market research questionnaire has the usual content structure: demographic, socio-graphic and psychographic items. The usual procedure followed is to first determine an optimal questionnaire length, pretest it for its reliability and validity, and then administer it on an optimal sample size, given a fixed cost budget. This procedure implies that the same questionnaire is administered across all the targeted number of respondents. It thereby assumes that all items in the questionnaire are of equal variability, and that they require an equal number of respondent-sizes for their population parameter estimation. Nevertheless, in reality, items of less variance could be observed across less number of targeted respondents, while items of higher variance could be estimated across higher number of responses. Thus the data collection methodology would optimize simultaneously on two factors: questionnaire length and sample size. This combined procedure if properly applied, can vouch for: a) better response rates which reduced questionnaires usually assure, b) better response-quality which shorter questionnaires usually motivate, c) sample sizes with no sacrifice on data quality and representativity, d) but with larger respondent representation across high-variance items. Of course, prior information on item-variance may have to be generated using a small pilot sample of the target population (Cochran 1972).

We assume that one of the major determinants of higher response rates is questionnaire length: the longer the length, lesser would be the response rates and response quality (Kanuk and Berenson 1975; Linsky 1975); and higher response quality is usually associated with a greater degree of effort and thought devoted to the question by the respondent (Houston and Ford 1976). If respondent reactions to m questions are to be studied across n target sample respondents, thus generating a data base of nm observations, then can the same nm observations be so distributed across respondents such that items of lesser variance are estimated across lesser number of respondents, while the items of higher variance would be estimated across larger number of respondents from the same respondent pool? This is the basic approach of matrix sampling methodology which we intend to use in this paper. This implies multiple questionnaire forms, not all respondents receiving the same form. However, all will receive a group of core items such as demographic or other very essential behavioral items, wherein heterogeneity is more pronounced. The non-core items could then be distributed across the targetted respondents such that those items of high variance could be estimated across larger representations of the same population, while those items of lesser variance would be studied across lesser sample sizes.

A Matrix Sampling Model

Let,

n = number of individuals to be surveyed
m = number of questionnaire items whose population parameters are to be estimated from the sample survey
a = number of items from among m that is selected as "core" to be included in all n surveys

C_F = fixed cost of administering the survey per respondent

$r(L)$ = expected response rate for a questionnaire of length L

k = number of different questionnaires to be generated; this is assumed to be a function of the (m-a) "non-core" items in the survey

S_i^2 = estimated variance of the ith item based on initial pilot sampling, (i=1,2,...,m) or based on some other prior information

t = time in minutes taken by respondent to respond to any one item in the survey. For simplicity this is assumed to be the same across the n respondents, and across the m response items

d = monetary compensation (in $s) per minute of respondent response time

td = respondent compensation per item; this can reflect respondent costs

Given that the (m-a) non-core items are equally distributed across the k groups among n targeted respondents, the non-core items will be estimated only across n/k individuals, while the core items would be estimated across all the n individuals. If X_{ij} is the respondent j's response to item i in the survey, and if $\overline{X}_i$ is the mean response value of item i and variance $(\overline{X}_i)$ is the variance of the estimate for item i, then for core items, $\overline{X}_i$ and variance $(\overline{X}_i)$, are estimated based on n observations, whereas for non-core items they would be based on (n/k) items. This assumes a uniform questionnaire length L across each respondent, where

$$L = [a + (m-a)/k] \qquad (1)$$

If some of the non-core items of higher variance need additional coverage beyond n/k respondents, then those items could be overlapped across some of the k groups. The model is extended later to include overlap. For the present we assume only two unknowns : n the sample size, and k the number of groups for the (m-a) non-core items. The optimal estimation of n and k is based on the following nonlinear programming formulation of the problem. The model involves minimizing total variance of estimates of all m parameters subject to a given total survey budget constraint C_o. Thus,

$$\underset{(n,k)}{\text{Minimize}} \; \sum_{i=1}^{a} (\sigma_i^2/n) + \sum_{i=a+1}^{m} (\sigma_i^2/(n/k)) \qquad (2)$$

$$\text{subject to } C_F n + nr(L)\,[a + (m-a)/k]\,td = C_o \qquad (3)$$

$$n,k \geq 0$$

Equations (2) and (3) can be rewritten as follows:

$$\underset{(n,k)}{\text{Minimize}} \; (\alpha + \beta k)/n$$

$$\text{subject to } \omega n + \delta(n/k) = C_o \qquad (4)$$

$$\text{where } \alpha = \sum_{i=1}^{a}(\sigma_i^2) \text{ and } \beta = \sum_{i=a+1}^{m}(\sigma_i^2)$$

$$\omega = (C_F + ar(L)td) \text{ and } \delta = r(L)(m-a)td \qquad (5)$$

We further assume that the response rate r(L) is uniform over a limited range of the questionnaire length L, and hence that r(L)=r, and solve for the optimal values of n, k and λ (the Lagrangian multiplier):

$$k^* = [\alpha\delta/\omega\beta]^{1/2} \qquad (6)$$

$$n^* = C_o/[\omega + \delta/k^*] \qquad (7)$$

$$\lambda^* = [\beta k^2 / \delta n^2] \qquad (8)$$

Simulation Results

Assume m=40, a=10, r=1.00, (i.e.,100%), C_F=$0.75, and a per person per item respondent compensation td=$0.10, Table 1 presents variations in the optimal sizes of k and n for various levels of variances in the core and non-core items. Table 1 suggest that k^* is a function of the ratio of the variances, rather than of the budget C_o, while the optimal sample size n^* clearly emerges as a function of the budget. Thus since k^* is not sensitive to the budget the number of questionnaires to be constructed can be determined independent of (or prior to) the budget determination, but based on the ratio of the variances: α and β. As expected, higher the levels of core variances, higher the k^*, which means higher the number of questionnaires to be generated, given that the response rate r(L) remains constant (which is assumed here to be a constant r= 100% response rate). Higher the non-core variances β, lesser the total sample sizes n^*, since by equation (6) k^* is inversely related to β, and by equation (7) n^* is positively related to k^*.

Table 2 illustrates sensitivity analysis of k^* and n^* to changes in respondent compensation (td) as also to changes in α and β. The budget C_o is fixed at $500, r=1, C_F=0.75 per questionnaire, m=40 and a=10. The optimal number of questionnaires k^* now emerges to be sensitive to respondent compensation td. Since, as per equations in (5), td occurs both in ω and δ, for a given level of α and β, k^* will be determined by the ratio δ/ω, which is clear from equation (6). Which also suggests that if C_F and the number of core items (a) increase, then k^* will decrease, for a fixed level of td. If on the other hand, the number of core items (a) increases, then δ will increase, and from equation (6), k^* will increase, given a fixed α/β ratio. Following the same line of reasoning n^* should be a decreasing function of td. Hence given a fixed budget C_o, any appreciable increase in respondent compensation td would automatically reduce the sample size n^*. As td increases, k^* increases decreasingly, thus indicating convergence of k^*.

Matrix Sampling With Item Overlap

The mathematical formulation of this model is provided under Appendix I. Here we are providing simulation results of k^* and n^* for various levels of overlap. The level of overlap is indicated by the index b which moves from m=40 to a=10. When it is at m=40, then there is no overlap, and the overlap model of Appendix I collapses to the usual model described under equations (2) to (8). When b moves to a=10, there is full overlap, and all the m items reach all the n respondents generating nm item observations. This assumes that the overlap takes place over all k groups. In this simulation exercise, given the overlap model, overlap occurs only over 2 groups. Tables 3 and 4 present the simulation results for different levels of cost budget C_o and for different compensation levels td. Both tables assume a constant variance level of core items: α=30. But the variances of non-core items are changing depending upon which of the non-core items are selected for the overlap, and at what design stage (i.e., at what level of index b).

Let us assume that the 30 non-core item variances are ordered in an increasing sequence, with the lowest among them having a variance of 0.025, and the next one increasing by 0.01 over the previous one. The (strong) ordered sequence would be as follows:

[0.025, 0.035, ..., 0.025 + (b-1)0.01, ..., 0.25 + 29(0.01) = 0.315]

The overlap occurs as follows: b moves by one item at a time, starting from the 30th non-core item (with the maximum item-variance of 0.315), till after 30 iterations all the 30 non-core items get overlaped. The overlap itself is over 2 groups of size n/k. That is the overlapped item is adjusted for 2n/k (which is reflected in equation (i) of Appendix I).

Table 3 assumes m=40, a=10, C_F=\$0.75, r=1.00, and td=\$0.10. The research budget C_O varies from \$300 to \$500 to \$700. The various optimal values of k^* and n^* for each level of overlap are then presented. It is easily seen from Table 3 that n^* emerges as a function only of C_O and not of the overlap design; the recorded variations in n^* are very small and seem to be independent of the level of overlap. Where there is no overlap at all, i.e., b = 40 = m, then k^* = 3.18 and n^* = 111, at C_O = \$300. This indicates only 3 questionnaire forms: each consisting of the 10 core items, and 10 non-core items, administered across 111/3 = 37 individuals each time. At this zero overlap stage α = 30 and β = [0.025 + 0.035 + 0.315] = 5.10, at which level, using the non-overlap model solutions (equations (6) and (7)) we have k^* = 3.117, and n^* = 111.329, which is also found in Table 3. This confirms the consistency between the non-overlap and overlap models. Note also, that when maximum overlap occurs, that is b = 10, then the optimal number of groups k^* is 6.35, which implies the shortest questionnaire form possible. Also observe that k^* is independent of the budget size. This also follows from our earlier assumption of r(L) = 100%; i.e., r = 1.00. Given 100% response rate, and this across all questionnaire lengths, k^* becomes invariant across various levels of C_O.

Table 4 provides a budget constrained (C_O = \$500) situation, within variations in respondent compensation td. The optimal values of n and k as functions of different td levels are presented, under the same parameters as in Table 3. When C_O is fixed for a given td level, n^* seems to be once again independent of the design. The value of k^* however increases with the increased overlap; i.e., the length of the questionnaire decreases. Note that both n^* and k^* vary with td: the former varies inversely, while the latter directly. The total design framework suggested by Table 4 has marketing research strategy implications, which are beyond the immediate scope of this paper.

An Empirical Illustration

A Syndicated Research Company gathered data on a pretested questionnaire of 40 behavioral items, some 8 demographic items, that dealt on "charity giving" among metro household consumers. The data was collected from a random sample frame of 500 metro households. A total of 161 responses were received, implying a response rate of 32.2%. The responses to both core and non-core items were equal interval scaled, ranging from 1 to 7: the larger number indicating a higher attitude (positive) toward charity giving.

A small pilot sample (25%) was derived from this data base: that is, responses across all items from among 40 randomly chosen respondents were first studied and their usual statistics noted. Of particular interest for this model are the core and non-core variances (α and β) that are incorporated in the objective function (equations (2), (4) or (i)). The non-core variances (β) are ordered next. The sequence of design-overlap is over those items which have the next highest variance, and so on, untill all the non-core items are overlapped exactly once; i.e., all the non-core items are covered exactly over 2n/k respondents, k being the number of groups the non-core items is being broken into.

The pilot sample yielded an α = 21.345, β = 6.731, and we estimated the other data base parameters as follows: C_O = \$500; C_F = \$0.50; td = 0.20, and since the response rate r was associated with items, we assumed it to be equal to 1.0. Then with m = 40, and a = 10, and applying these values on the non-overlap model we obtained the optimal values of k^* = 2.76 and n^* = 106.98. Which suggest that the same population estimates of items could have been obtained with smaller sample sizes, used more effectively by proper overlap.

This further suggested that using k^* = 3 (which is close to 2.76 as obtained from the model) we could experiment with various questionnaire-sampling designs: varying both the questionnaire length using proper overlaps, as also utilize different sample sizes and using the suggested data base, rederive the sample estimates of the population parameters, and then test for goodness-of-fit between the sample estimates of all the items (core and non-core included) with their corresponding population estimates. We use the following goodness-of-fit measures:

$$\text{MD} = \text{mean deviation} = (1/161) \sum_i \sum_{j=1}^{161} (X_{ij} - P_{ij}) \quad (9)$$

$$\text{AD} = \text{mean absolute deviation} = (1/161) \sum_i \left| \sum_{j=1}^{161} (X_{ij} - P_{ij}) \right| \quad (10)$$

$$\text{PAD} = \text{mean percentage absolute deviation} = (1/161) \sum_i \left\{ \sum_{j=1}^{161} \frac{|(X_{ij} - P_{ij})|}{X_{ij}} \right\} \quad (11)$$

$$\text{Theil's U Coefficient} = \sum_i \frac{\left\{ \sum_{j=1}^{161} (X_{ij} - P_{ij})^2 \right\}}{\left[\sum_{j=1}^{161} (X_{ij})^2 \right]^{\frac{1}{2}} + \left[\sum_{j=1}^{161} (P_{ij})^2 \right]^{\frac{1}{2}}} \quad (12)$$

The summation over i in each of the above goodness-of-fit measures depends upon how many items are included in the fit with each design overlap. Table 5 presents the goodness-of-fit results for various designs. With k^*=3 and m = 40, and a = 10 the non-core items were 30, and hence, each group had just 10 items of core and 10 non-core items to begin with, with all the 30 non-core items covered by a given sample size. For illustration purposes we started with a very low sample size of 10 and used this sample across 6 questionnaire forms, each containing 20, 22, 24, 26, 28 and 30 items, the overlap increasing by 2 items each time, those items being overlapped which had the next highest variance at each design stage. MD was -2.12, AD was 6.38, PAD was 7.30 and U was 3.75 for sample size 10 and questionnaire design size 20. Note that all the four goodness-of-fit measures decrease in value as the overlap increases; however, they decrease non-uniformly, U being fairly stable throughout. Note also that U which is bounded between 0 and 1 is not so in our case, as it is a sum of the U's over i items (see equation (12)).

The other design overlaps with various sample sizes from 15 to 50, with an increment of 5 random respondents each time, are presented in Table 5 with their corresponding four goodness-of-fit measures. In general MD behaves non-uniformly, while the other 3 measures decrease monotonically as overlap increases within a given sample size. AD, PAD and U decrease also as the sample size increases; however, AD and PAD reach a minimum when the sample size is between 35 and 40, and when the design size is 30. Which implies that much of the information contained in the above 161 respondent/40 questionnaire-item data base could have been obtained with about 40 target respondents with an average questionnaire length of 10 core items and 20 non-core items.

Conclusions and Further Research

This paper introduces the well established matrix sampling methodology to marketing research. The procedures help the researcher to simultaneously optimize over questionnaire designs and sampling designs. The model can particularly incorporate respondent time-talent cost functions (estimated here as just respondent compensation td), thus putting a premium on respondent time and cooperation. The paper argues that several short surveys may be better than one long one administered across all the targeted respondents.

Future research on this topic may focus on one or more of the following issues:

(i) The questionnaire length (m) and the core-length (a) can be treated as decision variables (or model parameters).

(ii) Establish the validity of the model when the questionnaire items may include categorically scaled nominal or ordinal items.

(iii) Since item variances and item response utilities are unrelated, the model must be extended to incorporate differential weights across items based on their respective response utilities.

(iv) The model proposed in here assumes that the researcher is interested in efficiently estimating population means; one could consider the problem of estimating other univariate/bivariate population parameters as well.

(v) The response rate can be assumed to be a known function of questionnaire length and be allowed to vary with the length of the survey.

TABLE 1
SENSITIVITY ANALYSIS OF k^* AND n^* TO CHANGES IN BUDGET (C_O) AND TO VARIANCES OF CORE (α) AND NON-CORE (β) ITEMS, GIVEN FIXED RESPONDENT COMPENSATION PER ITEM td = \$0.10

α	Cost Budget	$\beta = 4$		$\beta = 7$		$\beta = 10$	
		k^*	n^*	k^*	n^*	k^*	n^*
20	C_o = \$300	2.928	108.12	2.213	96.60	1.852	89.02
	C_o = \$500	2.928	180.20	2.213	161.00	1.852	148.36
	C_o = \$700	2.928	252.28	2.213	225.40	1.852	207.70
30	C_o = \$300	3.586	115.98	2.711	105.01	2.268	97.63
	C_o = \$500	3.586	193.30	2.711	175.02	2.268	162.71
	C_o = \$700	3.586	270.62	2.711	245.03	2.268	222.70
40	C_o = \$300	4.140	121.23	3.129	110.76	2.619	103.60
	C_o = \$500	4.140	202.06	3.129	184.60	2.619	172.67
	C_o = \$700	4.140	282.88	3.129	258.44	2.619	241.74

TABLE 2
SENSITIVITY ANALYSIS OF k^* AND n^* TO CHANGES IN RESPONDENT COMPENSATION (td) AND IN VARIANCES OF CORE (α) AND NON-CORE (β) ITEMS, GIVEN A FIXED BUDGET OF C_O = \$500

α	Compensation	$\beta = 4$		$\beta = 7$		$\beta = 10$	
		k^*	n^*	k^*	n^*	k^*	n^*
20	td = \$ 0.05	2.450	268.47	1.852	242.71	1.547	225.40
	td = \$ 0.10	2.928	180.20	2.203	161.00	1.852	148.34
	td = \$ 0.15	3.162	136.13	2.370	120.99	2.000	111.11
30	td = \$ 0.05	3.000	285.71	2.268	261.58	1.897	245.03
	td = \$ 0.10	3.586	193.30	2.711	175.02	2.268	162.71
	td = \$ 0.15	3.873	146.55	2.928	132.03	2.450	122.34
40	td = \$ 0.05	3.464	297.09	2.619	274.30	2.191	258.44
	td = \$ 0.10	4.140	202.06	3.130	184.60	2.619	172.67
	td = \$ 0.15	4.472	153.55	3.381	139.62	2.828	130.17

TABLE 3
OVERLAP DESIGN SIMULATION RESULTS WITH COST/BUDGET VARIATIONS

	Cost Budget C_o = 300		Cost Budget C_o = 500		Cost Budget C_o = 700	
b	k^*	n^*	k^*	n^*	k^*	n^*
40	3.18	111.33	3.18	185.55	3.18	259.77
35	3.71	111.37	3.71	185.61	3.71	259.86
30	4.28	111.71	4.28	186.19	4.28	260.67
25	4.86	112.13	4.86	186.89	4.86	261.64
20	5.44	112.37	5.44	187.29	5.44	262.20
15	5.95	112.18	5.95	186.97	5.95	261.76
10	6.35	111.33	6.35	185.55	6.35	259.77

TABLE 4

OVERLAP DESIGN SIMULATION RESULTS WITH RESPONDENT COMPENSATION VARIATIONS

	Respondent Compensation t_d					
	0.05		0.10		0.15	
b	k*	n*	k*	n*	k*	n*
40	2.66	275.55	3.18	185.55	3.58	113.00
35	3.10	275.63	3.71	185.61	4.18	113.04
30	3.58	276.39	4.28	186.19	4.82	113.42
25	4.07	277.31	4.86	186.89	5.49	113.88
20	4.55	277.84	5.44	187.29	6.13	114.14
15	4.98	277.42	5.95	186.97	6.71	113.93
10	5.31	275.55	6.35	185.55	7.16	113.00

TABLE 5

AN EMPIRICAL ILLUSTRATION OF THE MATRIX SAMPLING MODELS

		QUESTIONNAIRE LENGTH					
SAMPLE SIZE	STAT	20	22	24	26	28	30
10	MD	-2.12	-2.04	-1.65	-0.93	-1.24	-1.22
	AD	6.38	5.95	5.40	4.90	4.39	4.03
	PAD	7.30	7.23	7.17	7.09	7.06	7.04
	U	3.75	3.74	3.72	3.72	3.70	3.69
15	MD	-0.79	-0.94	-1.31	-1.26	-0.87	-0.52
	AD	4.60	4.21	3.54	3.59	3.29	3.31
	PAD	6.74	6.74	6.71	6.70	6.64	6.66
	U	3.65	3.64	3.60	3.60	3.60	3.61
20	MD	-0.94	-0.86	-1.06	-0.77	-0.76	-0.47
	AD	4.27	4.10	3.71	3.28	3.15	2.87
	PAD	6.65	6.63	6.62	6.54	6.50	6.47
	U	3.58	3.58	3.56	3.56	3.55	3.55
25	MD	-0.75	-0.75	-0.85	-0.92	-0.81	-0.67
	AD	3.80	3.69	3.62	2.87	2.61	2.51
	PAD	6.4	6.37	6.39	6.32	6.30	6.31
	U	3.53	3.53	3.53	3.50	3.50	3.50
30	MD	-0.15	-0.24	-0.24	-0.29	-0.22	-0.14
	AD	2.83	2.70	2.68	2.29	2.19	2.16
	PAD	5.97	5.98	5.98	5.93	5.95	5.94
	U	3.44	3.44	3.44	3.43	3.43	3.43
35	MD	-0.19	-0.24	-0.16	-0.07	-0.02	-0.02
	AD	2.09	1.99	1.88	1.76	1.77	1.76
	PAD	5.68	5.69	5.68	5.64	5.64	5.65
	U	3.33	3.33	3.33	3.33	3.33	3.33
40	MD	-0.03	-0.03	-0.09	-0.02	0.03	-0.00
	AD	2.57	2.47	2.28	2.16	2.03	1.91
	PAD	5.51	5.51	5.49	5.46	5.46	5.47
	U	3.29	3.30	3.30	3.29	3.39	3.28
45	MD	0.12	0.04	0.11	-0.02	0.06	0.01
	AD	2.75	2.57	2.43	2.15	2.02	1.93
	PAD	5.14	5.13	5.12	5.10	5.11	5.12
	U	3.18	3.18	3.18	3.17	3.17	3.17
50	MD	0.52	0.54	0.64	0.40	0.46	0.38
	AD	2.89	2.81	2.62	2.39	2.22	2.13
	PAD	4.89	4.89	4.87	4.87	4.87	4.87
	U	3.14	3.14	3.13	3.12	3.12	3.11

APPENDIX I

MATRIX SAMPLING MODEL WITH OVERLAP

The minimization problem of equations (2) to (5) can be easily extended to include the overlap in non-core questionnaire items. Retaining the same items, with a as core items therein, let us subdivide the remaining set of (m-a) non-core items into a non-overlap set of (b-a) items, and the corresponding overlap set of (m-b) items, $a < b \leq m$. Then the minimization problem is reduced to:

$$\underset{(n,k)}{\text{Minimize}} \; [\alpha + (\beta' + \varepsilon'/2)k]/n \tag{i}$$

$$\text{subject tl } [\omega n + \delta'(n/k)] = C_o; \; n, k > 0 \tag{ii}$$

$$\text{where} \quad \alpha = \sum_{i=1}^{a} \sigma_i^2 \quad \beta' = \sum_{i=a+1}^{b} \sigma_i^2 \quad \varepsilon' = \sum_{i=b+1}^{m} \sigma_i^2$$

$$\omega = C_F + a + td \text{ and } \delta' = (b-a)td + (m-b)2td \tag{iii}$$

$$a \leq b \leq m$$

The usual Lagrangian procedures yield the optimal solution to the overlap design as follows:

$$k^* = [\alpha\, \delta'/(\beta' + \varepsilon'/2)\omega]^{\frac{1}{2}} \tag{iv}$$

$$n^* = [C_o \; / \; (\omega + \delta'/k^*)] \tag{v}$$

The simulation results presented in Tables 3 and 4 follow this model.

REFERENCES

Cochran, W.G. (1972), Sampling Techniques, New York: John Wiley & Sons.

Houston, Michael J. and Neil H. Ford (1976), "Broadening the Scope of Methodological Research on Mail Surveys," Journal of Marketing Research, 13 (November), 397-403.

Kanuk, Leslie and Conrad Berenson (1975), "Mail Surveys and Response Rates: A Literature Review," Journal of Marketing Research, 12 (November), 440-453.

Linsky, Arnold S. (1975), "Stimulating Responses to Mailed Questionnaires: A Review," Public Opinion Quarterly, 39 (Spring), 82-101.

Sheatsley, Paul B. (1969), "The Harassed Respondent: II. Interviewing Practices," in Current Controversies in Marketing Research, Leo Bogart, ed. Chicago: Markham Publishing Company.

Shoemaker, David, M. (1973), Principles and Procedures of Multiple Matrix Sampling, Cambridge, MA: Ballinger Publishing Company.

Toffler, Alvin (1985), "Toffler on Marketing," Marketing News, 19 (March 15, 1, 30-31.

ISSUES WITH COMPUTER AIDED INTERVIEWING SYSTEMS

James D. Larson, Montana State University
Richard L. Schwaller, Montana State University

Abstract

This paper examines the emerging techniques associated with computer aided interviewing. The methodology is viewed as a management information system, and experienced based guide lines are offered for the design of the research project which will utilize CAI. Characteristics of good software are presented with the hope that this will aid in software selection and development. CAI has received limited methodological research in the marketing literature, so several issues are presented in the hope that such research will be stimulated.

Introduction

Computers have been used as an aid to telephone surveys for a number of years (Tyebjee 1979) and recently have seen many applications in "intercept" surveys (O'Brien and Dugdale 1978) in supermarkets and malls. The basic concept is straightforward. The computer poses the question, accepts the response, performs range checks and/or other operations, and moves to the next question. The computerization of the survey provides several key benefits (Churchill 1983; Tyebjee 1979).

1. The range checks guarantee that all responses are "acceptable."

2. Since the program provides complete control over the sequence of questions, complex skipping and order control are possible.

3. Personalization can easily be accomplished by forward control of information to enhance rapport with respondents.

4. The questionnaire can be "customized" to the interests, attitudes and behavior of the respondent by conditioning questions upon the response to previous questions.

5. The process allows "immediate" or even in-process analysis because data entry and coding are incorporated into the interviewing process. Sequential sampling can easily be incorporated, possibly allowing for smaller, less costly, samples.

6. Administrative control is facilitated by the use of the computer to collect "accounting" data to monitor the status of interviewing process and to monitor the interviewers.

These advantages have led to a great increase in the use of computerization. The advantages are not, however, automatic. It has been the authors' experience that these benefits are available only after careful planning and design of a complete interviewing system, and that even then computerization will lead to several problems. It is the purpose of this paper to highlight that many potential problems are associated with computer aided interviewing. At times we suggest methods which might be useful to avoid the problems, but these are based on experience. In general, even when not made explicit, the issues raised should be thought of as a call for research. Many aspects of research methodology have been subjected to a great deal of research. Mail surveys, for example, have been examined from many viewpoints (Dickinson 1982), and Albaum and Peterson (1985) have proposed a paradigm to guide future research. Computer aided interviewing is an exception: the literature search revealed very few methodological studies and no empirical studies.

Before proceeding with the discussion of these issues raised by computerization, several terms need to be clarified. The computer "program" which presents the questions is normally prepared using a software package that serves as the "language" by which the computerized survey instrument is written. The software facilitates the design and writing of the computerized questionnaire by handling many housekeeping details such as screen control, coding of questions, range checks, question sequence, etc. Many such software packages exist; the Marketing News Software directory section in the last two years has listed at least 10 companies offering packages. The user may also have developed their own set of subroutines to accomplish these tasks. The software is critical to the computerization task, since it facilitates the writing of a good program, but the best software does not guarantee success because it is simply a tool which must be used with skill. The program, at a minimum, must present the question and instructions to the interviewer, accept the response, perform range checks if needed, store the coded reponse, and move to the next question. In addition to these basic functions, there should be a computer facility to A) enter and edit the questionnaire, B) perform administrative tasks such as monitoring the phone numbers called, counting the number of completed interviews, etc., C) edit the database, and D) perform the data analysis. While many of the commercial software packages integrate these functions, they may also be handled by separate programs. Analysis, for example, may be done either on an integrated statistical package, or the data may be passed to an external program such as SAS.

The term "interviewing system" will be used to denote the entire working system - the computer program being operated by interviewers who are communicating with respondents, the administration and supervision of the interviewing process, the analysis aspects, and the development of the computer "program" that presents the questions and records the responses. When the demands of the research task are few, the nature of the interviewing system is not critical, and the computerized version differs little from administering the phone survey with a standard paper and pencil instrument. In more complex situations, however, computerization establishes a dynamic system which induces many unique opportunities and problems. A complex questionnaire, for example, with sequence randomization, personalization, or customization implies that there is no perfect "hard copy" to review, that each respondent receives a slightly different questionnaire, and that the interviewers never know what question is coming up next. In these more complex situations, the entire system must be carefully planned if major problems are to be avoided.

Questionnaire Development

The questionnaire is designed for the research problem, and it is imperative that computerization does not compromise this. The program must be designed to accommodate the questionnaire - not the questionnaire designed to accommodate programing. The interference may come from the high cost of refining a software package to meet the needs of the questionnaire, from prematurely building the questionnaire into the structure of the program, making subsequent modification difficult, or from software that is inadequate for the task at hand.

While in principle the programing could wait until the questionnaire is fully developed and pretested, except in the simplest situations programing and questionnaire development are highly interactive. This may be done in an effort to save lead time, since at least some portions seem firm. But the dynamic interactions induced by the advanced features force simultaneous development of program and "questionnaire," because the computerized version differs greatly from the hard copy representation. This requires budgeting the time and expense of fully testing the program, including production "shakedown." While this advice may sound trivial, the time slot is not part of the "normal" research process and comes at a time when everybody associated with the research program is very anxious to get started.

If the questionnaire is to be developed simultaneous with programing the editing features of the software system must be of very high caliber. One must be able to add, delete, modify, move, and restructure questions easily. Hard copy versions must not be "separate" from the computer version - that is a facility should exist which will output, in readable form, a hard copy version for review. But the reviewers - all those who must verify the acceptability of the final instrument - must be cognizant of the dynamic differences induced by computerization. The "hard copy" versions, which are taken to the review meetings are, in some cases, very poor representations of the true instrument.

Just as the questionnaire author must be aware or whether administration will be by phone or mail, if the survey is to fully utilize the benefits of computerization, the questionnaire must be written with features such as personalization and carry forward information in mind. In particular programing should not be divorced from questionnaire development. Programing should commence early, prior to refinement, focusing on several structural features.

Sequence rotation or randomization, customization by carry-forward of information to be incorporated into subsequent questions, and personalization all require careful development during programing. Programing should be done early so that the effects of these features can be seen, instead of imagined, by all reviewers. Pre-testing these special effects is especially critical. As a simple example of the problems that are difficult to anticipate without through review conducted with the dynamic computer version, consider the use of a random sequencing of attitude items. Are there some sequences that set a bad context? Or particularly apt to induce other biases? How often and with what questions will the instructions be read to the respondent? Even more complex situations arise when you are incorporating the response to one question into another. Will <u>every</u> acceptable response fit grammatically into the subsequent question?

Methodological Issues

Several of the "advanced" features of computerizing the questionnaire are done with the intent of increasing the involvement of the subject, and the hope that this will lead to more accurate responses. Personalization may be used to carry the respondent's name into several places in the questionnaire. But all who have received "personalized" form letters will recognize that this can be over done, and the effect is alienation, not involvement. Does the repeated use of ones name really increase involvement? If so, how many times should it be repeated? What if, as can easily happen, the formal name is not the same as the persons call name? Mr. Richard Nelson may sound strange to Dick Nelson. Should first names be used or last names or both?

Carrying the response to one question into another has the effect of making the experience of each respondent unique. For example on a recent survey we carried the favorite vacation activities into the rating section of the questionnaire. People who liked to ski where then asked to rate Montana as a place to ski, while those who didn't ski where not asked this later question, but to rate Montana as a place to do an activity they where interested in. This procedure has the advantage of obtaining ratings on a very large number of attributes, and of obtaining ratings only from respondents where familiar with the activity. But what effect did this procedure have on the attitude? Some where reminded of characteristics such as skiing which compliment Montana, others where reminded of characteristics which work against Montana. In addition some of the questions where asked of only a few respondents, so the reliability of response varies considerably between questions. Skips can easily be made very complex, and also have the effect of making the interview different between respondents, and perhaps inducing sparse data. What does this do to the quality of the response?

Interviewers

The program must be responsive to several "human" needs. The standard "hard copy" interview form has many features which are easily overlooked when developing a computerized version. The hard copy is easy to read, and causes no eyestrain. Coding is easily done by simply checking a box, and is easily corrected by the interviewer if desired. The pace of the interview is not dictated by the form. Interviewers can read ahead and anticipate the next question. Perhaps most importantly they are able to use human intelligence to solve specific problems which arise during the interviewing process, and pencil their solution in the margin while continuing with the interview. Developing a "user friendly" program that even matches these features is one of the major challenges facing program developers and software designers.

The screen must be designed for a minimum of eyestrain. Scrolling definitely leads to a dizzying effect and should be avoided. "Attention devices" (blinking displays, highlighted areas, etc.) are very useful, but should be used with restraint. Material to be read to the respondent should be clearly separated from instructions to the interviewer. One method to this end is to always position the question at the top of the screen, and to make it a distinct color (e.g. Bolded).

Interviewers should not be expected to respond to error messages generated by the programing language. Usually such messages are in computer jargon which will only confuse the interviewer. When selecting software one should verify that all errors that can be made are handled in a "user friendly" way. Out of range responses must be noticeable (bell rings, perhaps) and easily corrected. What happens when a character is entered for questions anticipating an integer? Errors that stop the program during the interview are especially onerous and frustrating. Every precaution should be taken during programing to avoid them, and software prone to such occurrences is completely unacceptable.

The computer is waiting for a legal response to the question and will not proceed without such a response. This structure provides a major benefit of computerization because of the guarantee of a legal response to every question in the exact sequence dictated by the program design. This "benefit" can easily lead to problems since potentially responsive answers can stop the program if they are not included in the legal range, and errors which are "legal" are difficult to change because they are so quickly "gone.

In spite of all precautions, changes will be required which cannot be made during the interview. Supervisors must be provided with a method of database query and modification. The supervisors must be careful to perform these changes in a "non-threatening" way, or the interviewers will not report their errors.

Many interviewers are poor typists, furthermore, even for an expert typist the response entry time on a computer is apt to be considerably longer than on hard copy. Without careful program design and high quality software this situation will lead to embarrassing pauses during the interview, excuses by the interviewer to the respondent, and mis-entry of data. Several design steps can be taken to speed data entry and reduce pauses. Most modern programming languages will allow the input of a single character to be accepted automatically without a carriage return or other end of line marker. A "mouse" to move the cursor to the proper place to "check" may be advantageous, yet in many cases the entry of a simple code will be faster. Simple codes should be entered whenever possible, and the coding scheme should be available on the screen (e.g., Never = 1,..., Often = 5). The codes should be standardized so that "No" is always 1 regardless of its position in the questionnaire. Frequent responses to open ended questions should be coded, either by number or simple abbreviations. Spelling errors will inhibit content analysis, but it is best not to correct them during the interview because it will take too much time. They can be reviewed and corrected by the interviewer or supervisor after completion of the interview. A review by the supervisor may also spot patterns which can be incorporated into the program to simplify response entry and subsequent analysis.

A simple training routine is both easily written and valuable. For example, most questionnaires have large blocks of questions with the same code. The computer can present a response and receive the code, check the time required and accuracy, and randomly select another response to be coded. Such a training routine will give the interviewers confidence and reduce the possibility of the bothersome "legal" entry errors which would otherwise pass range checks.

Methodological Issues

In principle CAI should minimize the occurrence of errors during the entry and coding of the reponse. The ability to have range checks and automatic skipping are examples of features designed to this end. This section, on the other hand has argued that the process opens avenues to errors which are not encountered during the more traditional "hard copy" interview, such as the possibility of new interviewer biases due to delay and frustration. Furthermore the range checks, by forcing acceptable responses, serve as a mask to uncovering sloppy interview practice. The question of whether CAI results in fewer, or different, errors is an empirical one which calls for careful study. Simple experiments could be embedded within the data collection process which would clarify many of these issues. Several of the suggestions made, for example, call for different programing styles which could be empirically compared. Others press on software, and should be studied and addressed by software vendors and designers.

In Process Analysis

Some of the major advantages of survey computerization reside in the fact that the database is immediately available and can be used during the survey process to A) monitor the process and interviewers, B) spot problems early to allow corrective action, and C) decrease the cost of the survey by the use of sequential sampling.

Administrative Control

A great deal of data useful for research administration can easily and unobtrusively be collected during the interview process. Administration of the interview process entails a fair amount of record keeping - the number of calls attempted, qualified and completed, various quotas, etc. The collection of this information should be easily programmed, and the ease with which such functions are accomplished should be a major factor during software selection. The main concern is that the administrative information needed for the project be carefully detailed and examined so that it can be incorporated into the program.

The program should handle terminations at any point in the interview and the ability to restart an interview if a respondent asks to be called back to complete the interview at a more convenient time. With simple interviews this is easy, but it takes good software to know where to start if broken in the middle of a random sequence, with the proper information recorded for customization or personalization.

Monitoring of interviewers

While not obsoleting the need for direct monitoring of interview performance, the computerization of the interview affords the opportunity for a powerful "big brother" which is of major assistance in standardizing the survey across interviewers and locating interviewer errors. Various aspects of the interview can be timed - total completion time, time to complete certain blocks, and/or key questions, for example. Large deviations from average suggest the interviewer is skipping questions or changing the wording.

Counting errors, such as the number of out of range entries, number of corrections, etc., will help spot careless data entry. Remember, however, that a very small number of errors may also imply problems since the interviewer could simply be keying "legal" answers. Data analysis, broken by interviewer, may quickly spot various interview biases.

Problem Recognition

Preliminary analysis may point to problems with the design of the the questionnaire or program. While this is not to suggest that the normal pre-test should not be the main technique of debugging the survey design, some problems will only show up with a sample size that is larger than normally used in a pre-test. An "other" response, for example may be occurring too often, and the reoccurring response added to the standard categories. A group of interest may occur less frequently than anticipated, so action should be taken to correct the situation - stratification perhaps, or additional screening questions could be added. Such post hoc changes to the survey design must, of course, be done with care, but certainly the problems uncovered are better faced early than after many interviews have been conducted.

Sequential Sampling

The use of in-process analysis greatly facilitates the use of sequential sampling plans. Essentially sequential sampling involves the analysis of the data as it accumulates, rather than waiting until the a-priori sample has been collected, and using the unfolding result to decide when sufficient evidence has been collected to reach a meaningful statistical inference. The technique can lead to significant cost savings, since meaningful results might be obtained with much smaller samples than would be needed than with conventional sampling plans. This flexibility can be viewed as a major benefit of computer aided interviewing. However, a change in the sampling plan is essentially a change in the design of the experiment and may lead to incorrect conclusions unless proper procedures are followed.

Consider a survey conducted in order to determine whether or not the proportion of customers having preference for a certain brand of a product is greater than 70%. In designing the survey it was determined that if, in a random sample of 57 customers, 80% or more preferred the brand in question, the conclusion would be that more than 70% of the customers in the entire population would prefer that brand. The probability of a Type I error is .05.

Now suppose that the interviewer calculated the sample proportion from 57 observations and found that it was slightly less than 80% and therefore, decided to continue sampling in the hope that the sample proportion would increase as additional observations were obtained. This changes the design of the experiment and the probability of obtaining the threshold value of 80% increases. That is, the likelihood of obtaining a sample proportion of 80% or more from a sample of 57 is less than the likelihood of obtaining this proportion from a sample of 57 <u>or</u> a larger sample if it is not obtained from 57 observations. What this does, essentially, is inflate the level of significance (Type I error probability) to a value larger than .05.

While less obvious than in the above example, preliminary checks to see if a parameter is "significantly" above a threshold value, within some range, or that some level of reliability has been reached will always lead to inflated estimations of the type I error, since the implication is that if significance is not reached, sampling will continue. The contingent nature of such action always implies the union of two (or more) sampling plans, and the probability of the union of the two events can only be greater than either standing alone.

If the benefits of sequential sampling are to be realized without inducing biases, the sampling plan must be designed with the contingencies in mind. Many such designs exist. Anderton, Gorton and Tudor (1980) have presented interesting data illustrating one correct approach to sequential analysis in market research. The statistical theory is presented in standard statistical texts (Hogg and Craig 1978, pp 374-380; Lindgren 1976, pp 310-324).

Methodological Issues

In-process analysis can lead to many benefits, but the use of this tool is not traditional in marketing research. The traditional approach calls for a-priori establishment of the research design: the training or changing of interviewers or the questionnaire based on partial results, and sequential sampling all raise profound methodological questions which have not been fully addressed in the marketing literature. Research should start by describing the current practice of those engaged in CAI, and critically examining these practices for good and bad features, and then developing improved procedures which recognize the possibilities inherent with the tools now in use.

Summary

After consideration of the information needs and facilities required, it is evident the computerizing the survey is much more than the simple output of questions and input of response, but an Management Information System. The program structure must, therefore, be thoroughly thought out so that both the immediate survey needs are satisfied and so that the interview system is as general as possible so that future projects can be implemented with ease. There are many ways that the goals outlined in this paper can be programmed, but there are several general considerations which will aid in selecting software and program design.

Successful questionnaire programing requires software which allows, and hopefully facilitates, the diverse features needed for interactive use, such as screen control, random sequencing, branching and skipping, carry forward of information for personalization and question customization, error control, questionnaire editing, and database editing. The available software varies in the ability to accomplish these goals. Major differences exist in how the tasks are accomplished and the ease with which the programing is accomplished. Ease of programing is important, since difficulty here will lead to many problems, but this must be balanced against the overriding goal of the ability to produce a computerized survey which is user friendly and will lead to good sound data. Since the selection of software is a decision which interacts with the hardware and often requires a commitment over a long time period, it is a very important decision. When making the decision one must consider future needs since many of the "advanced" features require experience with the equipment before their opportunities, and problems, can be fully appreciated. It is hoped that that this paper, by pointing to the characteristics of a good software system, will aid in the selection process. It is also hoped that open discussion of desirable features will lead to the development of improved software.

The need for methodological research has also been stressed. CAI raises questions which are either new, or of a different magnitude, than those found in traditional methodology. These issues should be addressed promptly since the technique is being widely used and new applications are constantly being found. The dynamics of customization, a different set of interviewer biases, contingent research design changes all certainly call for methodological research. But the technology is so new that these issues should only be considered the starting set, for once these questions come under the scrutiny of research it is likely that many more will surface.

References

Albaum, Gerald and Robert A. Peterson (1985) "A Paradigm for Methodological Research on Mail Survey Response," 1985 AMA Educators' Proceedings, 51, 363-368.

Anderton, E. J., K. Gorton, and R. Tudor (1980), The Application of Sequential Analysis in Marketing Research," Journal of Marketing Research, 17 (Feb) 97-105.

Churchill, Gilbert A., Jr. (1983), Marketing Research: Methodological Foundations, Chicago: The Dryden Press.

Dickinson, John R. (1982), The Bibliography of Marketing Research Methods, Windsor, Canada: R.O.I. Maximization, Inc.

Hogg, Robert V. and Craig, Allen T. (1978), Introduction to Mathematical Statistics, MacMillan Company, Forth Edition.

Lindgren, Bernard W. (1976), Statistical Theory, MacMillan Company, Third Edition.

O'Brien, T. and V. Dugdale (1978), "Questionnaire Administration by Computer," Journal of the Market Research Society, 20 (Oct.) 228-237.

Tyebjee, Tyzoon T. (1979), "Telephone Survey Methods: the State of the Art," Journal of Marketing, 43 (Summer) 68-78.

AN APPLICATION OF THE ANALYTICAL HIERARCHY PROCESS FOR A CONSUMER CHOICE PROBLEM

Nick Bahmani, Montclair State College
Rajshekhar G. Javalgi, Marquette University
H. Blumburg, Montclair State College

Abstract

Various approaches such as conjoint analysis, logit, probit, and elimination-by-aspect models have been employed to solve marketing problems that involve the selection of an alternative. The present paper uses the Analytical Hierarchy Process (AHP) developed by Saaty (1980). The major distinction of this approach is that it structures any complex, multicriterion problem hierarchically. The model employs pairwise comparisons using the subjective scale developed by Saaty. The pairwise c-mparisons are done in terms of which one element dominates another. These judgments are then expressed as integers. This approach is illustrated in an application to the prediction of consumer choice behavior. Guidelines for strategic implications are provided.

The analytic hierarchy modeling and measurement process, developed by Saaty (1980), is one more recent method among various methods used to determine the relative importances of a set of criteria. When a hierarchy is designed to reflect likely choice environment scenarios, objectives, and alternative, product/market options, the AHP process can provide a framework and methodology for marketers to understand the consumer process which involves selection of an alternative. The purpose of this paper is to describe the application of the AHP approach to a marketing problem which involves selection of an airline. The paper focuses on the following areas:

1. A brief description of the analytic hierarchy approach - its conceptual foundation, analytical process, and required inputs.
2. Description of research methodology including data description.
3. Application of AHP to consumer choice problems.
4. Conclusions and implications.

The Analytic Hierarchy Model

Humans are not logical or always rational. Decisions and judgments are made on what people believe to be reality and then logic is used to defend the reached conclusions. What the AHP attempts to do is to organize logic, feeling, and intuition into a framework for decision making.

In designing his model, Saaty looked at the human mind and how it organizes facts to make decisions. He felt there were two basic approaches, which analyzes a system as a network and its interacting parts, and the systems approach, which views the system from a global perspective, without regard for the operation of its individual parts. Based upon these two assumptions, three phases were developed in the model.

1. The construction of a hierarchy-breaking down a problem into separate parts.
2. The establishment of priorities - ranking elements of the problem by relative importance.
3. The principle of logical consistency - insurance of the first two steps that the elements are grounded properly and ranked in a logical fashion (Saaty 1980).

Taking each of the phases separately, the method of constructing hierarchies is first given. There is no set of rules for constructing hierarchies, each decision to be made must be examined individually. Using a heuristic approach, decompose the complex system according to the essential parts by first defining an overall objective. This becomes the top of the hierarchy and is the only element on that level. Next, list all the possible alternatives or outcomes to be considered. This becomes the bottom level. Finally, list the criteria for judgment. When constructing hierarchies, include enough detail to define the problem as completely as possible, taking into account the environment, key issues, and the participants.

The Analytical Hierarchy Process

The AHP uses pairwise comparisons in its dominance matrices. Like the AHP model, Thurston's model (1927) of comparative judgment also uses pairwise comparison of the objects, but only to the extent that one is more preferred to or greater than another. It does not elaborate on how much greater one is than the other. Guilford (1928) discusses the number of restrictions associated with Thurston's approach. The use of the matrix of judgments generates strong parallels with principal component analysis, except that the data give dominance rather than similarity or convenience information. In principal, the component analyses λ_{max} is emphasized, but one also solves for all the λ's. However, the results must be interpreted differently (Hotelling 1933).

To compare a set of objectives that are elements in a level of a hierarchy in pairs according to their weights, one denotes the object by A(1)....A(n) and their weights by W(1)....W(n), with the pairwise comparison appearing in a matrix. (See Exhibit 1.) (Saaty 1977).

Due to the fact that this matrix is composed entirely of positive entries, it satisfies the reciprocal property A(ji) = 1/A(ij) and is called a reciprocal matrix. If this matrix is multiplied by the transpose of the vector W^T = (W(1) ....W(n)) the problem becomes A(w) = nw. If W was not given, it would be necessary to solve the system (A - nI) W = 0.

This system has a non-zero solution if n is a root of the characteristic equation of A. However, A has a unit rank and all eigen-values $(i = 1,2...n)$ of A are zero except one. It is known that $I = \Sigma\lambda_i = Tr(A)$ where the sum of diagonal elements = n. Therefore, only one of $\lambda_{(i)}$'s, called λ_{max}, equals n and $\lambda = 0$ and consequently $\lambda_{(i)}$ cannot equal λ_{max}.

EXHIBIT 1

PAIRWISE COMPARISONS

	A_1	A_2	...	A_n
A_1	$\frac{W_1}{W_1}$	$\frac{W_1}{W_2}$	...	$\frac{W_1}{W_n}$
A_2	$\frac{W_2}{W_1}$	$\frac{W_2}{W_2}$	...	$\frac{W_2}{W_n}$
A_n	$\frac{W_n}{W_1}$	$\frac{W_n}{W_2}$		$\frac{W_n}{W_n}$

Any column of A, all of which differ by a multiplicative constant, is the solution W. No matter which column is used, a unique solution will result if the solution is normalized so that its components sum to unity. (Saaty 1980) If given any row A, it is possible to determine the rest of the entires in the matrix because of the cardinal consistency property.

When establishing priorities, each level of the hierarchy is compared to the next higher level. What is obtained after performing the comparisons is the vector priority or the relative importance. This is accomplished using the values set up in Exhibit 2, and arranging them into a matrix. This process is the heart of AHP. In this step logical thinking and feeling are used to make judgment values. These judgments are more efficient than the normal means we normally employ for making decisions, but they are not more accurate. Saaty claims that if a result is reached through AHP which does not "feel" right, then the process of judgment should be redone. (Saaty 1980).

To determine how consistent the judgment values given are, AHP uses a consistency ratio of less than ten percent. The consistency ratio (CI) is a comparison of judgment values made to random judgments. Some important concepts about consistency must be realized. First, perfect consistency is almost impossible except in 2 x 2 matrices (Saaty 1982).

To calculate the consistency ratio the following steps are performed:

1. Calculate the row average to obtain the vector priority.

2. Multiply the results by the initial entries in the columns.

3. Obtain the relative weight of each entry by then totaling the row, dividing each entry by the total of its column entry. The average of these totals is called λ_{max}.

EXHIBIT 2

THE PAIRWISE COMPARISON SCALE

Intensity of Importance	Definition	Explanation
1	Equal importance of both elements	Two elements contribute equally to the property
3	Weak importance of one element over another	Experience and judgment slightly favor one element over another
5	Essential or strong importance of one element over another	Experience and judgment strongly favor one element over another
7	Demonstrated importance of one element over another	An element is strongly favored and its dominance is demonstrated in practice
9	Absolute importance of one element over another	The evidence favoring one element over another is of the highest possible order of affirmation
2, 4, 6, 8	Intermediate values between two adjacent judgments	Compromise is needed between two judgments.
Reciprocals	If activity i has one of the preceding numbers assigned to it when compared with activity j, then j has the reciprocal value when compared with i	

4. Obtain the consistency index by taking λ_{max} minus the total number of rows divided by the number of entires in the row minus 1. Exhibit 3 shows the consistency index for matrices size 1 through 15 (Saaty 1980).

5. The consistency ratio is obtained by dividing the consistency index by the random value for the consistency index.

EXHIBIT 3

CONSISTENCY INDEX

Size of Matrix	1	2	3	4	5
Consistency Index	0.00	0.00	0.58	0.90	1.12
Size of Matrix	6	7	8	9	10
Consistency Index	1.24	1.32	1.41	1.45	1.49

Calculating the consistency matrix is a long and tedious process. It is suggested that a computer be utilized for this purpose to obtain more accurate and reliable results.

To evaluate the overall alternative to select, set up a new matrix with the vector priorities and multiply each by the next higher level. Add the results across the row to obtain the overall priority vector. The hierarchy is set based on the numerical order in the priority vector.

The AHP enabled us to simplify a complex, unstructured situation into its component parts resulting in a selection of the optimal alternative.

A functional hierarchy was developed employing the process of decomposing the complex situation of consumer selection of an airline, for a flight from Newark to Houston, Texas, into its components based upon their interrelationships (see Exhibit 4).

EXHIBIT 4

CONSUMER CHOICE OF AN AIRLINE

Hierarchical Level I (Criteria)	Hierarchical Level II (Subcriteria)	Hierarchical Level III (Alternatives)
Cost	Peak	Peoples Express
On-time performance	Off Peak	Piedmont
	Punctuality	World Airways
Reputation	Frequency	Continental
Service	Airplane safety	
	Company reputation	
	Comfort	
	Meals offered	

The initial phase was the development of the major criteria; cost, on-time performance, reputation of the airline, and service. Each of the major criteria was further expounded upon through the use of a more detailed description of the interrelated components.

Cost was considered to be the important factor when a traveler choses an airline. It was found that the consumer (traveler) is willing to give up some of the extras to gain some reduction in the cost. Cost was divided into the subcriteria of peak and off-peak prices. The second criteria was on-time performance, since travelers are always concerned as to whether or not they will arrive on time or constantly be delayed.

Reputation was also deemed to be an important criteria. Nowadays travelers are experiencing and observing the problems which can be fatal, encountered by the airline industry. If there has been a great number of repeated accidents on a particular aircraft, consumers are likely to avoid flying with that airline. This reputation also is attributed to the company's image. If the company had a better image in the market, travelers associate positive feelings with the image of the company.

The final criteria chosen is the service. No doubt, quality of the service is reflected by the cost; yet people expect desirable service. Some airlines do not provide meals, which some travelers expect, and also travelers may have to pay for a snack. Therefore, service which is associated with comfort and meals, is an important criteria.

Having selected the hierarchical structure presented in Exhibit 4, each of the above criteria was evaluated using the 9-point scale described in Exhibit 2. Some of the pairwise comparison matrices are discussed under the rubric of research design and methodology.

Research Design And Methodology

Data Collection

A randomly chosen sample of 250 passengers in the Newark International Airport, in New Jersey, were interviewed. A questionnaire was administered to individual respondents who were asked to rate the importance of the factors in Exhibit 2, in terms of which factors contributed to their patronage of a specific type of airline.

The means for all these respondents were tabulated and rounded to the nearest integer, due to the fact that the AHP model requires only a discrete scale from 1 through 9. The pairwise comparisons and consistency ratios were then performed on the matrices.

Pairwise Comparisons

After the hierarchy was structured, the next step was to construct a pairwise comparison matrix of the relative contribution of each element in one level to each element in the next higher level. Pairs of elements are compared with respect to a criterion in a higher level, and a numerical judgment is given according to Exhibit 2. Respondents were asked to compare the importance of cost, on-time performance, reputation, and service in selecting a type of airline they would patronize. Exhibit 5 presents a pairwise comparison matrix for Level 1.

EXHIBIT 5

PAIRWISE COMPARISON MATRIX FOR LEVEL 1

Choosing an Airline	Cost	On-Time Performance	Reputation	Service	Priority Vector
Cost	1	3	2	4	.42
On-Time Performance	1/3	1	1	4	.22
Reputation	1/2	3	1	3	.28
Service	1/4	1/4	1/3	1	.08

λ_{max} = 4.025, Consistency Index (CI) = .008

In Exhibit 5, the cost was rated a mean of 3 in comparison to on-time performance. We then write a mean value of 1/3 in the second row, first column (transpose position). Likewise, cost was rates a mean value of 4 in comparison to service. We have then put a mean of 1/4 in the fourth row, first column. A similar meaning is attached to all other entries in the matrix. We now focus our attention to a further analysis of the matrix.

Analysis

(1) Calculate the total of each column: they are: 2.08, 7.25, 4.33, and .12.
(2) Divide each entry by the total of that column to establish a normalized matrix.
(3) Calculate the row average to obtain priority vector column.

In Exhibit 5, the priority vector column indicates the relative importance of cost (.42), on-time performance (.22), reputation (.28), and service (.08). Consumers associate the highest priority to cost, then, reputation, etc.

We now move to the pairwise comparisons of the elements in the subcriteria; these are shown in Exhibits 6 - 9.

EXHIBIT 6

COMPARING SUBCRITERIA

Cost	Priority Vector
Peak	.83
Off-Peak	.17

$\lambda_{max} = 2.01$, CI = -.01

EXHIBIT 7

On-time Performance	Priority Vector
Punctuality	.24
Frequency	.76

$\lambda_{max} = 1.9485$, CI = -.05

EXHIBIT 8

Reputation	Priority Vector
Airplane	.20
Company	.80

$\lambda_{max} = 2$, CI = 0.0

EXHIBIT 9

Service	Priority Vector
Meals	.167
Comfort	.833

$\lambda_{max} = 2.002$, CI = .002

We have 8 matrices of pairwise comparisons in the bottom level, since there are 4 airlines and 8 elements in the second level. Then we have eight 4 x 4 matrices of judgments. Again, the matrices contain the judgments of the traveler involved. In order to understand the judgments, a brief description of the above results of 8 matrices are given below (see also Exhibit 11):

Peoples Express: Peoples Express is the better choice with respect to off peak cost (.47), on-time performance (that is frequency), and reputation of the airplane (.41). Peoples Express, however, did not rate high in terms of comfort or meal services.

Piedmont: Next to Peoples Express, the Piedmont line is better in terms of cost, on-time performance, and reputation. Piedmont, however, was also not considered a good airline in offering meals and comfort.

World Airways: In terms of offering low cost, it was rated lower compared to the other three airlines. In providing service to customers, it was rates higher than Peoples Express and Piedmont.

Continental: On the service and punctuality criteria, Continental is rated high. It is rated low on providing low-cost, a good reputation, and frequency of flights.

The next step is to apply the principle of composition of priorities. In order to establish the composite or global priority, we need to construct a pairwise comparison interdependent matrix of judgments. This matrix is shown in Exhibit 10.

EXHIBIT 10

INDEPENDENT MATRIX

Criteria	Priority Vector
Peak	.10
Off-peak	.22
Punctuality	.18
Frequency	.19
Airplane	.05
Company	.07
Comfort	.10
Meals	.07

Now to establish the global (overall) priority of the airlines, we lay out the local priorities of the airlines with respect to each criterion in a matrix and multiply each column vector by the priority of the corresponding criterion, and then add across each row which results in the composite on global priority vector of the airlines as shown in Exhibit 11.

Exhibit 11 indicates the following:

Airlines	Priority Vector
Peoples Express	.31
Piedmont	.29
World Airways	.14
Continental	.20

EXHIBIT 11

MATRIX FOR DETERMINING OVERALL RESULTS OF PRIORITY VECTOR OF AIRLINES

	Peak (.12)*	Off-Peak (.22)	Punc. (.18)	Freq. (.19)	Airplanes (.05)	Company (.07)	Comfort (.10)	Meals (.07)	
Peoples	(.44)*(.12)	(.47)(.22)	(.11)(.18)	(.45)(.19)	(.41)(.05)	(.45)(.07)	(.09)(.1)	(.09)(.07)	.31
Express	.05	.10	.02	.08	.02	.03	.01	.006	.31
Piedmont	(.32)(.12)	(.28)(.22)	(.29)(.18)	(.30)(.19)	(.30)(.05)	(.30)(.07)	(.17)(.1)	(.26)(.07)	
	.04	.06	.05	.06	.015	.021	.02	.02	.29
World	(.08)(.12)	(.09)(.22)	(.16)(.18)	(.09)(.19)	(.18)(.05)	(.09)(.07)	(.28)(.1)	(.13)(.07)	
Airways	.01	.02	.03	.02	.009	.006	.03	.01	.14
Continental	(.15)(.12)	(.16)(.22)	(.14)(.18)	(.16)(.19)	(.11)(.05)	(.16)(.07)	(.46)(.1)	(.52)(.07)	
	.02	.03	.02	.03	.005	.01	.05	.04	.20

*Priority vector.

Conclusions and Strategic Implications

According to the AHP process, Peoples Express was the first choice, then Piedmont, followed by Continental. The last choice was World Airways. Often, the alternatives (airliner) from which a choice must be made emphasized both costs and other benefits associated with them. Peoples Express airlines has the lowest cost and most frequent flights. One consideration where Peoples Express rated below other choices (airlines) was punctuality. Managers and other decision making people who are involved with Peoples Express must focus on this criterion, i.e., punctuality, to achieve a better market share. People who are more concerned about the on-time performance (punctuality) may switch to other airlines despite the low cost. Another area where Peoples Express rated well below other consumers may be willing to trade off high cost to feel more comfort. This segment, which is more "comfort seeking" oriented may be likely to choose another airline. Therefore, managers and executives in Peoples Express Airlines, for example, should also center their attention on offering comfortable service, while keeping costs low.

In conclusion, this microscopic analysis of a limited geographic region of consumers can be utilized for valid managerial and marketing functions; however, an enlargement of the data base is required in order to make broader statements. The findings mentioned, however, seem to parallel the consumer behavior literature related to the transportation field.

References

Guilford, J. P. "The Method for Paired Comparison as Psychometric Method," Psychological Review, 1928, Vol. 35, pp. 494-506.

Hotelling, H. "Analysis of a Complex of Statistical Variables Into Principle Components," Journal of Educational Psychology, 1933, Vol. 24, pp. 498-520.

Saaty, T. L. Decision Making for Leaders. Belmont, California: Wadsworth, 1982.

__________. The Analytic Hierarchy Process: Planning, Priority Setting, Resource Allocation. New York: McGraw-Hill, Inc., 1980.

__________ and Beltran, M. H. Architectural Design by the Analytic Hierarchy Process. Design Methods and Theories, 1980, 14, 124-134.

__________. A Scaling Method for Priorities in Hierarchical Structures," Journal of Mathematical Psychology, 1977, 15, pp. 234-281.

THE APPLICATION OF EXPLORATORY DATA ANALYSIS IN MARKETING: AN INTRODUCTION TO SELECTED METHODS

Armen Tashchian, Kennesaw College
J. Dennis White, Florida State University

Abstract

This paper introduces the family of techniques called exploratory data analysis. Unlike classical confirmatory statistics which rely upon strict distributional assumptions, parameter estimation, and hypothesis testing, EDA adopts an informal method of data examination designed to explore the structure of the data. Three representative EDA techniques are introduced and applications to marketing data sets are presented.

Introduction

Exploratory data analysis (EDA) is a generic term covering a large set of techniques which can help researcher develop a better understanding of the shape, form, and peculiarity of their data. The two major principles guiding EDA are the notions of openness and skepticism. Like a detective investigating a crime, EDA allows the researcher to be open to the unexpected and skeptical of the obvious and easy answer. The underlying premise is that the better you know your data, the stronger is your confidence in the appropriate choice of the analysis and the resulting conclusions.

Although the attitude underlying data exploration has long been an important part of the skilled data analyst's set of tools, the procedures have recently been popularized by John W. Tukey (Tukey 1977). Tukey's work has provided an impetus to numerous articles, books, and monographs on the topic (Cohen 1984; Hartwing & Dearing 1979; Leunhardt & Wasserman 1979; McGill, Tukey, & Larsen 1978), and several statistical packages incorporate the EDA techniques as a part of their standard offerings (Dixon & Brown 1981; Hogban & Peavy 1977; Nie and Hull 1981; Ryan, Joiner, & Ryan 1981; Velleman & Hoaglin 1981).

As the term implies, EDA is exploratory in nature. Unlike classical confirmatory statistics which rely upon strict distributional assumptions, parameter estimation, and hypothesis testing, EDA adopts an informal method of data examination designed to explore the structure of the data. Rather than relying upon numerical summaries, EDA uses visual displays to help identify structural characteristics of the data such as location, variation, skewness, bimodality, extreme values, and shape. Further, EDA employs robust and resistant statistics in identifying central and extreme values (Hoaglin, Mosteller, and Tukey 1983). It must be kept in mind, however, that EDA is designed to complement rather than replace the confirmatory data analysis. According to Tukey (1977), "Exploratory data analysis can never be the whole story, but nothing else can serve as the foundation stone--as the first step" (p.3).

The purpose of this paper is to present the three most commonly used exploratory methods: the stem-and-leaf diagram, the five number summary, and the box plot. Examples from marketing and social science highlight the use and the detective power of these techniques. The methods presented here are a small subset of all the available EDA techniques. The interested reader should refer to Hoaglin, Mosteller, and Tukey (1983), Mosteller and Tukey (1977), and Tukey (1977) for complete coverage.

Displaying Data: The Stem-and-Leaf

In many cases, a data analyst may possess a data set in which one dependent variable is thought to be related to a variety of independent variables. If no theory is available as to the shape of the relationship among the variables, the analyst may need to examine visual plots of the data in an attempt to identify possible patterns of influence.

The stem-and-leaf display is a simple yet versatile method that enables the researcher to examine the data as a whole. It is easier to construct than its classical counterpart--the histogram, preserves the original data values, and takes a major step in sorting the data. The stem-and-leaf display can also be used to detect such features as: where the values are centered; the spread of the numbers; whether there is bimodality in the data; the number and behavior of values that are far removed from the rest; and, other data patterns that the researcher may not expect to see.

The basic construction of the stem-and-leaf begins by allocating a separate line in the display for each possible leading digit (the stem). The trailing digit (the leaf) of each data value is then entered on the line corresponding to the stem. For example, consider the following numbers which represent actual grades obtained by twenty two undergraduate students in a marketing class:

Grades = {78, 73, 78, 67, 70, 67, 62, 73, 75, 50, 78, 57, 93, 67, 80, 63, 60, 72, 77, 88, 94, 87}

The first digit of each number serves as the stem and the trailing digit (e.g., 0, 1, 3, etc.) functions as the leaf. The stem-and-leaf for the data is presented below.

5	07
6	772730
7	838035827
8	087
9	34

It should be obvious that each number can be recovered and that the data values are almost in order. The general rule for the upper limit of the number of lines (categories) for a stem-and-leaf display can be approximated with the following formula:

$$L = [10 \log_{10} n] \qquad (1)$$

where n equals the number of data values and [x] is the largest integer not exceeding x. The above approximation was originally suggested by Dixon and Kronmal (1965) for establishing the numbers of categories for histograms. This rule gives reasonable estimates for the data values in the 20-300 range. For smaller samples (i.e., $n<50$), Velleman (1976) recommends the upper limit of number of categories to be computed using $L = 2\sqrt{n}$. The width of the stem-and-leaf display can be determined by dividing the range by the number of categories and round the quotient up the nearest power of 5 or 10.

Following these guidelines, the number of categories for the data set is approximately $L = 2\{\sqrt{(22)}\}=9$, the the width of the categories is $[(94-50)/9]=5$. The new stem-and-leaf display, incorporating these features is presented below.

2	5	07
5	6*	023
8	6	777
(4)	7*	0233
10	7	57888
5	8*	0
4	8	78
2	9*	34

The numbers in the far left hand corner indicate the frequency of observations in each class, while the value in parenthesis represents the frequency of the median class. The stem with a "*" represents the leaf values in the range of 0-4, and the stems without a "*" contain the leaf values in the range of 5-9.

Five Number Summaries

The best way to summarize a batch of numbers developed by the stem-and-leaf is to use the five number summaries: median, lower extreme, upper extreme, lower hinge, and upper hinge. These summaries are based on counts and as such, they are robust: an arbitrary change in a small part of the batch can have only a small effect on these summary values. Further, they indicate the amount of spread and help identify the outlying observations (See Table 1).

TABLE 1
FIVE NUMBER SUMMARIES

n - (number of observations)
M - depth of the median
H - depth of hinges
* - extremes

	median	
lower hinge	upper hinge	H-SPREAD
lower extreme	upper extreme	Range

Once the values in stem-and-leaf display are ordered, the researcher can easily find the extremes--the lowest and highest values (marked by "*"). The median (marked by "M") is the single middle value if the batch of numbers is odd and is the mean of the two middle values for even number of data points. The hinges (marked by "H"), the middle values between the extremes and the median, divide the batch into quartiles. The hinges and the median are resistant to the effect of stray values.

There are two convenient numbers that describe spread of the batch: range and h-spread. Range is defined as the difference of extremes, while h-spread is the difference between hinges (UH-LH). To define potential outliers, Tukey (1977) has suggested the following additional spread measures:

STEP = 1.5 * H-SPREAD, and
INNER FENCES = 1 STEP OUTSIDE HINGES

Values at each and closest to, but still inside, inner fences are labeled "adjacent". Values outside the fences cutoff points are generally regarded as outliers, deserving special attention. Using the examination data, the five number summaries are: M = 73, LH = 67, UH = 78, and H-SPREAD = 11. STEP is equal to 17, and the limit for inner fences if 50 and 95, respectively. In this illustration, the extreme values of 50 and 94 become the adjacent values. Table 2 displays the five number summaries for the total sample and male and female student subsamples.

TABLE 2
FIVE NUMBER SUMMARIES FOR CLASS EXAM EXAMPLE

n = 22 — Total Sample

		73	
M = 11.5			
H = 6.0	67	78	11
* = 1	50	94	44

n = 11 — Male subsample

		67	
M = 6.0			
H = 3.5	65	76.5	11.5
* = 1	57	94	37

n = 11 — Female subsample

		77	
M = 6.0			
H = 3.5	72.5	79	6.5
* = 1	50.0	93	43

The Boxplot

The purpose of boxplots is to summarize the information presented in the stem-and-leaf display and five number summaries. Boxplots show the structure of the batch in terms of location, spread, skewness, tail length, and outlying data. Further, boxplots permit simple comparison of several batches simultaneously.

To construct a boxplot, a rectangular box is drawn with the ends defined at lower hinge and upper hinge and a solid line at the median. A dashed line (whisker) is drawn from each end of the box to the largest/smallest adjacent value in the batch. The outliers are presented individually by o's. Boxplots are usually displayed vertically, however, horizontal displays are common when several boxplots are being compared simultaneously. When several samples are compared, boxplots are usually drawn with varying widths to reflect the difference in number of cases for each subsample. McGill, Tukey, and Larsen (1978) suggest the width of the boxplot to be proportional to the square root of the respective sample sizes.

When comparing several boxplots, confidence intervals for the population median can be computed as follows:

$$m-1.58[\text{H-SPREAD}/\sqrt{(n)}]<M<m+1.58[\text{H-SPREAD}/\sqrt{(n)}]$$

where n denotes the number of observations in the boxplot. Two groups whose intervals do not overlap are significantly different at approximately .05. Since median, and hinges define the boxplot, it is resistant to arbitrary large data values. Actually, up to 25% of the data values can be made large without greatly disturbing the median.

Figure 1 presents the boxplot of the exam grades for the entire class as well as boxplots for exam grades broken down for female and male students. As can be seen from Figure 1, the boxplots show the location, spread, skewness, tail length, and outlying data values at a glance. The location is summarized by the median--the solid line inside the box. Spread is measured by the length of the box. The relative position of the median to the hinges is an indication of skewness. When the median is closer to the lower hinge, it is an indication of a positively skewed distribution. Similarly, when the median is close to the upper hinge it indicates a negatively skewed distribution. Tail length is indicated by the length of the "whiskers".

Examination of Figure 1 reveals that for the total sample, the distribution of exam grades is almost symmetrical. The scores for the female subgroup, however, have a smaller spread than the grades for the male students. While both distributions are skewed, the female sample is skewed to the left and the male sample is positively skewed. Finally, the two samples are significantly different from each other based on their median.

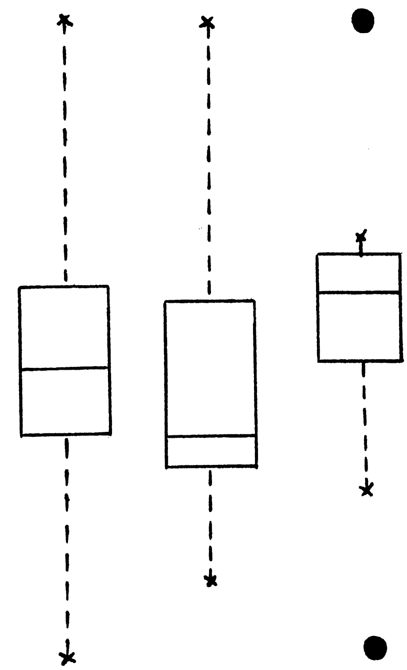
The next section presents two examples that show the application of the methods described above in actual research setting for studying symmetry of the data, skewness, bimodality and behavior of outlying values.

Illustrative Examples

Case-1

Diskin and Tashchian (1984) examines the impact of some selected demographic variables on tenant absorption of converted condominiums. Log-linear methodology was used to develop the final absorption model which included age, income and presence of children as three demographic variables. While fit of the overall model using chi-square statistics appeared acceptable, the confirmatory analysis did not hint if the assumptions of the model were violated. Thus, EDA techniques were used to study the distribution of standardized residuals in terms of normality and outlying values. The stem-and-leaf display and five number summaries are presented in Table 3.

FIGURE 1
BOXPLOTS FOR STUDENT GRADES



As can be seen from this table, the residuals closely follow a normal distribution. The median of the residuals is fixed at .05 and hinges are equally spaced around the median at -0.4 and 0.4. Further, all cases are within the inner fences of -1.6 and 1.6 and there are no outlying residuals.

TABLE 3.
RESIDUAL ANALYSIS FOR CONDOMINIUM EXAMPLE

-1	33
-0	88755
-0	44443332211
0	22222333444
0	55668
1	24

n = 36			
M = 18.5	0.05		
H = 9.5	-0.4	0.4	0.8
* = 1	-1.30	1.40	2.7

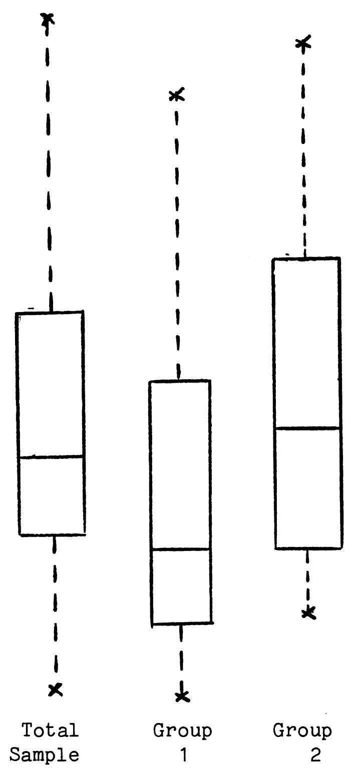
Inner Fences = (-1.6, 1.6)
Whiskers = (-1.3, 1.4)

Case-2

White and Carlston (1983) attempted to investigate the effects of memory accessibility of product information on consumer susceptibility to persuasion. The researchers predicted that susceptibility to persuasion would be dependent on the relative accessibility of supportive information in memory. Examination of the subjects' attitudes following receipt of the persuasive message, however, produced only mixed support for the original hypotheses. In an effort to discover what may have lead to the mixed support, an exploratory data analysis was performed. The results of the analysis is presented in Figure 2.

FIGURE 2
STEM-AND-LEAF DIAGRAM AND
BOXPLOTS FOR CONSUMER MEMORY EXAMPLE

```
   1   -1 | 0
   6   -0 | 00000
  11    0 | 00000
  35    1 | 000000000000000000000000
 (10)   2 | 0000000000
  27    3 | 000
  24    4 | 0000000
  17    5 | 00000
  12    6 | 00000000
   4    7 | 000
   1    8 | 0
```



By examining the stem-and-leaf display, it is clear that the sample shows a clear bimodality, with the largest group of consumers displaying resistance to persuasion as predicted. The fact that the second grouping appears to be composed of a substantial number of subjects (as opposed to a few outliers), an attempt was made to discover the antecedents of the bimodality. Further analyses ultimately discovered that a consumer confidence variable accounted for the bimodal pattern.

Summary

This paper presented some selected techniques which facilitate the exploration of data. The reader is cautioned against applying these techniques with same rigid approach that has characterized much of traditional data analysis. Exploratory data analysis is interactive and researcher should be open to the unexpected and skeptical of the easy answer. When combined with classical, confirmatory statistics, these techniques can provide the marketing researcher with an excellent set of tools for discovering unique data patterns and trouble-shooting failed statistical tests.

References

Cohen, A. (1984), "Exploratory Data Analysis Methods: A Study of Industrial Worker's Work Role Centrality." Sociological Methods and Research, 12(4), 433-452.

Diskin, B.A., and A. Tashchian (1984), "Application of Logit Analysis to the Determination of Tenant Absorption in Condominium Conversion," Journal of the American Real Estate and Urban Economics Association, 12(2), 191-205.

Dixon, W.J., and R.A. Kronmal (1965), "The Choice of Origin and Scale for Graphs, " Journal of the Association for Computing Machinery, 12, 259-261.

Dixon, W.J., and M.B. Brown (1981), BMDP Biomedical Computer Programs, Berkeley: University of California Press.

Hartwing, F. and B.E. Dearing (1979), Exploratory Data Analysis, Sage University Paper Series on Quantitative Applications in the Social Sciences, Series No. 16. Beverly Hills and London: Sage Publications.

Hoaglin, D.C., F. Mosteller, and J.W. Tukey (Eds.) (1983), Understanding Robust and Exploratory Data Analysis. John Wiley and Sons.

Hogben, D. and S.T. Peavy (1977), Omnitab II User's Reference Manual 1977 Supplement, NBSIR 77-1276, Superintendent of Documents, U.S. Government Printing Office, Washington,D.C. 20402.

Leunhardt, S. and S.S. Wasserman (1979), "Exploratory Data Analysis: An Introduction to Selected Methods," In K.F. Schuessler, (Ed.), Sociological Methodology, 311-365.

McGill, R., J.W. Tukey, and W.A. Larsen (1978), "Variations of Boxplots," American Statistician, 32, 12-16.

Mosteller, F. and J.W. Tukey (1977), Data Analysis and Regression: A Second Course in Statistics, Reading, MA: Addison-Wesley.

Nie, N.H., and C.H. Hull (1981), SPSS Update 7-9, New York: McGraw-Hill.

Ryan, T.A., Joiner, B.L., and Ryan, B.F. (1981), Minitab Reference Manual, University Park, PA: Minitab Project, The Pennsylvania State University.

Tukey, J.W. (1977), Exploratory Data Analysis, Reading, MA: Addison-Wesley.

Velleman, P.F. (1976), "Interactive Computing for Exploratory Data Analysis I: Display Algorithms," 1975 Proceedings of the Statistical Computing Section, Washington, DC: American Statistical Association.

Velleman, P.F., and Hoaglin, D.C. (1981), Applications, Basics, and Computing of Exploratory Data Analysis. Boston: Duxbury Press.

White, J.D., and D.E. Carlston (1983), "The Effects of Memory Accessibility on Resistance to Persuasion," Unpublished manuscript, Florida State University.

A COMPARISON OF METRIC AND NON-METRIC METHODS FOR MULTIDIMENSIONAL ANALYSIS OF MARKETING SURVEY STATEMENTS: DOES THE METHOD REALLY METTER?

Joseph L. Balloun, University of Dayton

A. Ben Oumlil, University of Dayton

Abstract

In this study the objective is to examine evidence for the relative effectiveness of factor analysis and multidimensional analysis of marketing survey data.

The results for the data set analyzed support the conclusion that a non-metric dimensional analysis method performs better than principal components method for analyzing responses to Likert attitude scale statements.

Introduction

Kruskal and Wish (1978) defined multidimensional scaling (MDS) as "a set of mathematical techniques that enable a researcher to uncover the 'hidden structure' of data bases," (p. 15). Davison (1983) refers to MDS as "a set of multivariate statistical methods for estimating the parameters in and assessing the fit of various spatial distance models for proximity data" (p.2). In this study the authors refer to multidimensional scaling as a class of techniques which use proximities between any types of objects as input. The smaller the similarity among the two objects, as indicated by their proximity value, the further apart they should be in the sparial map. Kruskal and Wish (1978) refer to a proximity "as a number which indicates how similar or how different two objects are, or are perceived to be, or any measure of this kind" (p. 7).

Multidimensional scaling, dimensional analysis or non-metric factor analysis refer to several different but related techniques (Kruskal and Wish, 1978). These techniques may use proximities, similarities, dissimilarities, correlations of various kinds or distances among any objects as inputs. The primary output of interest is a spatial representation of the configuration or pattern of relationships among the objects.

Multidimensional scaling (MDS) often uses input data which are global inter-object comparisons by raters. Such comparisons typically are judgments of subjective similarity, distance or dissimilarity. All of these may be referred to as "proximities" (Kruskal and Wish, 1978, p. 7) However, it is also true that the MDS method can be used to analyze data which are not proximities by forming proximities as an intermediate step (Kruskal and Wish, 1978, pp. 7,10). For example, Pearson conelation conelation coefficients "...can also be regarded as proximities and analyzed by MDS..." (Kruskal and Wish, 1978, p.11).

It can be argued that factor analysis methods constitute a special case of multidimensional scaling methods (Davison 1983; MacCallum 1974; Green and Carmone 1970). Specifically, factor analysis methods assume that the basic numerial data are measured at the interval or ratio levels of measurement. Similarly, Torgersen (1958) describes a multidimensional scaling as a method which assumes intervality in the original observations.

Factor analysis methods assume that the observed variables are linear combinations of some underlying common factors (Kim and Mueller 1978; Harman 1967).

An important advantage of comtemporary MDS algorithms is that they can recover the configuration of objects (e.g. variables or survey respondents) in a space without assuming intervality. Most survey question responses are measured on an ordinal scale (e.g. Likert scale responses).Hence the most appropriate data analysis methods ought to assume that the input data ate only at the ordinal level of measurement.

Multidimensional scaling techniques and factor analysis have a wide application to the study of marketing behavior (e.g. attitude studies, test marketing, store emage research, marketing segmentation, among others). These two methods are related to each other logically and methodologically.

According to Davison (1983) MDS is more closely related to factor analysis than to cluster analysis. The results obtained by implementing factor analysis (like MDS) contain a quantitative dimensional representation of the structure between the objects. Shepard (1972), in his comparison of the two methods, reported that non-metric MDS often generates a solution of a small number of dimensions to describe the structure of the data. However, when using factor analysis in some studies ten or more factors are generated. Shepard (1972) stated that: "this matter of dimentionality and hence visualizability tends, in practice, to distinguish these new methods of multidimensional scaling proper from the related methods that have long been used in the social sciences under such names as 'factor analysis' and principal components analysis" (p. 21). Schlesinger and Guttman (1969) reported much the same conclusion.

MacCallum (1974), in his assessment of MDS and Togerson's metric and non-metric models, concluded that: "In general, the underlying factor analysis is much richer than that underlying multidimensional scaling in that the former is capable of describing individual differences and the later is not" (p. 512).

Davison (1983) emphasized the fact that when factor analysis and MDS are used to study the same issue both methods lead to different conclusions. This is due to the following: "First, the studies may employ different measures of object similarity. Factor analysts have favored the correlation coefficient, MDS studies have employed profile dissimilarity measures, direct similarity judgements, and joint or conditional probabilities. Second, factor analytic and MDS studies of the same issue often employ very different experimental procedures. This may be the biggest single source of variation between MDS and factor analytic studies... The data analytic methods themselves represent the third source of differences. Both factor analysis and MDS yield a representation of the stimulus structure in terms of spatial coordinates. These coordinates are called factor loadings in factor analysis, and they are called scale values in MDS. The factor model and the MDS model, however contain very different assumptions about the relationship between the coordinates and the observed proximity data" (pp. 212-213). Davison (1976) added that such differences in assumptions concerning the data under consideration must lead to different solutions. He emphasized that "there exists no analytical study to suggest what kinds of differences one might generally expect to find between a MDS and a factor analysis of the same data" (p. 213).

Green and Carmone (1970) urged that there is a need to apply multidimensional scaling procedures (i.e., using similarities and preference mapping) to the study of market behavior. It is in the spirit of fulfilling these research needs and to stimulate interest in this research area that this study was conducted.

OBJECTIVES OF THE STUDY

As it was stated previously, multidimensional scaling is implemented for studying an isomorphic euclidian space structure of objects or people. One of the main objectives in marketing survey research is to determine the appropriate dimensionality and configuration of attitude "space". MDS techniques are useful in the field of marketing to determine the underlying dimensions of response to either all of the questions in the survey, or to specific subsets of questions in the survey. Dimension analysis is useful because it can greatly simplify description of multivariate response patterns, it aids interpretation of answers to each question, and because it can greatly reduce the complexity of subsequent multivariate analyses.

The purpose of this paper is to examine evidence for the relative effectiveness of factor analysis and multidimensional scaling for multidimensional analysis of marketing survey data. First, we define some simple methods for comparing the effectiveness of metric and non-metric dimension analysis methods. Second, we compare the effectiveness of factor analysis and multidimensional scaling in a market panel survey.

METHODOLOGY

Description of Sample

The sample of this study was drawn from the mailing list of the Arkansas Household Research Panel (AHRP). The selection of panel members is based upon a systematic sampling technique.

A structured questionnaire was carefully prepared, pretested and mailed to the AHRP members during the periods of Spring and Summer 1983. Altogether 512 households were contacted with the rate of return for mailed questionnaires at approximately 97 percent. This yielded 496 useable and returned questionnaires.

Description of the Research Instrument

The research instrument contains three parts, each of which was designed to achieve an aspect of a broad research project. In this paper, we are concerned only with the results of Part I of the survey instrument. Part I had fourteen questions which were structured to assess the nature of the economic environment's impact on the consumers subjective states (negative effect, positive effect, and no effect). These perception and expectation statements were worded to include positive, negative, and neutral positions inorder to avoid the "yea-saying"pnenomenon. The statements were measured on a 1 to 6 point agreement scale.

Method of Analysis

Standards for the Effectiveness of dimensional Analysis.

The elementary problem in evaluating multivariate methods is to create reasonable standards of what constitutes acceptable performance. Where absolute standards should be created so that we may judge the relative merits of two or more methods.

The computational methods and statistical tests underlying factor analysis and MDS are quite different (cf. Kruskal and Wish, 1978; Kruskal, 1964a; Kruskal, 1964b; Harman, 1967). The results of the two different methods can be compared by appropriate descriptive and statistical criteria.

There are various methods for comparing factorial invariance between two or more different samples analyzed by similar factor analytic techniques (e.g. Cattell, 1978; Anderson and Englewood, 1980). These techniques are not directly applicable when the same data set is analyzed by two different methods. In order to determine which method gives the "better" solution, however, they can be adapted to help assess the adequacy of each method.

The rest of this discussion assumes that the dimensional solutions being evaluated are orthogonal and rotated. This assumption follows from the standard of parsimonious description to be described in what follows. The discussion assumes furthermore that the factor analysis or dimension analysis method used starts from a matrix of similarities, correlations, or dissimilarities. In the interests of brevity, these will all be referred to as proximities in what follows. The standards advocated parallel Anderson and Engledows' (1980) discussion of a Joreskog's strategy for testing for financial invariance.

A first performance standard for a dimensional analysis method is that it should accurately reproduce the distances, similarities, or correlations among the variables. Pearson or rank order correlations between the elements of the reporduced and observed correlation matrix should be statistically significant, positive, and as high as possible. The paired t-test between elements of the original and reproduced similarities matrices should be insignificant.

A second standard for the adequacy of a dimension analysis solution is a minimum number of latent dimensions.

A third standard is that the simple structure criterion of adequacy of the rotated solution for more than one dimension should be maximized. This can be conveniently indexed by the intermax criterion for orthogonal rotation (Balloun and Kearns, 1975).

A fourth standard is freedom from artifacts. A common artifact in orthogonal factor analysis is that the factors which emerge are related to the variances or means of the items in the analysis. The correlations of item "communalities" and their projections on each latent dimension, of item means and variances with item projections ("loadings") should be non-significant and as close to zero as possible.

Factor Analysis

The scales were factor analyzed in order to ascertain the underlying dimensions of consumers' attitudes and expectations. The factor analysis was accomplished via the principal components method described in the Statistical Analysis System (SAS) users' guide (Helwig and Council, 1979). The three factors retained have eigenvalues greater than one. the components were rotated by the varimax criterion.

The statements that denoted negative perception and expectation were loaded positively on factor one (named the pessimistic factor), while the positively oriented statements were loaded positively on factor two (named the optimistic factor). The statements with neutral orientations tended to load on the third factor (labeled the neutral factor).

Factor Analysis

The scales were factor analyzed in order to ascertain the underlying dimensions of consumers' attitudes and expectations. The factor analysis was accomplished via the principal components method described in the Statistical Analysis System (SAS) users' guide (Helwig and Council, 1979). The three factors retained have eigenvalues greater than one. The components were rotated by the varimax criterion.

The statements that denoted negative perception and expectation were loaded positively on factor two (named the optimistic factor), The statements with neutral orientations tended to load on the third factor (labeled the neutral factor).

Non-Metric Multidimensional Scaling

The multidimensional scaling method used in this paper can be termed "non-metric factor analysis". This term is appropriate because the imput data are measured at the ordinal level, and the correlation coefficients used as input to the multidimensional scaling program assumes that each pair of variables is related only in a weak rank order or weak monotonic sense, thus the analysis is non-metric. Furthermore, we are interested in a spatial representation of distances among variables; hence the analysis is a non-metric analog to factor analysis.

Coefficient gamma was used to measure the correlation between each pair of variables (Liebetrau, 1983). Gamma assumes that both variables are measured at the ordinal or better level of measurement. It ranges between minus one and plus one, and the interpretation of the size of the coefficient is analogous to that for Pearsonian correlation. However, gamma is high whenever there is a weak monotonic relationship between two variables. Gamma will be high when Pearson's correlation is high. In addition, it will be high when the bivariate scattergram between two variables resembles a decay function, learning curve, staircase, step function or L-shaped function. Thus, gamma makes much less restrictive assumptions about the nature of the data than does the Pearson correlation coefficient.

The gamma correlations among the 14 statements of Part I are shown in Table 4.

RESULTS

Metric Factor Analysis

The results for the rotated principal components (RPC) analysis are shown in Tables 1 through 3. The mean of the original correlations was .07 and the mean of the reproduced correlations was .04, and their standard deviations are 0.35 & 0.30. The Pearson correlations between the original and reporduced correlations was 0.97 ($p<.05$) and the t-test showed no significant differenct in the mean of the original and reporduced matrices. The RPC solution meets the first performance standard.

There were three RPC factors and the intermax ratio for simple structure is 0.89.

Two of the eight tests for artifactual correlations with means or standard deviations were significant. Thus the RPC loadings were related to variables means and standard diaviations.

Multidimensional Scaling Non-Metric Analysis:

Torgerson's (1958) approximate method was used. Only one dimension was retained in the solution because the reproduced gamma correlations sufficiently "fit" the original gamma correlations. The resultant projections on the first latent dimension are shown in Table 5.

The mean and standard deviation of the original gamma correlations are respectively .04 and .31. The mean and standard deviation of the reproduced gamma correlations are respectively - .04 and .23. The Pearson correlation between the reproduced and original gamma correlations is about .96. The t-test ($t=1.71$, $p>.05$) indicates that the means of the original and reproduced gamma correlations do not differ significantly. The rank order correlation of statement means and standard deviations with absolute scale values are respectively - .20 and .07 ($p>.05$ in both cases). Hence the absolute scale values are not systemtically related to statement means or standard deviations.

These results in one data set support the conclusion that the non-metric multidimensional method used produces a "better" description of the latent dimensions underlying the 14 attitude statements.

For these data, the nonmetric colution appears superior to the principal component solutions in two respects. First, the nonmetric solution is more parsimonious (one "factor" instead of three). Second, there are smaller correlations of statement means or standard deviations with the "communalities" for the nonmetric method.

FUTURE RESEARCH

We hope this initial, exploratory effort will encourage other researchers to evaluate dimension analysis methods with other examples of market survey rating scale data. Future research may benefit by: (a) more careful definition of generally applicable standards for dimension analysis algorithms, and (b) comparison of different dimension analysis methods in several different data sets.

REFERENCES

Anderson, Ronald D. and J.L. Engledow (1980 (Comparisons of Factor Structures in Separate Consumer Behavior Studies." Journal of Business Research, 8, 501-524.

Balloun, Joseph L., and J. Kearns (1975). "An Approach to an Orthogonal Simple Structure Solution by Maximizing Test Factor Interaction Effects Among Squared Factor Loadings." Journal of Mathematical and Statistical Psychology, 28, 63-70.

Cattell, Raymond B. (1978). The Scientific Use of Factor Analysis. New York: Plenum, 1978, pp. 229-272.

Davison, Mark L. (1983). Multidimensional Scaling. John Wiley & Sons: New York.

Green, R.E. and Frank J. Carmone (1970). Multidimensional Scaling and Related Techniques in Marketing Analysis. Boston: Allyn and Bacon, Inc.

Harman, Harry H. (1967). Modern Factor Analysis. The University of Chicago Press: Chicago.

Helwig, Jane T. and Kathryn A. Council (Eds.) (1979). S.A.S. User's Guide. S.A.S. Institute: Raleigh, N.C.

Kim, Jae-On and Charles W. Mueller (1978). Factor Analysis Statistical Methods and Practical Issues. Sage: Beverly Hills, CA.

Kruskal, Joseph B. (1964a). "Multidimensional Scaling by Optimizing Goodness of Git to a Non-Metric Hypothesis".

Psychometrika, 29, 1-27.

Kruskal, Joseph B. (1964b). "Non-Metric Multidimensional Scaling: a nermerical Method". Psychometrika, 29, 115-129.

Kruskal, Joseph B. and M. Wish (1978). Multidimensional Scaling. Sage: Beverly Hills, CA.

Liebetrau, Albert M. (1983). Measures of Association. Sage: Beverly Hills, Ca.

MacCallum, R.C. (1974). "Relations Between Factor Analysis and Multidimensional Scaling." Psychological Bulletin, 81, 505-516.

Oumlil, A. Ben (1983). Economic Change and Consumer Shopping Behavior, New York: Praeger Publishers.

Shepard, R.N. (1972). Introduction to Volume I. In R.N. Shepard, A.K. Romney, and S.B. Nerlove (Eds.) Multidimensional Scaling: Theory and Applications in the Behavioral Sciences (Vol. 1) New York: Seminar Press.

Schlessinger, I.M. and L.Guttman (1963). Psychological Bulletin, 71, 95-100.

Torgerson, W.S. (1958). Theory and Methods of Scaling. New York: Wiley.

TABLE 1

PEARSON CORRELATION COEFFICIENTS AMONG STATEMENTS IN PART 1[a]

	A1	A2	A3	A4	A5	A6	A7	A8	A9	A10	A11	A12	A13	A14
1	1.00													
2	0.29	1.00												
3	0.44	.12	1.00											
4	.58	.23	.44	1.00										
5	.60	.30	.39	.67	1.00									
6	.32	.03	.17	.39	.35	1.00								
7	-.16	-.03	.02	-.22	-.21	-0.39								
8	-.27	-.20	-.12	-.30	-.30	-.27	.43							
9	-.26	-.22	-.11	-.30	-.35	-.18	.23	.40						
10	-0.24	-.24	-.09	-.28	-.31	-.21	0.28	.41	.59					
11	-0.23	-0.12	-0.11	-0.33	-0.31	-.37	0.54	.40	.46	0.58	1.00			
12	-0.42	-.23	-.27	-.37	-.43	-.13	0.17	0.36	.40	0.44	0.40	1.00		
13	-0.10	-.13	-0.11	-.10	-.11	0.15	-.07	0.10	.15	0.12	0.01	0.28	1.00	
14	.42	.22	0.15	0.32	0.38	0.17	-.09	1.22	-.22	-.17	-0.19	-0.28	0.01	1.00

[a]Lower Triàncle is shown only because the matrix is symmetrical.

TABLE 1 (Continued)

*A1 : Because of the economic situation during the past few years, our family is very concerned about maintaining our standard of living.
A2 : During the past few years, our family had to make many adjustments to maintain our standard of living.
A3 : During the past few years, I had to pay higher prices for products and services.
A4 : Because of the increased cost of living, our family members have taken additional employment.
A5 : Overall, our family has become worse off economically during the past few years.
A6 : It is harder to make ends meet.
A7 : I am pessimistic about obtaining a higher standard of living.
A8 : I realize that I will be able to improve my economic position in the future.
A9 : I have faith in the economy.
A10: As a consumer, I am more happy than I used to be.
A11: It will be easier to make financial plans in the future.
A12: I will probably have more money to spend in the future than I have now.
A13: The changed economic condition had no influence on my family's purchasing abilities.
A14: I think that my economic situation will remain the same in the future.

Table 2

VARIMAX ROTATED FACTOR MATRIX [a]

	FACTOR [b]					
Variable [c]	Pessimistic [d]	Optimistic [d]	Neutral [d]	h^2_j [e]	Mean [f]	S.D. [g]
1	81	-15	-04	69	4.08	1.30
2	33	-19	-38	29	5.54	.66
3	68	08	-08	47	3.02	1.64
4	78	-25	06	68	3.32	1.46
5	78	-27	-03	69	4.42	1.39
6	41	-35	58	63	3.59	1.47
7	-05	65	-45	63	3.71	1.32
8	-20	66	00	48	3.29	1.45
9	-16	70	28	59	2.93	1.28
10	-12	77	23	67	2.79	1.25
11	-15	80	-15	68	3.13	1.38
12	-42	48	39	56	2.50	1.34
13	-08	10	69	49	3.33	1.22
14	53	-15	-03	30	5.38	.78

[a] Decimals omitted from factor loadings and communalities
[b] The initial solution was found by the principal components method; the intermax ratio, phi, is .89 for the rotated loadings.
[c] Variables are described further in the text; See also Oumlil (1983).
[d] Factor names are explained in the text.
[e] This is the communality of each variable.
[f] This is the standard deviation of each variable.

Table 3

RANK ORDER CORRELATIONS OF VARIABLE MEANS AND STANDARD DEVIATIONS WITH FACTOR LOADINGS AND COMMUNALITIES

	Variable	
	Mean	S.D.
Mean	1.00	
S.D.	-0.32	1.00
F1	0.58*	0.17
F2	-0.62*	-0.22
F3	-0.44	0.03
H2	-0.08	0.36

* $p < 0.05$ by the two-tailed t test for the significance of Spearman's rank order correlations.

TABLE 4

GAMMA CORRELATION COEFFICIENTS AMONG STATEMENTS IN PART I [a]

	1	2	3	4	5	6	7	8	9	10	11	12	13	14
A1	1.00													
A2	.34	1.00												
A3	.50	.08	1.00											
A4	.60	.22	.41	1.00										
A5	.60	.38	.34	.59	1.00									
A6	.28	.01	.12	.31	.30	1.00								
A7	-.19	-.04	-.02	-.28	-.19	-.38	1.00							
A8	-.27	-.19	-.12	-.32	-.27	-.18	.43	1.00						
A9	-.26	-.24	-.12	-.27	-.33	-.10	.23	.40	1.00					
A10	-.27	-.30	-.06	-.19	-.29	-.15	.33	.33	.51	1.00				
A11	-.26	-.15	-.06	-.28	-.25	-.26	.53	.42	.45	.59	1.00			
A12	-.40	-.33	-.22	-.37	-.45	-.08	.11	.33	.46	.50	.43	1.00		
A13	-.08	-.16	-.12	-.14	-.09	-.12	.00	.06	.18	.15	.02	.32	1.00	
A14	.36	.42	.08	.17	.39	.12	.06	-.16	-.27	-.23	-.20	-.45	-.07	1.00

[a] Only the lower triangle is shown since the matrix is symmetric.

TABLE 5

ONE DIMENSIONAL NON-METRIC SCALING SOLUTION[a]

Variable	Pessimism vs. Optimism
1	2.72
2	1.80
3	1.48
4	2.60
5	2.68
6	1.40
7	-1.76
8	-2.41
9	-2.36
10	-2.32
11	-2.44
12	-2.68
13	-.88
14	1.80

[a]Torgerson's (1958) approximate method was used. The gamma correlations were transformed to simple "distances" scalar products were calculated and the control yielded the solution give.

ALTERNATIVE APPROACHES FOR EXAMINING THE TEMPORAL STABILITY OF PARAMETER ESTIMATES IN A MARKETING MODEL

James S. Moore, Indiana University-Purdue University at Fort Wayne
Zoher E. Shipchandler, Indiana University-Purdue University at Fort Wayne

ABSTRACT

The temporal stability of estimated parameters in multiple regression marketing models is important if the model is to prove useful in making economic inferences and in developing marketing strategies. OLS estimates are potentially distorted in the presence of collinear data sets that typify marketing models; consequently, any underlying temporal stability present may go undetected. This paper investigates the temporal stability of parameter estimates by comparing the results obtained from OLS, ridge, and latent root regression techniques in the presence of ill-conditioned data. Ridge regression provided improved individual coefficient stability and slightly greater predictive accuracy beyond the original estimation period.

Introduction

While multiple regression analysis (MRA) has been extensively discussed and utilized in marketing research, much of this history has focused on its aggregate predictive capabilities or one-time parameter estimates. Little has been done, as yet, to investigate the year to year parameter stability of MRA estimates for a common model specification. Such temporal stability of coefficient estimates is important if the model is to be accepted as theoretically sound and practically useful in developing a marketing plan for the future. A marketing manager would like to make operational plans, confident in the knowledge that the marginal impact of each major component of the model will remain reasonably constant even though the magnitude of the component itself will very likely change.

The intent of this study is to investigate the relative temporal stability of individual parameter estimates generated by three alternative MRA techniques, namely ordinary least squares (OLS), ridge regression (RR), and latent root regression (LRR). Each of these procedures is employed to estimate the co-efficients of the same linear model specification for each year from 1976 through 1982. These coefficients represent the separate marginal effects of each variable. The data set employed is one that is vulnerable to multicollinearity, as are data in many marketing situations. Consequently, our concern is with uncovering any year to year "staying power" of such marginal responses in the presence of ill-conditioned data.

Review of Literature

The OLS estimator, $\hat{\beta}$, is known to be the best linear unbiased estimator (B.L.U.E.) when the predictor variables are orthogonal. But when there is substantial intercorrelation among the predictor variables, $\hat{\beta}$ tends to deviate from the true value of the parameters being estimated in unpredictable ways. The problems associated with the presence of collinearity in statistical models have been well developed in the literature (Farrar and Glauber 1967). In sum, the OLS estimated coefficients, when generated from ill-conditioned data, may be compromised in terms of sign, magnitude and/or significance, and hence may not reflect only the influence of their associated predictor variables. This would invalidate the marginal response inferences an investigator might wish to make, and subsequently frustrate the search for any underlying temporal stability of these estimates.

Numerous approaches have been put forth in the econometric and marketing literature to address the problem of collinearity. The commonly employed approach of deleting collinear variables from the analysis, so as to reduce the degree of interdependence among the remaining variables, may often prove very inadequate for several reasons. First, the investigator may be responding to a symptom, such as inappropriate sign and/or low significance, and subsequently delete a variable that properly belongs in the equation specification. Second, the deletion of selected variables, whether they are identified via an arbitrary heuristic or by a stepwise regression procedure, can ultimately bias the remaining parameter estimates (Belsley et al, 1980).

Procedures for improving the conditioning of the data also have severe limitations, such as the unavailability of additional "clean" data. Another school calls for a form of artificial orthogonalization of the existing data. This often involves a transformation of variables with the resulting "new variables" no longer plagued by the collinearity. One such mechanism is factor analysis which aggregates several individual predictor variables into a smaller number of groups or factors. This results in the loss of some information and makes the interpretation of the new variables difficult.

Still another approach is the employment of a biased estimation procedure. Such techniques seek closer overall proximity to the true parameter by securing a much lower variance than a B.L.U.E. technique, in exchange for accepting their accompanying bias. If the amount of bias is kept small, then the estimate will be dominated by the reduced variance resulting in a lower overall mean square error. Two biased techniques that have gained exposure recently in the marketing literature are ridge regression and latent root regression.

Mahajan et al (1977) contrast ridge coefficients with those of OLS and show that while the ridge estimates are biased, they do possess smaller variance than the least squares estimates. Erickson (1981) found ridge regression preferable to OLS in handling the ill-conditioning of a highly autocorrelated data set as he sought to measure the cumulative impact of marketing efforts on sales beyond the period of the promotion's implementation.

Latent root regression was introduced by Hawkins (1973) and Webster, Gunst and Mason (1974) as a modified least squares estimation procedure. LRR enables the user to detect the presence of near singularities and determine whether they possess any predictive value for the criterion variable. LRR estimates are obtained by deleting any latent vectors which are associated with the collinearity, and which do not appreciably influence the explained variation in the dependent variable. Thus, the LRR estimator is purged of the effect of any "non-predictive" near singularities while retaining the influence of any near singularities that do contain substantive information about the underlying model. Should all near singularities identified be found to be "predictive", then no latent vectors are deleted and the LRR estimator coincides with the OLS estimator.

While numerous econometric procedures for handling ill-conditioned data have been discussed in the literature, the temporal stability of the coefficients estimated by such techniques has remained largely unexamined. The intent of this study is to investigate and compare the year-to-year parameter stability of a common model specification across estimation procedures.

The Model

The vehicle for this investigation of temporal stability is the traditional additive multiple regression model $Y = X\beta + \varepsilon$ where ε is a n x 1 vector of random errors with mean zero and variance σ^2.

The data base consists of a systematic sample of 114 SMSA's selected from Sales and Marketing Management's Survey of Buying Power for each of the years 1976 to 1982. The model was estimated annually with cross-sectional data. The years 1976 through 1982 cover both a period of relative economic prosperity from 1976 to 1979 and a period of stagflation from 1980 to 1982. This affords the opportunity to compare estimation methods under conditions in which some of the predictor variables have undergone sizable changes.

The basic conceptual specification of the model can be stated as $S = f(C,M)$ where S = real annual dollar sales of furniture and household furnishings in an SMSA, C = yearly capacity to buy furniture and household furnishings in an SMSA, M = yearly market size of furniture and household furnishings in an SMSA. The actual predictor variables for each SMSA and time period include median household effective buying income (EBI) in constant dollars, the total number of households (HH), the percentage of the market area's total population in the age groups 18 through 24 (YOUNG), 25 through 49 (TARGET), and 50 and over (OLD), and the percentage of the market area's unemployed labor force (UNEMP).

Each regressor variable is expected to play a unique contributory role in influencing the aggregate volume of furniture sales in its respective SMSA. It is posited that, ceteris paribus, the dependent variable will be directly related to EBI, HH, and TARGET and inversely related to YOUNG, OLD and UNEMP. It is assumed that the prime age group for furniture is the TARGET group, whereas many persons in the YOUNG and OLD age groups are not active in the market for new home furnishings. To mitigate the influence of inflation over the seven year period, the dollar denominated variables were deflated to real terms.

Methodology

Given that marketing data are frequently plagued by multicollinearity and that our model was deliberately specified so as to be vulnerable to such ill-conditioning, we felt it appropriate to document the extent of the collinearity present. The traditional correlation matrix for our data set finds an average of three occurrences of .50 or more on each side of the primary diagonal, per year. However, such figures may seriously understate the true ill-conditioning present within the data as they reflect only the simple pairwise correlations and consequently fail to reveal any evidence of the collinearity if the dependencies are group interrelations instead. Moreover, it would be possible for three or more predictor variables to be collinear while no two such data series exhibit high correlation. In an effort to capture such "package" ill-conditioning, we employ the "multi-collinearity index" (mci) of Thisted and Morris (1980). Their index has a closed range $1 < \text{mci} < p$ where p is the number of regressors. Orthogonal data will yield an index near the upper end of the spectrum while values near unity are associated with a high degree of package collinearity. For our seven sets of data, mci ranged from 1.085 to 1.141 within a possible spectrum of $1 < \text{mci} < 6$.

Further, Belsley et al (1980) construct variance-decomposition proportions so as to identify the extent of the degrading impact of the multicollinearity. When the same singular value is associated with a large (>50%) proportion of the variance of two or more coefficient estimates, they cite that occurrence as "evidence that the corresponding near dependency is causing problems" with the "quality of the subsequent regression analysis..." In this study, the matrix of variance-decomposition proportions for each year was found to contain one or more instances of such degrading singular values.

Parameter estimates were then derived annually using OLS, RR, and LRR for the same model specified earlier. In an effort to gauge the temporal stability of each individual parameter in the model, the coefficient of variation

(σ / μ) over the seven annual estimates was employed as a unit free index of relative stability. The OLS results serve as a benchmark for comparison since it is the most commonly employed estimation technique. Yet OLS is known to be suspect with illconditioned data. Specifically, the OLS estimator, $\hat{\beta}$, diverges farther from the true population parameter, β , as the vector of regressors becomes less orthogonal. The primary manifestation of such ill-conditioning with OLS is on the individual parameter estimates and their respective variances.

The ridge estimator:

$$\beta(k) = (X'X + k\ I)^{-1}\ X'\ Y \text{ for } o \leq k \leq 1 \qquad (1)$$

employs the dimensionless parameter k and is a biased estimator. The ridge estimator is similar to the OLS estimator, $\hat{\beta}$, except that the main diagonal of the correlation matrix is augmented prior to inverting by a small positive quantity, k, where k is an index of bias. RR provides estimates that have lower variance and possible lower mean square error than $\hat{\beta}$. In fact, Hoerl and Kennard (1970) prove that there always is a $k > 0$ such that the variance plus the squared bias of $\beta(k)$ is less than the variance plus the squared bias of the OLS estimator. When k is sufficiently small, the variance decreases faster than the increase in the square of the bias. Thus as k increases from zero, the mean square error initially declines and then later increases. By accepting no more bias than necessary to stabilize the coefficients, the effect of the increased bias is more than offset by the reduced variance, generating a net reduction in the mean square error. Estimates of parameters that have a lower variance deserve consideration in model building where the major concern is to investigate the separate effect of each of the potentially collinear predictor variables in the specification.

The ridge estimator, founded on the hypothesis that the regression coefficients, other than the constant term, are zero, stochastically shrinks the estimates toward that target. Hence, the bias introduced is not an arbitrary, uncontrolled bias, but rather, a bias toward the hypothesis that the regression coefficients are zero. This directional influence is fundamentally consistent with the philosophy of predictor variable retention within a specified model. The burden of proof remains with each regressor to demonstrate that it does make a significant contribution by distinguishing its estimated coefficient sufficiently from zero.

The use of ridge regression necessitates the determination of an appropriate ridge constant, k. In reality the optimal k value is a function of the true parameter, β , and consequently cannot be established with certainty. Numerous mechanical techniques exist for establishing an acceptable k value and much controversy exists in the literature concerning k selection (Hoerl and Kennard 1970; Vinod 1978). This study employs the ridge trace estimate of the ridge constant as initially advocated by Hoerl and Kennard. The trace was applied independently to each of the seven annual equations with the resulting k values ranging from 0.04 to 0.18.

Latent root regression can be viewed as a modified least squares technique when both estimators are represented as a weighted linear combination of the associated latent vectors of the matrix of augmented correlation coefficients. Following the notation adopted by Webster et al (1974) and Sharma and James (1981)

each estimate $$\beta = -\left[\sum_{j=o}^{p} w_j \cdot \gamma_{oj} \cdot \lambda_j^{-1} \cdot \gamma_j^{o} \Big/ \sum_{j=o}^{p} w_j \cdot \gamma_{oj}^{2} \cdot \lambda_j^{-1}\right] \qquad (2)$$

where:

- p = the number of predictor variables
- λj = the latent roots of the augmented correlation matrix for $j = o,1,\ldots,p$ and ordered such that $\lambda_o \leq \lambda_1 \leq \ldots \leq \lambda p$
- γj = the corresponding latent vectors
- γ_{oj} = the first element of the jth vector
- γ_j^{o} = the jth vector without the first element, and
- w_j = 0,1 dummy deletion variables.

The OLS estimator has all $w_j = 1$ in equation (2) and hence contains all latent vectors regardless of their degree of collinearity or predictive ability. In contrast, the LRR estimator will set $w_j = 0$ in equation (2) for any identified vectors associated with "non-predictive singularities." Thus it retains only predictive singular and non-singular vectors in combination.

The latent root estimator has also been compared to the ridge estimator since both are biased estimation procedures (Hawkins 1975). Sharma and James (1981) note that the latent root estimator can be thought of as the ridge estimator with non-uniform k values i.e., k = 0 for predictive latent vectors (this would completely retain their influence) and $k = \infty$ for non-predictive latent vectors (this would completely eliminate their influence). However, since RR employs a uniform k value, it like OLS, does not distinguish between predictive and non-predictive singularities and thus becomes a weighted linear combination of all vectors.

In LRR the identification of any near singularities present and their associated predictive natures involves the magnitudes of the latent roots, λ_j, and associated latent vectors, γ_j, of the augmented correlation matrix. The (p + 1) latent vectors define a set of mutually orthogonal axes Z_o, Z_1, ..., Z_p that are an alternative to the (p + 1) dimensional Euclidean space defined by the dependent variable, Y, and the p predictor variables, X_1, ..., X_p. The jth latent root, λ_j, measures the dispersion of the n data observations in the direction defined by the jth latent vector i.e., the Z_j axis. A "small" λ_j indicates there is little variability of data points in the Z_j direction and hence a high interdependence among the associated predictor variables. Should the "small" λ_j be affiliated with a latent vector that indicates Z_j is nearly orthogonal to the axis of the criterion variable, i.e., "small" γ_{0j}, then the near singularity can be labeled nonpredictive as the collinearity present is simply among the predictor variables with little or no spillover impact on the dependent variable. In such a case, that latent vector can be deleted so as to remove the unwanted effects of the near singularity from the parameter estimates involved in the singularity without major impact on the remaining estimates. The issue of just what constitutes "small" λ_j and γ_{0j} is not definitely resolved. Gunst et al (1976) defend a rule of thumb of λ_j of .3 or less coupled with a γ_{0j} of .1 or less, as indicators of nonpredictive singularity. The same rule of thumb is used in this analysis.

Results

Enforcing the identical specification of the model from year to year and across estimation techniques enables comparison of the temporal stability of the resulting coefficients with the OLS estimates serving as a benchmark. The comparison reveals a number of interesting differences.

1. In terms of incorrectly signed regression coefficients, both OLS and RR yield six estimates and LRR yields eight estimates that violate our a priori expectations. Interestingly, OLS and LRR failed to pick up the proper directional impact of the key variable, TARGET, that specifies the relative size of the true target market for sales of household furnishings. These same estimates under RR were all properly signed.

2. Relative to the number of statistically significant and appropriately signed coefficients, the ridge and latent root estimates provided very improved results. We recognize that the precise distribution of the ridge estimator is unknown. Several simulation studies suggest that, for modest values of k, any departure from the t-distribution will likely be minimal (Curcio et al 1984). Obenchain (1977) contends that the ridge estimator provides comparable F and t ratios as does OLS for hypothesis testing. As yet, an exact distributional theory and properties have not been derived for the LRR estimator since the latent roots and latent vectors are random variables with complex multivariate distributions. To employ the traditional F and t statistics, one must presume an appropriate underlying distribution. Webster, Gunst and Mason (1974) conducted simulation tests with generated data and observed an approximate F-distribution in the presence of vector deletion. Given the favorable results of Webster et al, F and t-ratios for LRR are interpreted cautiously. Only seventeen of forty-two OLS estimates were significant at the five percent level for a one-tailed test. In contrast, twenty four coefficients convincingly differentiated themselves from zero under ridge in spite of the bias which propels them toward zero, while twenty-five estimates were statistically significant under LRR. The increased significance for the ridge estimates and latent root is achieved through a substantial reduction in the individual coefficient variances.

3. Table 1 reports each technique's coefficient of variation to facilitate the comparison of temporal stability of the estimates. The ridge estimates appear, at first glance, to offer only mixed results regarding relative stability of the coefficients over time. However, for EBI and HH which are statistically significant under all three procedures, the coefficient of variation is lowest for ridge estimates. While the coefficient of variation for TARGET is lowest under LRR, the LRR estimates of TARGET were consistently inappropriately signed. Hence, even for TARGET, the ridge estimates offer greater stability over time and are properly signed. Also, as the population ages and consequently makes the transition from the classification of YOUNG to that of TARGET, the combined impact of a one percentage point reduction in YOUNG and a like increase in TARGET was found to be substantively more stable over time under RR.

TABLE 1

COMPARISON OF RELATIVE STABILITY OF
ESTIMATES ACROSS TECHNIQUES
σ/μ FOR 1976 THROUGH 1982

	OLS	RR	LRR	Technique With Least Relative Dispersion	Mean Coefficient for Selected Technique
UNEMP	.878	3.351	.863	LRR	-1.412
YOUNG	.268	.561	.369	OLS	-1.463
TARGET	1.846	.690	.590	RIDGE	1.946
OLD	.554	4.196	.592	OLS	-1.094
EBI	.209	.172	.207	RIDGE	.00840
HH	.0632	.0478	.0621	RIDGE	.3107
Combined Impact of Transition From Young to Target	.953	.226	1.213	RIDGE	3.338
UNEMPL 80-82	.211	.087	.238	RIDGE	-2.067

Furthermore, if one posits a structural change from the expansion years of 1976 through 1979 to the recession years of 1980 through 1982, one may expect a substantially different role for UNEMP in the model. While OLS, RR and LRR pick up on this with very different coefficient estimates for the recent period, the temporal stability of the recession years' coefficient is clearly improved with ridge.

4. The relative ability of the OLS, RR and LRR models to forecast may be very distorted by a simple comparison of their respective R^2 values. While the average multiple correlation coefficient does decline from about .96 for OLS and LRR to approximately .78 for ridge, this comparison, based entirely upon the estimation period, may not be indicative of the techniques' relative predictive capability beyond that period.

   To test each technique's ability to forecast furniture sales a year beyond the estimation period, the regression coefficients estimated using a given year's data set were employed employed to project the dollar sales volume for the subsequent year. The mean forecast for each technique was then compared to the mean actual sales for that year. Six such annual forecast comparisons were possible over the seven year data period. In three of the six years (1977, 1978, and 1980) the mean predicted value of the criterion variable is closer to the mean actual value for RR than for OLS or LRR. For 1979, the forecasts were nearly identical for OLS, LRR and RR. In 1982, the closest average is obtained via LRR while RR and OLS are nearly indistinguishable. Only for 1981 did the least squares prediction prove more accurate. In all cases, the dispersion of the forecast distribution is less with ridge than with OLS or LRR. Thus, in spite of lower R^2, the true predictive ability of RR beyond the estimation period is, on the whole, better than LRR and OLS.

Conclusion and Summary

It has been demonstrated in this article that the temporal stability of parameter estimates through RR is better than or at least as good as OLS and LRR in the presence of ill-conditioned data. This is particularly true for coefficients of those variables with a substantial impact on variance explanation. RR estimates also result in a reduction in the incidence of improperly signed parameters and an increase in the number of statistically significant coefficients. Hence, in this model, the ridge technique was better able to separate the influences of the regressor variables in spite of their interdependence. This permitted improved economic inferences and better detection of any underlying coefficient stability over time. Additionally, despite lower R^2 values for RR, the package predictive ability was not in any way sacrificed.

REFERENCES

Belsley, D.A., Kuh, E., & Welsch, R. Regression Diagnostics: Identifying Influential Data and Sources of Collinearity. New York: John Wiley and Sons, 1980.

Curcio, R.J., P. Marquette & J. Webb. Improved Prediction of Real Estate Values Through the Use of Ridge Regression. Property Tax Journal, June 1984, 107-121.

Erickson, G.M. Using Ridge Regression to Estimate Directly Lagged Effects in Marketing. Journal of the American Statistical Association, 1981, 76, 766-773.

Farrar, D.E., & Glauber, R.R. Multicollinearity in Regression Analysis: The Problem Revisited. The Review of Economics and Statistics, 1967, 49, 92-107.

Gunst, R.F., Webster, J.R., & Mason, R.L. A Comparison of Least Squares and Latent Root Regression Estimators. Technometrics, 1976, 18, 75-83.

Hawkins, D.M. On the Investigation of Alternative Regressions by Principal Component Analysis. Applied Statistics, 1973, 22, 275-286.

Hawkins, D.M. Relations Between Ridge Regression and Eigenanalysis of the Augmented Correlation Matrix. Technometrics, 1975, 17, 477-480.

Hoerl, A.E., & Kennard, R.W. Ridge Regression: Biased Estimation for Non-Orthogonal Problems and Applications to Non-Orthogonal Problems. Technometrics, 1970, 12, 55-82.

Mahajan, Vijay, Jain, A.K., & Bergier, M. Parameter Estimation in Marketing Models in the Presence of Multicollinearity: An Application of Ridge Regression. Journal of Marketing Research, 1977, 14, 586-591.

Obenchain, R.L. Classical F Tests and Confidence Regions for Ridge Regression. Technometrics, 1977, 19, 4, 429-439.

Sharma, Subhash & James, W.L. Latent Root Regression: An Alternative Procedure for Estimating Parameters in the Presence of Multicollinearity. Journal of Marketing Research, 1981, 18, 154-161.

Thisted, R.A., & Morris, C.N. Theoretical Results for Adaptive Ordinary Ridge Regression Estimators. Technical Report 94, University of Chicago, 1980.

Vinod, H.D. A Survey of Ridge Regression and Related Techniques for Improvements Over Ordinary Least Squares. Review of Economics and Statistics, 1978, 60, 121-131.

Webster, J.R., Gunst, R.F., & Mason, R.L. Latent Root Regression Analysis. Technometrics, 1974, 16, 513-522.

SALES MANAGEMENT
AND
INDUSTRIAL MARKETING

PURCHASING TASKS: A CLASSIFICATION SCHEMATA

George W. Wynn, University of Arkansas
David P. Campbell, University of Arkansas

Abstract

In a 1973 article, Kotler outlined and explained an all inclusive set of demand situations or "demand states" of continuous order which the marketing manager may face. These states of demand were: Negative, No, Latent, Faltering, Irregular, Full, Overfull, and Unwholesome. Using parallel terminology, this article shows how Kotler's construct can be broadened to include the states of purchasing management.

The broadening of Kotler's concept to application on both sides of the transaction may be useful in the development of primary marketing theory.

Organizational Purchasing Tasks: A Classification Schemata

There has been a pronounced lack of theory development to explain the relationship between organizational purchasing and organizational selling (Johnson 1981), even though the organizational purchasing has long been accepted as a part of the marketing discipline (Kotler and Levy 1973; Hunt 1976a; 1976b). As might be expected, various constructs (strategies, concepts, models) have been offered over the years to help the industrial purchasing manager to achieve the objectives of the buying organization (Kotler and Levy 1973). In order to aid in the study of purchasing and to aid in the primary development of purchasing theory, as a subset of marketing, it would be helpful if certain of these constructs could be shown to be common to both buyers and sellers as exchanges are attempted. Further, if a classification scheme capable of organizing purchasing phenomena into meaningful classes or groups could be developed, primary purchasing theory might well begin to advance.

A good starting place for such a classification scheme may be found in Kotler's article "The Major Tasks of Marketing Management" (1973), in which Kotler outlines and explains an all-inclusive set of demand situations or "demand states" of fairly continuous order which the marketing manager may face. In his article Kotler develops the tasks arising from those states. The present study is intended to demonstrate how Kotler's construct can be broadened to include the states of purchasing management and how the use of "purchasing states" can be developed into a standardized classification system for viewing the tasks of purchasing management.

It will be shown how Kotler's (1973) observation that "...The task of marketing management is ... to regulate the level, timing, and character of demand..." can readily be applied to the purchasing professional, who must regulate the level, timing, and character of supply in terms of his or her organization's overall objectives. This study will show how Kotler's logic and exposition can be broadened quite readily to describe the states and tasks of purchasing management, as well as to provide a scheme for classifying these states and tasks. This classification schemata may aid in our understanding even though the states may not "match" exactly.

Theoretical Aspects

If any given construct is to be considered a true marketing construct rather that just a selling or a buying construct, it must be capable of being shown to include both sides of an exchange. In other words, because of the superficial differences between buying and selling, a construct which can be shown to include both sides can be more comfortably included as a theoretical aspect of marketing (Nagel 1961). The theoretical aspect itself then becomes more useful to practitioners (Robinson 1967, p.XI), especially as the construct becomes empirically testable (Hunt 1976a). The underlying regularities explained by a construct valid on both sides of an exchange would assist in the search for the science of marketing (Hunt 1976a).

Although Kotler's group classification schemata lacks the requisite of a lawlike generalization and therefore cannot be considered to be a purchasing theory (Hunt 1971; 1976a), it should nevertheless prove valuable as representing an early step in theorizing. The classification schemata proposed in the present study will hopefully encourage other thought and work into the theoretical aspects of purchasing as the schemata serves as a means of organizing the observed purchasing phenomena (Hunt 1976a).

Demand/Supply States

In Table I and Table II, Kotler's (1973) listing of demand states has here been changed to "Demand/Supply States" in order to demonstrate the applicability of his concept to both sides of an exchange. Table II can be seen as a rightward extension of Table I. Each of the "Supply States" with its respective "Purchasing Task" is explained and illustrated below with examples drawn from both the goods and services types of organizations. The exchanges involved can include anything of value and are not limited to money transactions (Kotler and Levy 1969; Kotler 1972). The organizations served may be either profit or non-profit.

INSERT TABLE I AND TABLE II HERE

NEGATIVE SUPPLY - A state in which there is not only a lack of current supply available, but there is also a demand for the purchaser's already acquired supplies. This state will result not only in an inability of a firm to purchase more of the products, but the purchasing firm will experience internal pressure to dispose of on-hand supplies at a profit. If the purchasing manager is in a strictly routinized position, the manager is limited to the procurement of additional supplies on those supplies one specified by other members of the firm. However, if the purchasing manager is following the purchasing and materials management concept, as well as considering the total strategic view, the scarce supplies might actually be resold after some type of an alternative supply had been arranged.

The supply state of negative supply can be countered by "Defensive Purchasing," which consists of two major activities: the refusal to sell on-hand supplies, and the finding of alternative goods for purchase by the buyer's firm and its competitors.

If suitable substitutes can be found for purchase by the firm's competitors, the demand for on-hand supplies will be lessened and suitable substitutes may be found for the firm's own needs.

An example - An electronics manufacturer needed platinum in the production process and had sufficient stock on hand to last for several production periods. Due to an international situation, platinum became less available and, as a result of a constant aggregate demand and a competitive market, it became much more costly (Ferguson and Gould 1980). Thus, the opportunity existed for the firm to sell its on-hand supplies at a good profit. Such a sale, however, would have crippled the production process. The firm purchased the patent for an alternative process which substituted iridium, which was more readily available than platinum. While the new process was being set in place, the firm continued to use its on-hand supply of platinum and then changed to the iridium process. Excess supplies of platinum were sold on the open market. Some competitive firms also changed to the iridium process and paid royalties to the electronics firm for the right to use the process.

NO SUPPLY - A state in which no suppliers are interested in supplying a particular product. The purchasing firm must create a supply where none existed before. Two likely causes for the suppliers' lack of interest is their lack of knowledge of a need for their products and their perception that acceptable profit can not be made by supplying the needed good.

No supply is countered by "Gestative Purchasing." One way for the purchasing firm to overcome a lack of knowledge on the part of the supplier is to provide information to prospective suppliers (Alderson 1965). In addition to letting its own needs be known, the purchasing firm must also show the supplying firm how the potential supplier's needs can be served by effecting an exchange. Given the capability of the supplying firm to supply the needed product, an exchange is likely once the mutual benefit of the exchange is established or the "seed" has been planted (Emerson 1981).

An example - A small, speciality steel mill had a need for scrap metal high in titanium but low in beryllium. The presence of too much beryllium would make the production process of the speciality mill prohibitively expensive. The purchasing department of the steel mill contacted various scrap metal dealers to inform them of the need for this special scrap requirement. It was discovered that the scrap dealers were aware of the mill's requirements but did not choose to fill them. The scrap dealers felt that it would not be worthwhile for them unless they could be assured of orders in sufficient quantity. The purchaser offered to select one dealer and assured that dealer that all of the mill's requirements for the special scrap would be bought from the dealer selected. After a dealer was selected, an appropriate quantity/price contract was signed and deliveries began. Thus the purchasing department of the mill planted and developed the seeds to help create their own supply.

LATENT SUPPLY - A state in which the potential suppliers are not aware of the firm's need for a particular product in a particular form.

The task facing the purchaser in the stage of latent supply is to develop a supply through "Developmental Purchasing." The potential purchaser needs to locate and acquire the desired products, even though they are not yet available or are not available in the form or assortment that the purchaser desires. The task of the potential purchaser is to entice a supplier to develop the particular form of the product or assortment of products (Alderson 1965) - thus, "developmental purchasing."

An example - Jai-alai is a very popular parimutual game in the state of Florida. An individual wanted to open a new jai-alai fronton in the Miami, Florida, area. No land owners were aware of the need for land for this purpose because, under current Florida law, no new parimutual operations were allowed in the Miami market. However, the potential purchaser felt that he could cause a change in State laws so that the contemplated fronton would be permitted. The fronton developer contacted five local real estate brokers and made known his need for land of a particular size, location, and so on. One of the developer's key financial requirements was to keep the initial capital investment as low as possible. Within two weeks, one of the brokers located a suitable parcel of land, the owner of which was amenable to a long-term lease, obviating the need for the fronton developer to invest any down payment in the land. By spreading information of his need, the fronton developer "developed" his supply. Before efforts to change the State laws could be initiated, a situation developed linking jai-alai to illegal activities. Because of this situation, the developer was not successful in getting legislative relief and the lease was never signed.

FALTERING SUPPLY- A state in which the overall supply of a product is less than its former level and can be expected to decline even further with little or no hope for the supply of the product to reach production levels of the past. In this situation, a way must be found to revitalize supply.

When this state is recognized, the astute purchasing professional engages in "Alternative Purchasing." The purchasing function of the organization must recognize the state of faltering supply and analyze the actual needs of the organization. This recognition and analysis probably will result in in the organization's redefining or revising its needs to get them more into agreement with what is now available and what promises to be available in the future. Such revision of needs may well change the product that had been purchased in the past; thus alternative purchasing will be employed.

An example - Essentially all electrical transformers contain oil to eliminate arcing or burning of various parts of the transformer while it is in operation. It is not uncommon for large transformers to contain more than 5,000 gallons of oil. These transformer oils must be very pure and at one time were produced by an acid treating process which had a potentially harmful effect on the environment by producing large amounts of chemical sludge. This process was very costly and because of the environmental concerns of the chemical sludge, only a limited amount of the pure oil could be produced. Thus, the transformer manufacturers were faced with a faltering supply.

After considering the total process of transformer operation, the transformer manufacturers decided that a process of neutralizing the harmful components instead of removing them through acid treating would solve the problem posed by the faltering supply of acid treated oil. The major oil companies already had the technology of treating oils with hydrogen or "hydrofining" them to neutralize harmful components. By working closely with the major oil companies, the electrical transformer industry was able to use an alternative product that was more available and less costly as compared to the former acid treated oils.

IRREGULAR SUPPLY - A state in which the supply of a product is marked by seasonal fluctuations or other supply irregularities that follow a particular pattern. This irregular supply situation is often manifested by periodic non-availability of the product or by wide fluctuations in the price of the product. Purchasing management of the organization must synchronize the supply with the demands of their firm.

In the state of irregular supply, the organizational purchasing department must find ways to smooth the fluctuations in the availability and/or the price of the product. The solution to the problem of irregular supply can often be accomplished by "Forward Purchasing" (Tersine and Grasso 1978).

An example - A copper pipe and plumbing supply factory needed large amounts of copper for its production process. If the purchasing department of the factory only purchased the copper as needed, the price of the copper, and thus the cost of production, would fluctuate widely due to the variations in the commodity market. To overcome or mitigate these variations, purchasing management of the plumbing supply factory became involved in the copper commodities market. By forward purchasing (buying futures contracts) in the commodities market, the factory was able to dampen the effects of the wide swings in the spot prices of copper. If the needs of the firm exceeded the forecasting, the copper was always available at spot prices.

FULL SUPPLY - A state in which the current level and timing of supply is equal to the needs of the firm.

For most industries and purchasing departments, this is the most desirable supply state. The task facing the organizational purchaser in the full supply state is that of "Maintenance Purchasing." However, the purchasing professional must be alert to the possible changes from this supply state. Any change from full supply is likely to indicate a potentially adverse situation.

This state feels, and is, comfortable, a situation that can easily lead to complacency. Environmental forces can and do change very quickly due to internal and external technological changes, external market forces, general economic conditions or any number of other factors (Kotler 1980; Pride and Ferrell 1985).

An example - In the early 1960's in the United States, essentially all cardboard milk cartons were waterproofed by a petroleum wax coating. This technology had existed for a number of years; the supply and demand were essentially balanced. The technology was not totally favorable for consumers because wax would often flake off the cardboard, causing the carton to leak. About 1963, a process was developed to moisture -proof milk cartons using a polyethylene coating. Within 18 months, the major part of the industry had switched to this new process. The switch in processes which involved so many industries (dairy, carton manufacturers, wax suppliers, polyethylene suppliers, suppliers of equipment to apply the polyethylene, etc.) caused wide short-term fluctuations in supply, demand, prices and availability of supplies. The professional purchasing department that was alert to change and practicing good "maintenance purchasing" by being alert to actual and potential changes in its environment suffered fewer problems than other more complacent organizations.

OVERFULL SUPPLY - A purchasing state in which the supply of the product exceeds that which the industrial organization wishes to purchase. Overfull supply situations may be indicated by the drastic systematic lowering of the price of the product, either through deep discounts or actual price reductions. A common symptom of overfull supply is the purchasing organization's being inundated with potential suppliers. On the surface, the overfull supply situation appears to be an ideal situation for the purchasing organization. However, this may not be the case. The overabundance of the product itself may be caused by a lessening of demand by the competitors of the purchasing firm. This, in turn, may be an indication of a change in technologies by the purchasing firm's competitors. The competitors' embracing of a new technology may put the competitors in a more favorable position than the purchasing firm itself. Another danger of the overfull supply state is that the overfull supply and lowering of prices by the suppliers may serve to put the suppliers in an unprofitable situation. Thus, the suppliers may discontinue the unprofitable product or even go out of business altogether. These situations could lead to shortages of the product, possible negative, faltering, or irregular supply states, and higher prices for the product.

On the other hand, if overabundance is due to an increase in the number of suppliers in the field, this may be an indication that the profits of the suppliers are so high that a large number of additional suppliers have been attracted into the field (Hogendorn 1974). If this is the case, it may be an excellent indicator that the purchasing firm will be able to spend less for the product in the future than it had spent in the past.

In the overfull supply state, the indicated course for the purchasing firm is to undertake "Reduction Purchasing." Reduction purchasing is the conscious decreasing or reduction of requirements or lessening of price paid for a product by a particular organization due to overabundance of the product. If the overabundance of product is a harbinger of technological changes, the purchasing firm must look to its own technology to assure future competitiveness in the marketplace. If the overabundance is due to an increased number of suppliers more stringent negotiation and reduction in the prices the purchasing firm pays for the product should result.

An example - A small manufacturing firm had been using a brass sub-assembly in several of the products that it manufactured. The purchasing department noticed that in recent months, it had been receiving more and more inquiries from different firms about the possibility of supplying these brass sub-assemblies. The purchasing department alerted the engineering staff and other members of the buying center of this increase in solicitation. As a result of the alert, it was determined that an aluminum sub-assembly was being used by some of the purchasing firm's competitors. Substitution of aluminum for brass would not only save money for the customers of the purchasing firm, but the profit margin of the purchasing firm could be increased as well. By practicing reduction purchasing, the professional purchasing group of the firm not only increased the firm's profit margin, it made it more competitive in the marketplace.

UNWHOLESOME SUPPLY - A state in which any positive level of supply is considered to be detrimental to the purchasing firm, its supplying firms, or to society in general. Therefore, the task of the purchasing firm, often in conjunction with other firms, suppliers, or society, is to destroy supply. The purchasing firm must then "cease purchasing." The professional purchaser must do everything possible to eliminate this supply for the good of the firm and/or society.

In the state of unwholesome supply, the purchasing firm is certain that it must not acquire the product because of undesirable qualities associated with either the product or with the supplier. The undesirable qualities could be financial, legal, moral, sociological or any combination of these. If no alternatives are found for this state of unwholesome supply, the purchasing firm has no choice but to cease purchasing.

An example - A road-oil contractor gathered used oils to spread on dirt roads for dust and weather control. The used oils were a mixture of motor oils gathered from service stations and industrial oils gathered from manufacturing plants located in the area. Through chemical testing it was discovered that the used oils from the industrial plants contained poisonous and carcenogenic components, such as PCB's, lead, cadmium and zinc. The road-oil contractor was unable to gather sufficient volume of used motor oils from service stations. Hence, the contractor had no alternative but to respond to this unwholesome state by "cease purchasing" and liquidation of this business. While this appears to be a drastic option, the alternative of endangering public health and violation of both federal and state laws would have been even worse.

Implications for Research

Kotler's recognition of the "states", broadened to the "Demand/Supply States" by this article, can now be seen to have application on both sides of the marketing exchange. This broadening into a group classification schemata for purchasing will provide the marketing/purchasing theorist with a starting place for work towards a "theory of purchasing".

The symetrical purchasing/marketing paradigm can be tested by identifying a situation which can be described by one of the classifications discussed above and then discovering if purchasers actually behave as postulated. For instance, at one time copper experienced a large upsurge in price. Pennies were worth more as copper than they were worth as coin. Organizations that had significant quantities of the metal on hand were subjected to market forces that have been described as "negative supply". How then, did the organizations behave? Did they actually practice something that could be called "defensive purchasing"? If not, why not? Were idiosyncratic forces at work in the copper situation, or can the purchasers' behaviors be generalized?

Other situations can be found that fit the descriptions of the other purchasing states. Parallel investigations into the behavior of purchasers can be made to see if the purchasers behaved as posited here.

Summary and Conclusions

This classification will enable the purchasing manager to view his or her tasks in a different light. One of the basic roles of marketing, the matching of supply and demand, will be facilitated as each party to any exchange comes to the realization of either the appropriate demand or supply state (Arndt 1978).

The professional marketer must regulate the level, timing, and character of demand for a product (Kotler 1973). This task is not unlike the professional purchasing manager who must regulate the level, timing, and character of supply in terms of the organization's overall objectives. Negative supply is countered by defensive purchasing; no supply is countered by gestative purchasing; latent supply requires developmental purchasing; faltering supply must be revitalized; irregular supply requires forward purchasing; full supply requires maintenance purchasing; overfull supply requires reduction purchasing; unwholesome supply requires a cessation of purchasing. It is recognized that these supply states may not be as continuously ordered as even Kotler's demand states. Some supply states concern the ratio of current supply to current demand while some other supply states may concern changes in that ratio.

The appropriate buyer behavior is not always a reciprocal of the appropriate seller behavior if the individual demand / supply states are considered. Wynn and Campbell (1984) show how the states of demand and the states of supply can all be grouped into three discrete categories: Underdemand / Oversupply, Adequate Demand / Adequate Supply, and Overdemand / Undersupply. Once these states have been grouped, various exchange situations within the categories, each containing a particular demand state and a particular supply state can be considered.

Recognition by the purchasing executive of the purchasing state in which the firm finds itself, coupled with the recognition of the state in which the selling firm finds itself, can provide the purchaser with valuable information. That information may have implications affecting both the immediate purchase and the long-range strategy of the firm. For example, recognition of the purchasing states under which the purchaser and seller are operating may lead to behavioral changes on the part of the actors to lessen channel conflict (Rosenberg and Campbell 1984, 1985). To maximize the value of the known and implied information gained by recognition of the demand and/or supply state, this information must be included in the Marketing Information System in use in the firm.

Purchasing organizations now often consist of a number of people assigned to a job by product line and/or tasks performed (Hutt and Speh 1981; Lee and Dobler 1977). Since supply situations may call for different actions and psychological concepts, purchasing task specialization may be redesigned to reflect these purchasing states. This supply state recognition and possible specialization may aid purchasers and ultimately marketers to better understand their own tasks and hopefully facilitate any contemplated exchange.

References

References available upon request.

TABLE ONE
THE BASIC MARKETING TASKS

Demand State	Marketing Task	Formal Marketing Name
I. Negative	Disabuse demand	Conversional marketing
II. No	Create demand	Stimulational marketing
III. Latent	Develop demand	Developmental marketing
IV. Faltering	Revitalize demand	Remarketing
V. Irregular	Synchronize demand	Synchromarketing
VI. Full	Maintain demand	Maintenance marketing
VII. Overfull	Reduce demand	Demarketing
VIII. Unwholesome	Destroy demand	Countermarketing

Source: Kotler, Philip (1973), "The Major Tasks of Marketing Management," Journal of Marketing, 37 (October), 43.

TABLE TWO
THE BASIC PURCHASING TASKS

Supply State	Purchasing Task	Formal Purchasing Name
I. Negative	Defend supply	Defensive purchasing
II. No	Create supply	Gestative purchasing
III. Latent	Develop supply	Developmental purchasing
IV. Faltering	Revitalize supply	Alternative purchasing
V. Irregular	Synchronize supply	Forward purchasing
VI. Full	Maintain supply	Maintenance purchasing
VII. Overfull	Reduce supply	Reduction purchasing
VIII. Unwholesome	Destroy supply	Cease purchasing

ASSESSING ATTITUDINAL CONGRUENCE IN THE BUYING CENTER

Paul D. Boughton, Saint Louis University

Abstract

Although the concept of multi-person buying centers is widely recognized, industrial marketing researchers still rely primarily on survey data supplied by a single company informant. This paper reports on a study which shows that buying center participants have varying beliefs about variables which are central to a purchase decision: This study lends added weight to the importance of studying more than one informant per company when strategy is based on understanding buyer behavior.

Introduction

It has become widely accepted in the current stream of marketing literature that most industrial purchasing is the result of multi-person decision-making. Nicosia & Wind (1977) have noted the diffusion of the buying process throughout the organization and have argued that the focus of observation and measurement should be on the buying center and not the purchasing manager. This theme has been echoed by many authors (Spekman and Stern 1979, Johnston 1981, Moriarity 1983, Silk & Kalwani 1982), and has become recognized as the sine qua non for understanding industrial buying behavior in today's complex environment. Thus, it is strongly believed, that industrial firms wishing to define customer characteristics, or market segments, based upon customer surveys, should use the buying center (i.e. all those individuals who participate in the purchase decision process) as the unit of analysis.

A Review of the Issue

Buying centers typically contain decision participants from different functional areas and organizational levels. Sheth (1973) hypothesized that such a diversity of decision participants would bring differential expectations to the purchasing decision process, leading to intra-group conflict. Both Moriarity (1983) and Choffrey and Lilien (1980) found that across firms, decision participants in different functional areas (i.e. engineering, production, finance, purchasing, etc.) evaluate product offerings on the basis of different criteria and have different views about the importance of various attributes. While these studies aggregated data, by function, across firms, it is reasonable to assume that such differences must exist within buying centers, as well as across buying centers. Thus, segmentation schemes based on product attributes or product benefits, will differ, depending upon what functions are represented. Phillips (1981), in a study of key decision-makers in wholesale distribution companies, found a considerable lack of agreement on information provided by multiple respondents within the same firm. He concluded that "... no single informant is likely to be found who is the 'most reliable informant' on all issues," and that a single informant approach to the measurement of organizational characteristics should be avoided due to an inability to make any assessment of convergent or discriminant validity.

While the buying center concept has become accepted in the academic community, there is little evidence that marketing researchers in industrial firms have adopted the practice of including multiple members of sampled firms in their marketing studies. Instead, they continue to typically sample only a single key informant in each firm and rely on survey responses by this one individual to represent the firm. Such an approach, however, is taken at the risk that the single respondent does not truly represent the opinions, attitudes, or knowledge of the buying center as a whole, and therefore the provided information may be misleading and/or inadequate.

There are perhaps a number of reasons why the buying center concept has not caught on. Methodological stumbling blocks, such as collecting behaviorial/attitudinal data from many decision participants, and the analysis of such data (attribution of influence) are significant. The extra expense and time required for surveying buying centers in lieu of a single key informant per firm, is also significant. Moriarity (1983) has shown that a single stage snowball sample (combination telephone/mail survey), which average 3.5 respondents per firm, was 35% more expensive than a traditional single informant approach. An exhaustive snowball sample, 6.5 respondents per firm, 82% more expensive. Such a cost differential can only be justified when the researcher is convinced that interviewing multiple respondents will lead, not only to a more reliable understanding of customer behavior, but more importantly, to different strategy. In short, the value of the information obtained from multiple informants must exceed the cost.

The crux of the issue seems to be to what extent members of the same buying center hold similar or congruent beliefs regarding issues relevant to the development of marketing strategy. If beliefs are similar (congruent) obtaining survey responses from a single informant may well be justified. If belief, are dissimilar (incongruent), then clearly there is a need to obtain information from more than one buying center member.

The existing studies, while few in number, provide some evidence of buying center incongruency. Phillip's (1981), however, points out that there is still relatively little documentation on this subject and thus a continuing need to examine evidence related to it.

The Study

The purpose of this article is to present the results of a study which will shed further light on the question of buying center congruency.

The data for this analysis has been provided by a major telecommunications company. The original study was conducted for the purpose of constructing market segments of small to medium size business firms based on responses to a series of belief statements.

The purchase of telecommunications equipment and services represents a large capital expenditure for companies in the small to medium size range. The extent of diversity of opinion with respect to perceptions and beliefs about their company's needs and about potential suppliers, are factors that affect the final purchase decision, and in turn affects the marketing strategy employed by the supplying firms. The research question of interest is thus, to what extent does attitudinal congruency exist within the buying center?

Sample

A random sample of small to medium size business firms, in five midwestern states, was obtained from a company database (customer and non-customer). Company size was defined by number of telephone stations. Companies in the database were partitioned into three station size groups: 21-40; 41 to 100; and 101-500. A proportionate stratified random sample of firms was chosen from the database using a random number generator. Through means of a telephone screening procedure referred to as snowball sampling, the members of the buying team in each firm, associated with telecommunications equipment, were identified and contacted for participation in the study. The initial contact was with the individual who had supervisory responsibility over the firm's telephone system. This person was asked to provide the names and titles of other people who would be involved in the decision-making process related to the purchase or lease of a new telephone system. In this manner, members of the center of each company was identified, contacted, and recruited for participation in the study. To be qualified a respondent had to be involved in at least one of the following stages of the decision-making process:

1. identifying the need for a new telecommunications system and getting the process started.

2. determining the firm's specifications which must be met by the new equipment.

3. making a recommendation after evaluating alternative suppliers.

4. the final supplier selection and authorization.

In total 2570 individuals representing 1126 firms were recruited for participation in the study. Completed questionnaires were received from 1334 respondents, representing 732 firms. The breakdown of responding firms by size is as follows:

Station Size	Responding Firms
21 - 40	353
41 - 100	240
101 - 500	139
TOTAL	732

The use of the snowball sampling technique to identify multiple members of a buying center follows well established precedent (Spekman and Stern 1979, Johnston 1981, Moriarty 1983).

Method

Individuals who agreed to participate in the study were mailed a questionnaire. Respondents were presented with 55 statements concerning beliefs and perceptions about the telecommunications industry in general, and about industry suppliers in particular. A seven point Likert type scale was used to measure the extent of agreement/disagreement to the statements. A hierarchial cluster analysis was performed which grouped respondents into five homogeneous segments based on their responses to the belief statements. Two constructs, price and service were found to be determinants of segment assignment. A sample of belief statements representing these constructs are shown below:

1) Price: "Price is really not an issue when it come to communication systems."
"It is important to get the job done quickly regardless of price."
"____cannot compete with other vendors on price."
"____equipment and systems are too expensive for me."
"I am able to save money by shopping around."

2) Service: "Lack of responsiveness is the primary reason why I would switch communication vendors."
"Quick service is what I need the most."
"I trust the expertise of my sales representative."
"The service from my communication vendor is not important."
"To me the most important thing is to get the job done right."

As shown in figure 1, the five segments are arrayed on a continuum determined by their attitudes toward price and service. Segment 1 downplays price as a major issue in choosing a communication vendor while holding service as an important determinant. At the other extreme, service is downplayed and price is regarded as the major choice criterion.

FIGURE 1

BELIEF SEGMENTS

1	2 3	4 5

Price insensitive Service sensitive	Price sensitive Service insensitive

Analysis

To investigate the central issue of buying center congruency it was reasoned that if members of the same buying center held congruent beliefs, they should fall into the same belief cluster. If attitudes are incongruent, one would expect to find buying center members falling into different clusters.

To investigate the extent to which individuals from the same buying center fell in the same cluster, individuals were randomly paired together and the proportion of matches was computed. A match occurred when both members of the pair fell in the same cluster. Theoretically, under the assumption of independence, that is, if attitudes and beliefs are held independently by respondents within the same company, they would be expected to fall into the belief clusters independently of one another. Under such an assumption it would be expected that 31% of the pairs of individuals would match (fall into the same cluster) on the basis of random chance.

The hypothesis to be tested may be stated as follows:

> H_1: The proportion of matches of buying center members in the same cluster will be no greater than random chance.

In this study it was found that 33% of the pairs matched, meaning that in one-third of the firms buying center members fell into the same cluster, while in two-thirds of the firms they were in different clusters. At a significance level of .05, the difference between the actual proportion (.33) and the expected proportion given random variation (.31) is not established. The hypothesis is therefore not rejected and the conclusion drawn is that buying center members tended to fall into the belief clusters independently of one another, demonstrating incongruency.

As a cross check to this method, another approach was taken. The belief clusters were ranked from 1 to 5, where 1 represents the group with the most positive attitude, and 5 the least positive. Using the same random pair of individuals, each individual was assigned the rank order number of the belief cluster in which they fell. A Spearman Rank Order correlation coefficient was computed measuring the extent to which those most favorably disposed toward the industry were found together. One would expect little correlation to exist for buying centers in which attitudes are held independently. The actual correlation was computed as .14. The results of the two procedures are summarized in table 1.

TABLE 1

MEASUREMENTS OF INCONGRUENCY

	Expected	Actual	Significance Level
R	.00	.14	.152
P	.31	.33	.058

Discussion

All marketing strategy decisions are based on assumptions about buyer behavior. The validity of such assumptions reflect on the adequacy of the market information available. Marketing research is often focused on ascertaining respondent opinions, attitudes, intentions to buy, levels of satisfaction or dissatisfaction, preferences, etc. These are all sociometric variables which are characteristics of individuals, but not of an organization as an entity. A purchase decision is the result of the interaction of individuals and the subsequent resolution of disagreements or differences.

The industrial marketing researcher who relies on a single company informant implicitly assumes that the informant possesses the requisite knowledge sought after, and that there is attitudinal congruency within the buying center which will be articulated by that individual. There is little evidence to support this assumption and growing evidence to refute it.

Conclusion

This study has shown that beliefs held by buying center members related to telecommunications purchase decisions, are variant across participants within the same buying center. An incongruency in beliefs among buying team members demonstrates the need to sample the opinion of more than one individual from a company. By failing to consider the nature of individual attitudes and perceptions, a valid model of the behavioral system of an organization can not be developed. Such an oversight can lead to marketing and sales strategies that are incomplete or inappropriate.

References

Choffray, Jean-Marie and Gary L. Lilien (1978) "Assessing Response to Industrial Marketing Strategy." Journal of Marketing, 42 (April) pp. 20-31.

Johnston, Wesley J. (1979), Patterns in Industrial Buying Behavior, Praeger Scientific, New York, N.Y.

Moriarty, Rowland (1983), Industrial Buying Behavior, Lexington Books, Lexington, MA.

Nicosia, F. and Y. wind (1975), "Behavioral Models of Organizational Buying Behavior." In Behavioral Models of Market Analysis: Foundations for Marketing Action, edited F. M. Nicosia, and Y. wind, Hillside, IL; Dryden Pres .

Phillips, Lynn W. (1981), "Assessing Measurement Error in Key Informant Reports: A Methodological Note on Organizational Analysis in Marketing." Journal of Marketing Research, 18 (November) pp. 395-415.

Sheth, J.N. (1973), "A Model of Industrial Buyer Behavior." Journal of Marketing, 37 pp. 50-56.

Silk, A.J., and Kalwani, M.U. (1982), "Measuring Influence in Organizational Purchase Decision." Journal of Marketing Research, 19 (May) pp. 165-181.

Spekman, Robert E. and Louis W. Stern (1979), "Environmental Uncertainty and Buying Group Structure: An Empirical Investigation." Journal of Marketing, 43 (Apring) pp. 54-63.

DECISION PARTICIPANTS' PRE-PURCHASE RISK PERCEPTIONS FOR AN INDUSTRIAL INNOVATION

Daulatram B. Lund, Iowa State University

Abstract

This paper investigated the heterogeneity in decision participants' pre-purchase risk perceptions in the adoption decision for an industrial innovation. Decision participants' perception of six dimensions of risk were assessed. The decision participants were the members of supermarket buying committees, and the innovation adoption decision concerned the Universal Product Code scanner checkout system. Multivariate analysis of variance was used to test the differences in perceived risk across decision participants grouped on the basis of organizational hierarchy, functional area, industry experience, age, and education. The implication of the analyses for industrial marketing strategy is briefly discussed.

Introduction

Buying decisions in an organization are generally made by a buying group or decision making unit. Recognizing the complexity of the buying decision process resulting from the involvement of multiple decision participants, industrial marketers have explored a number of participant and firm factors which affect the purchase decision. Among these factors, several researchers have stressed the importance of the decision participants' risk perception as a key determinant in new product or innovation adoption decision (Cunningham 1967; Robinson and Faris 1967; Webster 1969; Webster and Wind 1972; Sheth 1973). For example, Wilson (1971) identified perceived risk as the most important factor affecting industrial adoptions; Peters and Venkatesan (1973) found a significant negative relationship between perceived risk and innovation adoption behavior; and McMillan (1973) and Choffray and Johnson (1979) both reported differences in risk perceptions between decision participants grouped on the basis of their job responsibility.

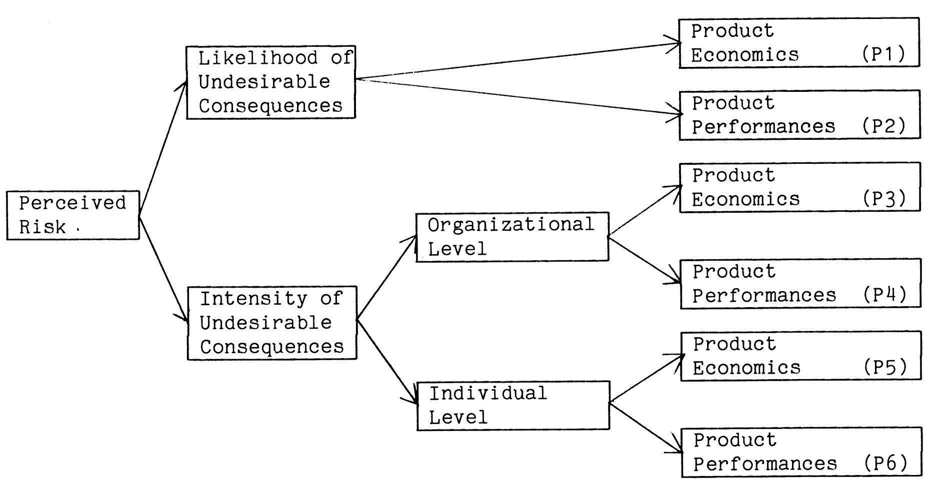
The present study was undertaken to investigate the heterogeneity in decision participants' pre-purchase risk perceptions in the adoption decision for an industrial innovation. The decision participants were the members of supermarket buying committees, and the innovation adoption decision concerned the Universal Product Code (UPC) scanner checkout system. The specific objective of the study was to assess differences in pre-purchase risk perceptions between decision participants grouped on the basis of their (1) organizational hierarchy, (2) functional area, (3) experience in the industry, (4) age, and (5) education.

Conceptual Framework

The conceptual framework proposed by Choffray and Johnson (1979) was utilized for measuring the different dimensions of risk. Under this framework the decision participant's perceived risk for the new product adoption decision was composed of (1) the likelihood of undesirable consequences, and (2) the perceived intensity of those consequences for the decision participant and the organization. Potential consequences were conceptualized as both economic consequences (cost-effectiveness of the product), and performance consequences (reliability-depend-ability of the product). This conceptual framework is illustrated in Figure 1.

It is acknowledged widely that industrial buying is a multi-person process involving, at different stages and to varying degrees, a number of different organizational members (Webster and Wind 1972). Previous organizational research suggests that organizational members enter the buying process not only as a result of their stated expertise (Spekman and Stern 1979), but also because of their organizational position which gives them a stake in the decision

FIGURE 1
DIMENSIONS OF PERCEIVED RISK



outcome either as a result of the size of the financial commitment or the nature of the purchase (Corey 1978). Johnston and Bonoma (1981) suggested that higher purchase importance, complexity, or novelty leads to greater involvement in the decision process across organizational hierarchies and functional areas. Similarly, Speckman and Ford (1981) reported that a decision participant's hierarchical level may determine the nature of purchase related information needs, which could range from strategic information (Cleland and King 1978) to operational information needs (Steiner and Miner 1977). Also, as stated earlier, McMillan (1973) and Choffray and Johnston (1979) both reported differences in risk perceptions between decision participants grouped on the basis of their job responsibility. Therefore, from past literature, it may be summised that decision participants' risk perceptions of the product-adoption decision may differ based on the individual's organizational level and functional area. Similarly, it is conceivable that decision participants' risk perceptions may vary with individual characteristics such as experience, age, and educational level.

Past research studies have not investigated the influence of characteristics of organizational decision participants on risk perceptions of new product adoption decisions. Given the focus of the present study, namely, supermarket buying committees concerned with the UPC scanner checkout system adoption decision, the following null hypotheses are advanced:

H_{01}: Supermarket buying committee decision participants' organizational hierarchial level will have no influence on their risk perceptions of the UPC scanner checkout system;

H_{02}: Supermarket buying committee decision participants' functional area will have no influence on their risk perceptions of the UPC scanner checkout system;

H_{03}: Supermarket buying committee decision participants' length of experience in the food industry will have no influence on their risk perceptions of the UPC scanner checkout system;

H_{04}: Supermarket buying committee decision participant's age will have no influence on their risk perceptions of the UPC scanner checkout system; and

H_{05}: Supermarket buying committee decision participants' educational level will have no influence on their risk perceptions of the UPC scanner checkout system.

Research Methodology

Data Base

The sampling units for the present study consisted of supermarkets in the United States that had not adopted the UPC scanner checkout system in their stores. The sampled frame comprised of 240 food retailing firms randomly selected from a list generated from the 1980 Chain Store Guide. To identify the decision participants involved with the adoption decision and to seek the firm's cooperation in the study, all firms were mailed participation forms. Completed participation forms were received from 148 firms. Survey questionnaires were mailed to 261 decision participants identified on the participation forms. Four weeks after the first mailing one follow-up mailing was undertaken. A combination of methods was employed to reduce the likelihood of low response rate (Kanuk and Bereson 1975). Briefly, these included a strategically written cover letter, prepaid return envelope, assurance of anonymity, and a renewed offer for a complimentary copy of the summary of survey results for participation. A total of 104 (39.9%) questionnaires from 89 (60.1%) firms were returned.

Research Instrument

As part of a larger study which investigated structural dimensions of supermarket buying committees, structured mail questionnaires were employed in the study. Operational items measuring the identified components of perceived risk (**Figure 1**) are presented in **Table 1**. Five-point Likert rating scales with possible response ranging from "strongly agree" to "strongly disagree" were utilized to scale items measuring decision participants' risk perceptions. The survey questionnaire included sections related to background information about the respondent and the firm.

TABLE 1
ITEMS MEASURING COMPONENTS OF PERCEIVED RISK

Risk Component	Item Description
P1	Scanner manufacturers currently produce a cost-effective system.
P2	Scanner manufacturers currently do not produce a totally reliable and dependable scanning system.
P3	If your firm chose a scanning system which proved to be less economical than projected, then your firm could go out of business.
P4	If your firm chose a scanning system which proved to be less reliable and dependable than projected, then your firm could suffer large losses.
P5	A supporter of the purchase of the scanning system would jeopardize his credibility and personal position within the firm if the system proved to be less economical than projected.
P6	A supporter of the purchase of the scanning system would jeopardize his credibility and personal position within the firm if the system proved to be less reliable and dependable than projected.

Analysis

The decision participant's perceived risk was viewed as a vector valued function comprising of the individual's response to the six components of risk. The effects of decision participants' organizational position, functional area, experience in the industry, age, and education on risk perceptions for the innovation adoption decision were tested by a one-way multivariate analysis of variance (MANOVA). The grouped categories of decision participants for each factor are presented in Table 2. If the overall relationship was significant for each factor, then univariate F tests were explored to note the source of variation. Univariate F tests should only be interpreted if the MANOVA null hypothesis has been rejected (Cooley and Lohnes 1971). Thus, where MANOVA F was not significant univariate F statistics are not reported.

TABLE 2
GROUPED CATEGORIES OF DECISION PARTICIPANTS

FACTOR: Organizational Hierarchy Category	Frequency
1. Top Management (CEO, Owner, President)	59
2. Middle Management (V. Ps., Gen. Mgr.)	20
3. First-level Management (Dir., Mgrs.)	12
4. Other	9
	100
FACTOR: Functional Area Category	**Frequency**
1. President, CEO, Owners	58
2. Marketing, Retailing, Purchasing	7
3. Management Operations, M.I.S.	31
4. Other-Secretarial	4
	100
FACTOR: Experience in Food Industry Category	**Frequency**
1. 10 years or less	22
2. 11-20 years	27
3. 21-30 years	25
4. 31 years or more	26
	100
FACTOR: Age of Decision Participant Category	**Frequency**
1. 34 years or less	31
2. 35-44 years	28
3. 45-54 years	26
4. 55 years or more	15
	100
FACTOR: Education Level of Decision Participant Category	**Frequency**
1. High School or less	28
2. Undergraduate	33
3. Graduate	39
	100

Results and Discussion

Of the 104 decision participants responding to the survey questionnaire, only 100 could be used for the present analysis due to missing data. The decision participants were grouped on the basis of organizational hierarachy, functional area, experience, age, and education, as presented in Table 2. A MANOVA of risk perceptions was performed across grouped decision participants in each factor. The summary of results of MANOVA are presented in Table 3. As can be seen in Table 3, the hypotheses of no difference in risk perceptions between decision participants grouped on the basis of organizational hierarchy, functional area, age, and education, could not be rejected at the statistical level of significance of $p < .05$. However, decision participants grouped on the basis of their experience in the food industry differed significantly (at $p < .05$) in their risk perceptions for the innovation adoption decision.

Since the overall differences in risk perceptions were significant across decision participants grouped on the basis of their industry experience, univariate F tests were explored to note the source of variation among the perceived risk components and the corresponding univariate F tests. Table 4 indicates the differences among the decision participants' mean perceptions of the risk components. The emerging pattern of differences in risk assessment among decision participants with varying length of experience in the food industry are summarized, in relative terms, as follows:

(1) Decision participants with fewer years of industry experience perceived relatively greater economic consequences in the innovation adoption decision than more experienced decision participants.

(2) All decision participants perceived relatively equal levels of performance risk in the innovation.

(3) Decision participants with fewer years of industry experience perceived a higher intensity of economic risk at the organization level in the adoption decision, than more experienced decision participants.

(4) All decision participants perceived relatively equal intensity of performance risk at the organization level in the innovation adoption decision.

(5) Decision participants with fewer years of industry experience perceived a higher intensity of economic risk at the personal level in the adoption decision, than more experienced decision participants.

(6) All decision participants perceived relatively equal intensity of performance risk at the personal level in the innovation adoption decision.

Overall, the above summary of pattern of risk perceptions suggest that length of experience in the food industry did not influence decision participant's perception of the consequences and intensity of performance risk (P2,

TABLE 3
SUMMARY OF MANOVA RESULTS

Factor	Perceived Risk Components	Wilks' lamda	F - approximation $F_{(18,257)}$	p
Organizational Hierarchy	P1-P6	0.8448	0.88	.6034
Functional Area	P1-P6	0.7753	1.35	.1579
Experience in Industry	P1-P6	0.7224	1.75	.0324 *
Age of Decision Participant	P1-P6	0.8538	0.82	.6719
Edu. of Decision Participant	P1-P6	0.9066	0.77	.6803

* Significant at $p < .05$

TABLE 4
DIFFERENCES IN RISK PERCEPTIONS AMONG DECISION PARTICIPANTS
GROUPED BY INDUSTRY EXPERIENCE

Perceived Risk Component	Mean Perceived Risk Scores by Decision Participants' Industry Experience (Years)				Over-all Mean	$F_{(3,96)}$	p
	<=10	11-20	21-30	>=31			
P1	2.64	2.89	3.16	2.65	2.84	2.12	0.1013
P2	3.41	3.07	3.24	3.65	3.34	1.55	0.2052
P3	3.64	4.11	3.72	3.69	3.80	2.24	0.0871
P4	2.64	2.89	2.80	2.58	2.73	0.77	0.5380
P5	2.50	3.00	3.04	3.19	2.95	2.26	0.0850
P6	2.41	2.63	2.68	2.92	2.67	2.16	0.3311

P4, P6) associated with the innovation adoption decision. However, it weakly influenced (at p <= .10) decision participant's perception of the consequences and intensity of economic risk (P1, P3, P5) associated with the adoption decision.

Conclusions and Implications

The study investigated the heterogeneity of pre-purchase risk perceptions among participants in organizational buying. The decision participants were members of supermarket buying committees and the product adoption decision concerned the UPC scanner checkout system. Decision participants' perception of six dimensions of risk was assessed. These dimensions were concerned with economic and performance consequences, and the perceived intensity of these consequences at the individual and organizational levels. MANOVA was utilized to test the null hypotheses concerning the influence of organizational hierarchy, functional area, length of industry experience, age, and educational level on decision participants' nature of risk perception.

The results of the analyses indicated that decision participants' pre-purchase risk perceptions for the innovation adoption decision did not vary significantly among individuals grouped on the basis of organizational hierarchy, functional area, age, or education. However, weak support was provided for the hypothesis that participants' length of experience in the food industry affected their risk perceptions.

The empirical conclusions have practical implications, particularly, for vendors of the UPC scanner checkout systems. Industrial market strategists should be cognizant of the importance of the decision participants' multidimensional perceptions of risk associated with the adoption decision. In general, while efforts need to be directed towards lowering decision participants' perceptions of all risk components, particular emphasis may be placed on efforts focused on moderating the economic risk perceptions of decision participants with relatively fewer years of industry experience. Finally, it is important to note that the adoption decision process is a complex process involving multiple participants. While perceived risk has been recognized as a key determinant in new product/innovation adoption decisions (as detailed in the introduction), other determinants such as situational variables, as well as more elegant bases of influencers affecting decision participants' risk perceptions will have to be identified and investigated by future researchers for developing more comprehensive industrial marketing strategies.

References

Choffray, Jean-Marie and Paul E. Johnston (1979), "Measuring Perceived Pre-Purchase Risk for a New Industrial Product," Industrial Marketing Management, 8: 333-40.

Cleland, D. and William King (1978), Strategic Planning and Policy, New York: Van Nostrand Reinhold Company.

Cooley, William W. and Paul R. Lohnes (1971), Multivariate Data Analysis, New York: John Wiley and Sons, Inc.

Corey, Raymond (1978), Procurement Management:

Strategy, Organization and Decision Making, Boston: CBI Publishing Company.

Cunningham, Scott M. (1967), "The Major Dimensions of Perceived Risk," in Donald F. Cox, ed., *Risk Taking and Information Handling in Consumer Behavior*, Boston: Harvard University, 507-23.

Kanuk, Leslie and Conrad Berenson (1975), "Mail Surveys and Response Rates: A Literature Review," *Journal of Marketing Research*, 12 (November), 440-53.

McMillan, J.R. (1973), "Role Differentiation in Industrial Buying Decisions,"*Proceedings*, Chicago: American Marketing Association.

Peters, Michael P. and M. Venkatesan (1973), "Exploration of Variables Inherent in Adopting and Industrial Product," *Journal of Marketing Research*, 10 (August), 312-15.

Robinson, Patrick J. and Charles W. Faris (1967), *Industrial Buying and Creative Marketing*, Boston: Allyn and Bacon, Inc.

Sheth, Jagdish N. (1973), "A Model of Industrial Buyer Behavior," *Journal of Marketing*, 37 (October), 23-26.

Speckman, Robert E. and G.T. Ford (1981), "The Industrial Marketing Implications of Organizational Hierarchy Within Purchasing Departments," *Proceedings*, Chicago: American Marketing Association, 178-181.

__________ and L.W. Stern (1979), "Environmental Uncertainty and Buying Group Structure: An Empirical Investigation," *Journal of Marketing*, 43 (Spring), 54-64.

Steiner, George A. and J.B. Miner (1977), *Management Policy and Strategy*, New York: Macmillan Publishing Company.

Webster, Frederick E. Jr., (1969), "New Product Adoption in Industrial Markets: A Framework for Analysis," *Journal of Marketing*, 33 (July), 35-9.

__________ and Yoram Wind (1972), *Organizational Buying Behavior*, Englewood Cliff, N.J.: Prentice-Hall, Inc.

Wilson, David T. (1971), "Industrial Buyer Segmentation: A Psychographic Approach," *Proceedings*, Chicago: American Marketing Association.

ON THE THEORETICAL INTERPRETATION OF A MULTIPLE REQUEST INFLUENCE STRATEGY IN AN INDUSTRIAL MARKETING SETTING

Harrie Vredenburg, McGill University

Abstract

Several authors have proposed the foot-in-the-door behavioural influence strategy as an industrial marketing/personal selling communication strategy. There is a fundamental difference between the industrial marketing setting and the pro-social charity and questionnaire survey settings in which the strategy has been empirically tested. This paper discusses the shortcomings of the predominant self perception theory interpretation in the industrial marketing setting, and proposes a person commitment/obligation paradigm as an alternative theoretical interpretation.

Introduction

There are two approaches available to salespersons in inducing buyers to purchase their products: persuasion and behavioural influence techniques. Persuasive strategies are based on the assumption that behaviour can be modified by influencing its cognitive antecedents (e.g. attitudes) (Reingen and Kernan 1979, Scott 1976, Tybout 1978). Most of the research published on marketing communications is based on this assumption. Research on how consumers acquire dispositions through information processing (Dyer and Kuehl 1974, Sawyer 1973, Sternthal and Craig 1974a, 1974b), how disparate pieces of information are aggregated (Bettman, Capon and Lutz 1975a, 1975b, Cohen, Fishbein and Ahtola 1972, Day 1973, Sheth and Talarzyk 1972, Wilkie and Pessemier 1973), and how attitudes are related to behaviour (Bass, Pessemier and Lehman 1972, Day 1970, Ginter 1974, Heeler, Kearny and Mehaffey 1973, Kraft, Granbois and Summers 1973, Lehman 1971) are all based on this assumption. Most of the traditional studies of personal selling communication strategies also implicitly, if not explicitly, assume the persuasion model (Capon 1975, Capon and Swasy 1977, Farley and Swinth 1967, Jolson 1975, Levitt 1965, Reed 1976). Behavioural influence is offered as an alternative approach to obtaining personal sales communications effectiveness.

Because personal selling involves interaction between the buyer and seller and is not just one-way communication, a behavioural influence strategy approach may be appropriate. Behavioural influence strategy, unlike persuasion strategy, does not attempt to influence the cognitive antecedents of behaviour. Instead, behavioural influence strategy focuses on the direct modification of behaviour(Reingen and Kernan 1979, Scott 1976, Tybout 1978). It assumes that after behaviour has been modified, subsequent behaviour will be consistent with it. The behavioural influence approach is guided by the assumption that psychological involvement with a product, service or organization, whether it be through experience or acknowledged disposition favoring it constitutes an important basis for subsequent purchase action.

Although several authors have proposed their use in personal selling in an industrial marketing setting (Swinyard and Ray 1977, Yalch 1979), to date no empirical research has been published on industrial sales applications of behavioural influence strategies. Only one study has, in fact, been published (Scott 1976) which tests behavioural influence in an actual marketing setting.

It is on personal selling applications of these behavioural influence techniques that this paper focuses. Salespeople have been using various forms of these techniques for years. The Avon saleslady who concentrates on inexpensive items in her initial sales appeal, and subsequently focuses on high ticket items is using a behavioural influence strategy. The insurance salesperson who attempts to sell small policies initially and then graduates the customer to larger, more comprehensive coverage is using a type of behavioural influence strategy. The business school dean who invites major corporation executives to sit on the school's advisory committee is using another type of behavioural influence strategy. The dental supplier who sends out R.S.V.P. invitations to a wine and cheese new product demonstration evening is also using a behavioural influence strategy.

Despite the widespread use of these techniques, little scientific research has been conducted to test their efficacy in marketing settings or to explore the behavioural principles being applied. One of the important areas of inquiry in this field ought to be the theoretical interpretation of behavioural influence in industrial marketing settings. This paper suggests that although, as casual field evidence would suggest, behavioural influence strategy can be effective in industrial selling, the underlying psychological rationale for it may not be the same as in non-marketing settings where much of the research has been done. As applied social scientists, marketing researchers are right to borrow concepts from fields like psychology. However, concepts ought not to be borrowed wholesale, but rather ought to be customized for the marketing setting. One of the steps along this road is developing an understanding of the theoretical interpretation of a phenomenon.

The Foot-in-the-Door Strategy

For purposes of brevity this paper will only discuss the theoretical interpretation of the behavioural influence strategy known as Foot-in-the-Door (FITD) strategy. The discussion, however, applies equally to such other behavioural influence strategies as Social Labelling. Other behavioural influence strategies ought to be re-examined similarly as they are being adopted by the marketing discipline. The initial study on the FITD strategy will be briefly described before theoretical interpretations are discussed.

Jonathan Freedman and Scott Fraser (1966) ran two experiments testing the FITD technique. The first experiment was carried out in a consumer research setting. Housewives were telephoned and asked to respond to eight questions regarding household products they used. One treatment group, upon agreeing to the request was told that they would be telephoned back at a later time to answer the questions while another treatment group was asked the questions immediately. A third group who did not receive an initial contact was the experimental control. The dependent measure consisted of agreement to a large request three days later (also by telephone) consisting of allowing a team of five or six men to come into their homes for two hours to classify household products they used. Both initial request treatments resulted in significantly higher compliance rates with the second request than the control group. It appears from these results that the technique is so robust that only the agreement to perform an initial request is sufficient to form a self-attribution that will result in later compliance with requests.

A second experiment, dealing with a safe driving campaign, manipulated the type of initial task. The dependent measure was agreement to allow a large unattractive sign to be placed on the front lawn of the subject's house. The sign promoted safe driving. Experimental treatments then varied the similarity of the initial task requested to the ultimate task to be requested. One group was requested to place a small sign promoting safe driving in their window. A second group was requested to place a small sign promoting "Keeping California Beautiful" in their window. A third group was requested to sign a petition in favour of legislation promoting safe driving. A fourth group was requested to sign a petition promoting legislation aimed at "Keeping California Beautiful". A fifth group was a control group who did not receive any initial request. Freedman and Fraser found that regardless of the similarity of the initial task or issue, verbal compliance with the second request was significantly greater than the control. The similar task and issue condition had the greatest compliance but not statistically significantly greater than the other experimental conditions. The primary importance of the Freedman and Fraser experiments is that they initiated an entire tradition of research into behavioural influence techniques, especially the FITD strategy (Baron 1973, Beaman et al. 1983, Calder and Staw 1975, Cann, Sherman and Elkes 1975, Cialdini and Ascani 1976, Hansen 1980, Hansen 1980, Hansen and Robinson 1980, Pliner et al. 1974, Reingen 1978, Reingen and Kernan 1977, 1979, Scott 1976, 1977, Seligman, Bush and Kirsch 1976, Snyder and Cunningham 1975, Sternthal, Scott and Dholokia 1976, Tybout 1978, Tybout, Sternthal and Calder 1983, Uranowitz 1975, Yalch 1975, 1979).

Self Perception Theory

Virtually all of the research done on the FITD strategy uses self perception theory[1] as the theoretical interpretation of the effect. As such, it is useful to review the basic tenets of this theory.

[1]Some authors refer to the theory as self-attribution theory since self perception theory is one of several theories collectively known as attribution theory. Self perception and self-attribution are used interchangeably in this paper.

Daryl Bem (1965, 1967, 1972) did the pioneering conceptual work in self perception. He argues that individuals look to their own actions or their own verbal reports to judge inferences about themselves. His position is that individuals do not have an innate understanding and knowledge of themselves and thus go through a process of self observation in order to gain an understanding of themselves. Bem's theoretical approach is very much a Skinnerian behaviouralist one. If a strong environmental reward or threat is present, a particular behaviour is attributed to this external cause;if none is present then the behaviour is attributed to internal causes or an individual's true attitude toward something.

It has been self-perception theory that has been predominantly cited as the theoretical interpretation of the FITD strategy. The interpretation for the FITD phenomenon goes as follows: 1. Compliance is gained with the first small request because the request is so insignificant and little thought, if any, is given to compliance. 2. Upon receipt of the second, or large, request the requestee examines his/her own behaviour in order to form a self-perception. 3. Compliance with the second request results because non-compliance would be inconsistent with the self-perception formed.

Self Perception Theory in an Industrial Marketing Setting

Self-perception theory appears to be a reasonable, or at least an intuitively appealing, interpretation of the FITD behavioural influence strategy. However, virtually all of the studies investigating the strategy have been carried out in a charitable, or at least a pro-social setting. The subjects generally made self-attributions of being "helpful", "charitable", "environmentally conscious" etc. Given that we are concerned with applying these behavioural influence techniques in an actual industrial marketing setting, it is appropriate to contemplate the applicability of this theoretical interpretation.

In discussing the self-perception interpretation of the FITD phenomenon one must ultimately arrive at the question: What is the self-attribution made by the subject/customer? In a truly commercial setting, where the small request might be to read some product literature, to accept a deal offer, or to give some time to listen to the seller, the subject/customer is unlikely to be able to make abstract, global attributions to himself of the order of "charitability", "helpfulness" etc. that are possible in pro-social settings. Whatever self-attributions are made are likely to be of greater self interest, perhaps self-attributions like "shrewd businessman" or "I'm one who's always looking for ways to make my business more efficient". The trouble with these self-attributions is that they are economic rather than social in nature. As a result, self-attributions of an economic nature (internal justifications) are conceptually confused with economic incentives for external justification. The theoretical and empirical work has shown that the FITD strategy only works when compliance with the initial request results from internal reasons but not when external incentives are present. That is, the initial compliance has to be perceived as being of the individual's own free will, based on his true attitudes. The individual must not be able to attribute his behaviour to external incentives.

This discussion would suggest that the FITD behavioural influence technique and its self-perception interpretation will only be applicable in situations in which subjects/customers become psychologically/socially involved with the product;that is, buying situations that are less economically "rational". Many consumer products would fit this description. For example, the American Express Gold Card is such a product; prospective card members can make a self-attribution of being a "successful individual". Non-consumer products also fit this description: business computer equipment, dental office equipment etc. In these cases subjects/customers can make self-attributions of being "technically advanced". Casual observation suggests, however, that behavioural influence techniques such as FITD appear to be effective not only in such a restrictive set of situations, but in a much broader, more universal set of situations. Perhaps researchers have been trying to fit self-attribution theory to FITD unnecessarily. The FITD phenomenon seems to operate in more than just the high ego involvement social or conspicuous consumption settings in which self-attribution theory easily fits as an interpretation of the psychological process underlying the effect. Perhaps there are alternative theoretical interpretations of the effect as it occurs in industrial marketing settings. The remainder of this paper will examine the the theoretical interpretations provided by the few researchers who have examined or proposed the FITD phenomenon in true business settings and will explore some potential alternative theoretical interpretations which appear plausible.

Alternative Theoretical Interpretations

Scott (1975) proposed in her community newspaper study that the customer's self-attribution after complying with the initial request was one of "interest in the product". Compared to the more global self-attributions proposed in the pro-social settings, such as helpfulness or generosity, this seems rather weak. Furthermore, it is quite possible that the customer could make a self-attribution that is more economically based (and therefore run into conceptual problems with external justification) such as "I'm the kind of person who can't resist a deal".

Yalch, in his 1979 review paper, only proposed in business settings a self-attribution of "complier" --again considerably weaker than self-attributions of the pro-social studies. Although these researchers did not run into problems of confusing economic self-attributions with external justification, they may be skirting the real issue by proposing weak psychological self-attributions that neatly fit the theory rather than coping with the problematic economic self-attribution issue which appears to be important in examining the FITD effect in business settings.

One of the alternate explanations is simply risk reduction. The risk reduction paradigm clearly is relevant to the "free trial" and "percent off" deal operationalizations of the small request of the FITD. There is an established literature on perceived risk and risk reduction dating back to such articles as Roselius' (1971) "Consumer Ranking of Risk Reduction Methods". Although this model is useful for interpreting some of the FITD applications such as trials or deals, it does not explain the effect in general. As such, it does not appear to be the most useful one on which to focus.

De Jong (1979) cites three alternate explanations which he dismisses as not being as useful as self-perception theory. The first of these is adaptation level. This explanation proposes that after the first request has been complied with, the second large request seems relatively smaller than it would be without the first request. A second explanation that he discusses is that of salience of social norms. The small initial request supposedly makes people aware of the social norms with respect to charity giving etc. A third explanation that he mentions is one of behavioural consistency. The two variations on this approach suggest that people attempt to maintain a public image, or possibly a private image.

It is this third one which seems most promising in industrial marketing settings - a buyer has behaved consistently in a subsequent request. De Jong comments that, "... a large FITD effect should result when the second request is made by the same experimenter or involves the same issue of action. The importance of these kinds of variables has not been adequately tested..." (p. 2236) He then cites Freedman and Fraser (1966) as evidence that these variables are "not terribly important". Freedman and Fraser, however, showed that although it was not statistically significant, relevant task and issue had the greatest compliance. It seems that there would be a greater tendency to generalize behaviour from one pro-social issue and activist activity to another than between commercial firms and business products. (i.e. One is probably more likely to link one's behaviour of signing a petition favouring legislation to "Keep California Beautiful" with a subsequent request for a pro-social behaviour like putting up a sign promoting safe driving in the community, than to link behaviour, as a commercial buyer, of accepting promotion literature for one company's car batteries with a subsequent request to buy another company's tires.) As a result, we may well get statistically significant differences here if we replicated Freedman and Fraser (1966) in an industrial marketing setting.

Two recent papers in the Journal of Personality and Social Psychology (Burger and Petty 1981, Cialdini, Cacciopo, Basset, and Miller 1978) shed some more light on the relevance of this last interpretation of the FITD in commercial settings. These papers deal with the so-called low-ball compliance technique. The low-ball technique is another low pressure compliance technique that has been added to FITD and has been found to increase compliance even more. The name of the technique, again, is derived from personal selling practice while it has been tested in social psychology laboratory settings. It entails getting someone's agreement to perform a relatively low-cost task and then somehow preventing the individual from performing it while moving them up to a more costly form of the same behaviour. (i.e. The car salesman obtains your agreement to buy the basic car for $8000, then informs you that after checking the delivery list, a basic car will not be delivered for three months. He then persuades you to buy the car in stock which has many options and costs $1000 more.) Cialdini, Cacciopo, Basset, and Miller (1978) tested and explained this effect in terms of "an additional commitment to a particular behaviour, which is absent in the foot-in-the-door procedure". This additional "cognitive commitment to the performance of the target behaviour" was advanced to account for the increased effectiveness of the low-ball procedure beyond that found with the FITD technique.

Burger and Petty (1981) took issue with this effect and proposed that in fact it was a commitment or obligation to the person (experimenter/salesperson) that accounted for the increased willingness to comply with the more costly request, not commitment to the task. Three experiments were carried out which showed that this was, in fact, the case.

It appears that this personal commitment/obligation interpretation of the low ball technique may also have some relevance for interpreting the FITD technique in commercial settings where the self-perception interpretation seems to be strained. Prospects agree to a small request (sales literature, sales presentation, sample, etc.) knowing that the sales person's ulterior motive is to sell them, not just to get them to agree to the first request. By accepting his first request, the prospect psychologically incurs an obligation or commitment to the salesperson (however slight this may be). It is in this weakened psychological position *vis-a-vis* the salesperson that the prospect succumbs to the second request and fulfills his psychological obligation. Whereas Cialdini *et al* (1978) and Burger and Petty (1981) use this interpretation only for the low-ball phenomenon (i.e. where the performance of the first request is prevented), it would appear that it has a lot of relevance for interpreting the FITD technique. Probably both processes are at work in most FITD applications, but self-perception probably accounts for more in the pro-social settings while person commitment/obligation accounts for more in non-social settings.

A candid illustration of the two interpretations of the FITD phenomenon is the dating game: a young man and woman have just finished wining and dining in a fine restaurant. He reaches for the bill in order to pay it. She stops him and insists on paying her share. (The example could have been the refusal of a gift or even a peck on the cheek.) Why does she refuse his kindness/approaches? Does she want to avoid incurring obligations/commitment to him that he may try to cash in later that evening with a larger request? Or does she not want to perceive of herself as the kind of woman who accepts expensive gifts/pecks on the cheek from men?

There is a precedence for this dual theoretical interpretation of a social psychological phenomenon. Delroy Paulhus (1982) presents findings that support a dual theoretical interpretation of attitude change after forced compliance (forced compliance refers to the group of experiments in which a subject is forced to engage in counter-attitudinal behaviour ie. argue for marijuana legislation change when he's not for it). His experiments show that while the literature has debated over whether self-presentation theory or cognitive dissonance theory is the appropriate explanatory theory, both, in fact, explain part of the phenomenon.

Conclusion

Dissatisfaction with self-perception theory as the only theoretical interpretation of the FITD phenomenon in industrial marketing settings leads one to two plausible alternative theoretical interpretations. While the risk reduction model may be useful in the "trial" and "deal" operationalizations of the FITD, it offers little in other operationalizations. The most useful alternative theoretical interpretation, it would seem, is the person commitment/obligation paradigm thus far advanced only for the low-ball phenomenon. A final comment of theoretical interest is that it seems that in industrial marketing settings the person commitment/obligation rationale might be stretched with slightly weaker results to company commitment. Prospects may feel an obligation has been incurred to a company if an inside sales representative and an outside sales representative appear to be a sales "team".

Although the most convincing evidence of a self-perception or other theoretical explanation of the FITD technique would be measures of changes in self-perception and other cognitive states, most of the psychological studies have failed to specifically measure this or failed to obtain usable measures. De Jong (1979) asserts that the explanation for this shortcoming in the extant research lies not only in design and measurement inadequacies, as others have suggested, but also in the fact that the self-perception changes that follow a person's initial compliance with a small request have never been clearly specified and may be much more complicated than has been acknowledged. It is hoped that this paper will stimulate discussion and empirical work which might settle the theoretical interpretation question. If industrial salesmen/marketers are to make efficient use of this behavioural influence strategy, a good understanding of the behavioural principles underlying it are essential. It is up to researchers in the field of marketing to do this required work as it is in industrial marketing settings that the shortcomings of the self perception theory interpretation has the most shortcomings.

References

Baron, R.A. (1973), "The Foot-in-the-Door Phenomenon: Mediating Effects of Size of First Request and Sex of Requester," Bulletin of the Psychonomic Society, (2, 113-4).

Bass, Frank M., E.A. Pessemier, and Donald R. Lehman (1972) "An Experimental Study of Relationships Between Attitudes, Brand Preference, and Choice," Behavioural Science, (17 November, 532-41).

Beaman, Authur L., C. Maureen Cole, Marilyn Preston, Bonnel Klenz, Nancy Mehrkens Steblay

(1983), "Fifteen Years of Foot-in-the-Door Research: A Meta-Analysis," Personality and Social Psychology Bulletin, 9 (June), 181-196.

Bem, Daryl J. (1965) "An Experimental Analysis of Self-Persuasion," Journal of Experimental Social Psychology, 1, 199-218.

___________ (1967) "Self-Perception: An Alternative Interpretation of Cognitive Dissonance Phenomena", Psychological Review, 74, 183-200.

___________ (1972) "Self-Perception Theory," in Advances in Experimental Social Psychology, ed. L. Berkowitz. New York: Academic Press, Inc.

Bettman, James R., Noel Capon, and Richard Lutz (1975) "Cognitive Algebra in Multi-Attribute Attitude Models," Journal of Marketing Research, 12 (May) 151-65.

___________ (1975) "Multi-Attribute Measurement Models and Multi-Attribute Theory: A Test of Construct Validity," Journal of Consumer Research, 1 (March) 1-15.

Burger, J.M., and R.E. Petty (1981), "The Low-Ball Compliance Technique: Task or Person Commitment?" Journal of Personality and Social Psychology, 40, 492-500.

Calder, B.J. and B.M. Staw (1975), "Self Perception of Intrinsic and Extrinsic Motivation," Journal of Personality and Social Psychology, 31, 599-605.

Cann, Arnie, Steven J. Sherman, and Ray Elkes (1975) "Effects of Initial Request Size and Timing of a Second Request on Compliance: The Foot-in-the-Door and Door-in-the-Face," Journal of Personality and Social Psychology, 32, 774-782.

Capon, Noel (1975), "Persuasive Effects of Sales Messages Developed From Interaction Process Analysis," Journal of Business Administration, 60 (April), 238-244.

___________, and John Swasy (1977), "An Exploratory Study of Compliance Gaining Techniques in Buyer Behavior," in Comtemporary Marketing Thought, B. Greenberg and D. Bellenger, eds., Chicago:American Marketing Association.

Cialdini, R.B. and K. Ascani (1976), "Test of a Concession Procedure for Inducing Verbal, Behavioral, and Further Compliance With a Request to Donate Blood," Journal of Applied Psychology, 16 (March), 295-300.

___________, J.T. Cacciopo, R. Basset, J. Miller (1978), "The Low-Ball Procedure for Producing Compliance: Commitment Then Cost," Journal of Personality and Social Psychology, 36, 463-476.

Cohen, Joel B., Martin Fishbein, and O. Ahtola (1972) "The Nature and Uses of Expectancy-Value Models in Consumer Attitude Research," Journal of Marketing Research, 9 (November) 456-460.

Day, George S. (1970) Buyer Attitude and Brand Choice Behavior. New York: Free Press.

Day, George S. (1973), "Theories of Attitude Structure and Change", in S. Ward and T.S. Robertson, eds., Consumer Behavior: Theoretical Sources. Englewood Cliffs, New Jersey: Prentice-Hall, 303-353.

DeJong, William (1979), "An Examination of Self-Perception Mediation of the Foot-in-the-Door Effect". Journal of Personality and Social Psychology, 37, 2221-2239.

Dyer, Robert F., and Philip Kuehl (1974), "The Corrective Advertising Remedy of the FTC: An Experimental Evaluation," Journal of Marketing, 38 (January), 48-54.

Farley, John and R. Swinth (1967), "Effects of Choice and Sales Message on Customer-Salesman Interaction," Journal of Applied Psychology, 51 (April), 107-110.

Freedman, Jonathan L., and S. Fraser (1966), "Compliance Without Pressure: The Foot-in-the-Door Technique", Journal of Personality and Social Psychology, 4, 195-202.

Ginter, James L. (1974), "An Experimental Investigation of Attitude Change and Choice of a New Brand," Journal of Marketing Research, 11 (February), 30-40.

Hansen, Robert A. (1980), "A Self-Perception Interpretation of the Effect of Monetary and Nonmonetary Incentives on Mail Survey Respondent Behavior," Journal of Marketing Research, 17 (February), 77-83.

___________, and Larry M. Robinson (1980), "Testing the Effectiveness of Alternative Foot-in-the-Door Manipulations", Journal of Marketing Research, 17 (August), 359-364.

Heeler, Roger M., Michael J. Kearney, and Bruce J. Mehaffey (1973), "Modelling Supermarket Product Selection," Journal of Marketing Research, 10 (February) 34-37.

Jolson, Marvin A. (1975), "The Underestimated Potential of the Canned Sales Presentation," Journal of Marketing, 39 (January), 75-78.

Kraft, Frederic B., Donald H. Granbois, and John O. Summers (1973), "Brand Evaluation and Brand Choice: A Longitudinal Study", Journal of Marketing Research. 10 (August), 235-241.

Lehman, Donald R. (1971), "Television Show Preference: Application of a Choice Model", Journal of Marketing Research, 8 (February), 57-65.

Levitt, Theodore (1965), Industrial Purchasing Behavior: A Study in Communications Effects, Boston, Ma: Division of Research, Harvard Business School.

Paulhus, Delroy (1982), "Individual Differences, Self-Presentation, and Cognitive Dissonance: Their Concurrent Operation in Forced Compliance," Journal of Personality and Social Psychology, 43, 838-852.

Pliner, Patricia, Heather Hart, Joanne Kohl and Dany Saari (1974), "Compliance Without Pressure:

Some Further Data on the Foot-in-the-Door Technique". Journal of Experimental Social Psychology, 10, 17-22.

Reed, Jim D. (1976), "Comments on 'The Underestimated Potential of the Canned Sales Presentation,'" Journal of Marketing, 40 (January), 67-68.

Reingen, Peter H. (1978), "On Inducing Compliance with Requests", Journal of Consumer Research, 5 (September), 96-102.

___________, and Jerome B. Kernan (1977), "Compliance with an Interview Request: A Foot-in-the-Door, Self-Perception Interpretation," Journal of Marketing Research, 14, (August), 365-369.

___________, and ___________ (1979), "More Evidence on Interpersonal Yielding", Journal of Marketing Research, 16, (November), 589-593.

Roselius, Ted (1971), "Consumer Ranking of Risk Reduction Methods," Journal of Marketing, 35 (January), 56-61.

Sawyer, Alan G. (1973), "The Effects of Repetition of Refutational and Supportive Advertising Appeals," Journal of Marketing Research, 19 (February), 23-33.

Scott, Carol A. (1975), "Past Behavior, Incentives, and Maintained Behavior Change: A Field Study of Self-Attribution Theory," unpublished Ph.D. dissertation, Northwestern University.

___________ (1976), "The Effect of Trial and Incentives on Repeat Purchase Behavior", Journal of Marketing Research, 13 (August), 263-269.

___________(1977), "Modifiying Socially-Conscious Behavior: The Foot-in-the-Door Technique", Journal of Consumer Research, 4 (December), 156-164.

Seligman, Clive, Malcolm Bush and Kenneth Kirsch (1976), "Relationship Between Compliance in the Foot-in-the-Door Paradigm and the Size of the First Request," Journal of Personality and Social Psychology, 33, 517-520.

Sheth, J.N. and W. Wayne Talarzyk (1972), "Perceived Instrumentality and Value Importance as Determinants of Attitudes," Journal of Marketing Research, 9 (February), 6-9.

Snyder, Mark, and M.R. Cunningham (1975), "To Comply or Not Comply: Testing the Self-Perception Explanation of the Foot-in-the-Door Phenomenon", Journal of Personality and Social Psychology, 31, 64-67.

Sternthal, Brian and C. Samuel Craig (1974), "Fear Appeals: Revisited and Revised," Journal of Consumer Research, 1 (December), 22-34.

___________, (1974), "Humor in Advertising", Journal of Marketing, 37 (October), 12-18.

___________, Carol Scott, and Ruby R. Dholokia (1976), "Self-Perception as a Means of Personal Influence: The Foot-in-the-Door Technique", in Advances in Consumer Research, Vol. 3, B.B. Anderson, ed., Chicago: Association for Consumer Research, 387-393.

Swinyard, William R., Michael L. Ray (1977), "Advertising-Selling Interactions: An Attribution Theory Experiment", Journal of Marketing Research, 14 (November), 509-516.

Tybout, Alice M. (1978), "Relative Effectiveness of Three Behavioral Influence Strategies as Supplements to Persuasion in a Marketing Context," Journal of Marketing Research, 15, 229-242.

___________, Brian Sternthal, and Bobby J. Calder (1983), "Information Availability as a Determinant of Multiple Request Effectiveness," Journal of Marketing Research, 20, 280-290.

Uranowitz, Seymour (1975), "Helping and Self-Attributions: A Field Experiment," Journal of Personality and Social Psychology, 31 (May), 852-854.

Wilkie, W.L. and E.A. Pessemier (1973), "Issue in Marketing's Use of Multi-Attribute Attitude Models," Journal of Marketing Research, 10 (November), 428-441.

Yalch, Richard F. (1975), "Attribution Theory and Voter Choice", in Advances in Consumer Research, Vol. 2, ed. M.J. Schlinger, Cincinnati: Association for Consumer Research, 783-791.

___________ (1979), "Closing Sales: Compliance Gaining Strategies for Personal Selling", in Richard P. Bagozzi (ed.), Sales Management: New Developments from Behavioral and Decision Model Research, Marketing Science Institute, Cambridge, Mass.

THE EQUITY/ EXPECTANCY FRAMEWORK INTERFACED WITH THE PSYCHOLOGICAL CONTRACT TO DESCRIBE THE SALESPERSON MOTIVATION BEHAVIORAL PROCESS

Ramon Avila, Ball State University

Abstract

This paper offers a conceptual model of the salesperson behavioral process. On the basis of equity/inequity theory and expectancy-valence theory, specific relationships between different cognitive variables are identified. Psychological contracts are introduced as a means to further the development of the motivational process. Implications from a managerial perspective and future directions for research are also discussed.

Introduction

Two recent articles in the Sales Management Bulletin published by the AMA (1985) support the idea that motivation is not a simple subject. To summarize, it is well known that motivation is a very complex issue that is not likely to be resolved by easy approaches. Sales managers should recognize that sales performance is a function of several factors including motivation, sales skills, aptitude, task clarity and other personal, environmental, and organizational variables. Ceratto (1985) identifies several factors that affect motivation (performance) such as poor leadership, lack of clear or precise work objectives, personal problems, and company products that do not live up to expectations. Doyle (1985) discusses the role of sales task clarity and its relationship with performance. He supports the need for clear goals and timely feedback.

The purpose of this paper is to offer a conceptual model of motivational work behavior. Past research has lacked systematic research that includes input into this motivational process by both the salesperson and sales management. The model in this paper includes the conventional variables believed to be important to the behavioral process of motivating salespeople, but also adds the concept of the psychological contract to help improve task clarity, define clear goals, and offer timely feedback. The psychological contract will be briefly defined.

Psychological Contracts

The notion of a psychological contract implies that the salesperson has a variety of expectations of the organization and that the organization has a variety of expectations of the salesperson. These expectations not only cover how much work is to be performed for how much pay, but also involve the whole pattern of rights, privileges, and obligations between salesperson and organization (Schein 1970).

It is important to underline the importance of the psychological contract as a major variable of work behavior. It will be argued that whether a person is working effectively, whether they generate commitment, loyalty, and enthusiasm for the organization and its goals, and whether they obtain satisfaction from their work, depends to a large measure on two conditions: (1) the degree to which their own expectations of what the organization will provide them and what they owe the organization match the organization's expectations of what it will give and get; and (2) assuming there is agreement on expectations; what actually is to be exchanged - money in exchange for time at work; social-need satisfaction and security in exchange for work and loyalty; opportunities for self-actualization and challenging work in exchange for high productivity, quality work, and creative effort in the service of organizational goals or various confirmations of these and other things. Ultimately the relationship between the salesperson and the sales manager is interactive, unfolding through mutual influence and mutual bargaining to establish a workable psychological contract (Schein 1970, See Table 1).

Introduction of The Model

Motivational work behavior models have been developed to measure salesperson motivation and performance. In a number of sales management studies there have been attempts to study salesperson motivation within the framework of expectancy theory (Churchill 1977, Oliver 1974, 1979). Other researchers have studied salesperson motivation within the framework of equity theory (Adams 1965, Weich 1964, Pritchard 1969) which postulates that the major determinant of job performance and satisfaction is the degree of equity, or inequity, that an individual perceives in a work situation. These two theories along with the concept of a psychological contract will be used to develop a model to explain salesforce motivation and performance. By utilizing the psychological contract concept the model can be improved by incorporating the salesmanagers point of view. Past studies have focused on the salesperson while little effort has been directed at the salesmanager.

The Model

The model of motivational work behavior introduces the concept of a psychological contract. Whenever two individuals exchange anything, there is the possibility that one or both of them will feel that the exchange was inequitable. Such can be the case when a salesperson exchanges his services for compensation or rewards. On the salesperson's side of the contract are factors such as education, intelligence, experience, and effort on the job. There can be under special circumstances other relevant attributes. These may be personal appearance or attractiveness, health and so on. These attributes are what the salesperson perceives as their inputs to the exchange process for which they expect a just return. These inputs may not necessarily be perceived similarly by the salesmanager in the exchange process. The salesmanager must also recognize the inputs as being relevant (Adams 1963, Steers and Porter 1979, Belcher 1974).

A major focus of the model is to understand the process of reaching an equitable psychological contract from both the organization's and salesperson's perspective. The salesmanager and salesperson through negotiation define what the employee will give in the way of effort and contribution in exchange for challenging and rewarding work, acceptable working conditions, organization rewards in the form of pay and benefits, and an organizational future in the form of a promise or promotion, or in the form of a career advancement. The actual terms should be explicit so the sales manager and salesperson can review progress and areas of the selling effort that need to be improved upon. The mutual expectations formed between the salesperson and manager become part of the psychological contract, thus if either party fails to meet the expectations, dysfunctional consequences may follow; demotivation, turnover, lack of advancement, or termination (Schein 1970). Locke and Bryan (1976) found that people's statements about how they intend to perform and of their goals in a situation are good predictors of their actual performance in the situation. The implications are that a salesmanager can expect a better effort by their salespeople if they have the salespeople contribute in determining performance goals, etc., for themselves. Thus, conscious thought processes are related to motivation and therefore motivation presumably can be influenced by affecting the kinds of goals people set for themselves (Locke 1970). For example, instead of a manager giving a sales representative a quota to meet at the beginning of the year, a manager might utilize the psychological contract to induce the sales representative to set a challenging quota or goals for themselves.

The psychological contract also offers the sales manager the opportunity to discuss the problem of role perceptions. It is argued that role inaccuracy, perceived role conflict, and role ambiguity will effect performance (Churchill, Ford, and Walker 1977). In the psychological contract stage it is important for the salesmanager to review these components and ensure that there is an open channel of communication to clarify roles. Role perceptions are treated as inputs in the psychological contract stage of the model and are conceptualized as having a direct influence on motivation and performance. Sales managers can use the psychological contract to filter out role perception problems. Salesperson and organizational objectives and goals should be addressed early in the process before lapses of time compound and distort perceptions. Periodic follow up can determine if the psychological contract is "in balance" or "out of balance."

External Factors of Salesperson Work Behavior

The motivation component will not be the only determinant of performance. The ability of the salesperson, the nature of the work setting and the resources available, the nature of the job itself, and the ability of management to coordinate the efforts of many - all enter into the determination of performance. These external factors will directly influence the psychological contract, motivation and performance components of the model. The model hypothesizes a set of external factors will influence the psychological contract, motivation and performance components. These factors include personal attributes that the salesperson brings to the organization. The individual's demographics, esteem, and experience will also be attributes that positively effect his or her worth.

On the other hand, the way the organization (salesmanager) interacts with the salesperson is likely to influence the process of this motivation. Factors such as closeness of supervision, organizational climate, leadership style, communication techniques, and background of the manager will have an effect on the salesmanager-salesperson relationship. These factors will influence the salesmanager's overall ability to enter into a psychological contract.

Environmental factors such as industry norms are also likely to influence the process of psychological contract. Industry norms will be of concern to the salesmanager. What is happening in our own industry as well as other industries will influence the salespersons perceptions and expectations.

Motivational Component

Motivation. The motivational component in Figure I is modeled as a variant of Vroom's expectancy theory (1964). Motivation is given by

$$M_{io} = f\ [E_j \times \sum_{k=1}^{n} (V_k \times I_{jk}) \qquad (1)$$

where;

M_{io} = the individual salesperson's motivation to perform task i for reward j;
j = the performance level;
k = the outcome as a result of the performance level j;
n = total number of outcomes;
E_j = the salesperson's subjective estimate that his or her efforts will lead to the performance level j;
I_{jk} = the instrumentality of the performance level j required for the second-level outcome k_i and
V_k = the valence of the second-level outcome k.

Individuals are motivated, therefore, by expectancy that the expenditure of effort in certain directions will ultimately result in the desired outcome. The specific tasks which the individual will perform are a function of two factors: 1) the expectancy that the task will lead to an improved outcome level, and 2) the individual's role perception, (i.e. the salesperson's conception of the tasks they ought to perform in order to reach desired levels of outcome).

The state of the psychological contract produces a direct influence on the expectancy/valence model. The psychological contract gives the salesmanager time to interact and decide with the salesperson which tasks are desirable and which are not and which tasks will bring about desired outcomes and which will not. It would seem that discrepancy theory might be utilized to understand why salespeople have low motivation and performance levels. For instance, the greater the discrepancy between the salespeople and salesmanager in setting sales goals, the greater the difference in the psychological contract, thus the greater the dissatisfaction expressed by the salespeople (lack of motivation) will result in greater dissatisfaction by management in the sales performance of the sales people. Finally as has been pointed out earlier, role perception problems can be overcome and each salesperson's questions answered (i.e. a salesmanager might show a new salesperson the tasks performed by a successful salesperson who has just been promoted: number of sales calls, time spent preparing proposals, and amount of company literature distributed could be analyzed if these were the criteria followed by the successful salesperson). If the salesmanager takes the time to enter into a psychological commitment with the salesperson, the salesperson will thus have a better understanding of which tasks will lead to positive outcomes.

Performance

Once the contract is reached, certain contributions will have been agreed upon by both the salesperson and the salesmanager. Performance will be a function of the resulting motivation level and the external factors (i.e. personal, organizational and environmental). A salesperson might have high motivation but if they are lacking in intelligence or needed experience, then performance will be low. Alternatively, if the salesperson has a high level of aptitude but possesses a lower level of motivation there again the performance level will be low. It is management's responsibility to hire people with attributes necessary to succeed. Once the salesperson is hired then management must bring about the climate that will lead to desired salesperson performance.

Performance Evaluation

At the end of a performance period an evaluation will take place. The psychological contract gives the salesmanager and salespeople a common ground to evaluate performance and performance standards. The agreements that were explicitly stated should now be easier to evaluate. The psychological contract will reduce arbitrary decision making that takes place by the salesmanager and the salesperson in the evaluation of performance. The salesperson is more apt to accept a salesmanager's decision if the salesperson made a contribution in determining what level of effort would be necessary to gain the rewards.

Outcomes

Extrinsic rewards are distributed by the organization and the rewards result from the performance level of the salesperson. These include such things as salary increases, promotions, larger expense accounts, and security.

Intrinsic rewards are those which the individual gives to himself. These rewards satisfy higher order needs such as self-esteem and self-actualization (Maslow 1943). Examples would be feeling of accomplishment, personal growth, career development, and self-worth.

The behavior of an employee cannot be explained totally by extrinsic rewards. Intrinsic rewards are important to employee job satisfaction. Although intrinsic rewards are not distributed by the organization, their realization is affected by the design and structure of the organizational environment (Porter, Lowler, Hackman 1975). There are salespeople that put a major emphasis on extrinsic rewards or intrinsic rewards and some will seek equal measures of both. The psychological contract stage can attempt to determine the needs of the salesperson and the importance of the two rewards.

Performance Comparisons (Equity Theory)

Once rewards are offered people tend to make comparisons with rewards offered to others (Adams 1963, 1965). The organization must be aware of these comparisons and should take steps to reward equitably. Salespeople will always discuss their rewards so the organization must ensure the availability, quality, and amount of information be monitored and accurate.

A state of equity or inequity will be perceived. If the comparison is deemed unfair then the salesperson will be faced with a number of alternatives to attempt to correct the inequity (Adams 1963). Tension will be high and the salesperson will attempt to eliminate this.

Psychological tension will take place if the requirements of the contract are not met by the salesperson or the organization. The salesperson will attempt to eliminate the tension. The perception of inequity may lead to first, altering of inputs as the salesperson might engage in a work slowdown. Second, altering outcomes as the salesperson may demand more pay or benefits. Third, the salesperson might decide to change the object of comparison to a lower level employee or the salesperson may leave the organization.

Existence of equity perceptions are likely to lead to satisfaction. The salesperson may be satisfied because they reached all the goals agreed upon in the psychological contract. Another salesperson may have decided that if a majority of the goals set out in the psychological contract were reached then this would bring about an equitable state. The salespeople must also have rewarded themselves with the desired intrinsic rewards. Churchill, Ford, Walker (1977) argue that satisfaction must encompass extrinsic and intrinsic dimensions. The organizational environment must be conducive for the salesperson to reach accepted levels not only extrinsically but intrinsically to be truly satisfied.

The level of satisfaction experienced by the individual will be a function of two variables: 1) the level of extrinsic and intrinsic rewards, and 2) the perceived equitability of the rewards.

Conclusion and Direction for Future Research

Two major propositions are important to consider when examining the model. First, it seems imperative that salesmanagers allow their sales personnel a voice in setting goals for themselves. Evidence suggests that salespersons are more apt to accomplish goals when they were a contributing factor in establishing them. There is evidence to suggest that through this interaction the salesperson will be more inclined to pursue the tasks that will benefit both the organization and the salesperson. Without a psychological contract a salesperson might be pursuing tasks that will not be viewed by management as rewardable. Thus, the salesperson may waste valuable time and effort.

There are many areas other than pay that can be studied in future research. One study would be to measure which inputs and outcomes salespeople feel relevant? Another study might include exploring the ability of the salesmanager to influence the recognition and relevance of inputs and outcomes of individual salespeople or groups (sales force). It might also be worthwhile to measure these variables over a number of industries. Discrepancy theory might be pursued to determine the level of agreement between the salesmanagers and salespeople and whether predictions could be made concerning the desired performance of each salesperson.

Discussion

The paper intends to offer not just another model to emphasize salesperson motivation, but rather an expanded model to incorporate the salesmanager's role. Past research does not emphasize the salesmanager's role in promoting an atmosphere that encourages maximum motivation potential. The model attempts to approach the question of sales motivation from a salesperson/salesmanager viewpoint rather than relying on the perspectives and predictions of sales managers or salespeople.

Conclusions and Implications for Management

The psychological contract offers the salesmanager an avenue to open communication channels. Salespeople generally have little supervision and can easily fall into perceptual problems. The introduction of the psychological contract stage can act as a filter to eliminate any concern of the salesmanager or salesperson. This is also the time that relevant tasks can be determined so common goals of the organization and the employee can be achieved. Also relevant rewards should be identified at this time.

The following implications need to be tested and confirmed:
1) The greater the sales manager's incorporation of the salesperson's inputs into the final sales goal, the greater the satisfaction of the salesperson, and the greater the sales performance of the salesperson.
2) The greater the sales manager's ability to determine the relevant outcomes, the greater the salesmanagers chances to link the outcomes to relevant tasks, which in turn should enhance the potential outcomes for the sales force.
3) Greater satisfaction of the salesforce should be forthcoming when rewards are administered when the salesmanager can elicit agreeable psychological contracts from the sales force.

BIBLIOGRAPHY

Adams, Stacy J., (1963), "Toward an Understanding of Inequity" JOURNAL OF ABNORMAL AND SOCIAL PSYCHOLOGY, vol. 6, no. 5, 442-436.

Atchison, T. J., and Belcher, D. W., (1971), "Equity Rewards and Compensation Administration," PERSONNEL ADMINISTRATION, March-April.

Austin, William, and Walster, Elaine, (1974), "Reactions to Confirmations and Disconfirmations of Expectancies of Equity and Inequity," JOURNAL OF PERSONALITY AND SOCIAL PSYCHOLOGY, vol. 30, no. 2, 208-216.

Bagozzi, Richard, (1980), "Performance and Satisfaction in an Industrial Sales Force: An Examination of Their Antecedents and Simultaneity," JOURNAL OF MARKETING, vol. 44, p. 65-77.

Bagozzi, Richard, (1980), "The Nature and Causes of Self Esteem, Performance, and Satisfaction in the Sales Force: A Structural Equation Approach," JOURNAL OF BUSINESS, vol. 53, no. 3.

Belcher, David, (1974), COMPENSATION ADMINISTRATION, Prentice Hall, Inc.

Belcher, D. W., and Atchison, T. J., (1970), "Equity Theory and Compensation Policy," PERSONNEL ADMINISTRATION, July-August.

Ceratto, Efrain, (1985), "On Motivating the Sales Force," SALES MANAGEMENT BULLETIN, AMERICAN MARKETING ASSOCIATION, Neil M. Ford, editor, volume 1, issue 2.

Doyle, Stephen, (1985), "Motivating Salespeople Through the Clarity of the Sales Task," SALES MANAGEMENT BULLETIN, AMERICAN MARKETING ASSOCIATION, Neil M. Ford, editor, volume 1, issue 2.

Doyle, Steven, Chapiro, Benson, (1980), "What Counts Most in Motivating Your Sales Force," HARVARD BUSINESS REVIEW, May-June.

Hupperty, John W., and Arenson, Sidney, Evans, Richard, (1978), "An Application of Equity Theory to Buyer-Seller Exchange Situations," JOURNAL OF MARKETING RESEARCH, vol XV, May, 250-260.

Lawler, Edward, (1968), "Equity Theory as a Predictor of Productivity and Work Quality," PSYCHOLOGICAL BULLETIN, vol. 70, no. 6, p. 596-610.

Leventhal, Gerald, and Harold Whiteside, (1973), "Equity and the Use of Reward to Elicit High Performance," JOURNAL OF PERSONALITY AND SOCIAL PSYCHOLOGY, vol. 25, no. 1, p. 75-83.

Leventhal, Gerald, and James Michaels, (1977), "Locus of Cause and Equity Motivation as Determinants of Reward Allocation," JOURNAL OF PERSONALITY AND SOCIAL PSYCHOLOGY, vol. 17, no. 3, 229-235.

Pritchard, Robert, (1969), "Equity Theory: A Review and Critique," ORGANIZATIONAL BEHAVIOR AND HUMAN PERFORMANCE, 4, p, 176-211.

Schein, Edgar, (1965), ORGANIZATIONAL PSYCHOLOGY, Prentice Hall, Inc.

Schein, Edgar, H., (1978), CAREER DYNAMICS, Addison-Wesley Publishing Company.

Steers, Richard, and Porter, Lyman, (1979), MOTIVATION AND WORK BEHAVIOR, McGraw-Hill Series in Management, Second Edition.

Teas, R. Kenneth, (1981), and James F. Harrell, "Salespeople Satisfaction and Performance Feedback," INDUSTRIAL MARKETING MANAGEMENT, 10, 49-57.

Walker, Orville, Churchill, Gilbert, and Ford, Neil, (1977), "Motivation and Performance in Industrial Selling: Present Knowledge and Needed Research," JOURNAL OF MARKETING RESEARCH, vol. XLV, May, 157-168.

Walster, Elaine, Berschied, Ellen, and Walster, William G., (1973), "New Directions in Equity Research," JOURNAL OF PERSONALITY AND SOCIAL PSYCHOLOGY, vol. 25, no. 2, 151-176.

Wanous, John P., (1980), ORGANIZATIONAL ENTRY, Addison-Wesley Publishing Company.

Weitz, Barton, (1981), "Effectiveness in Sales Interactions: A Contingency Framework," JOURNAL OF MARKETING, vol. 45, Winter, 85-103.

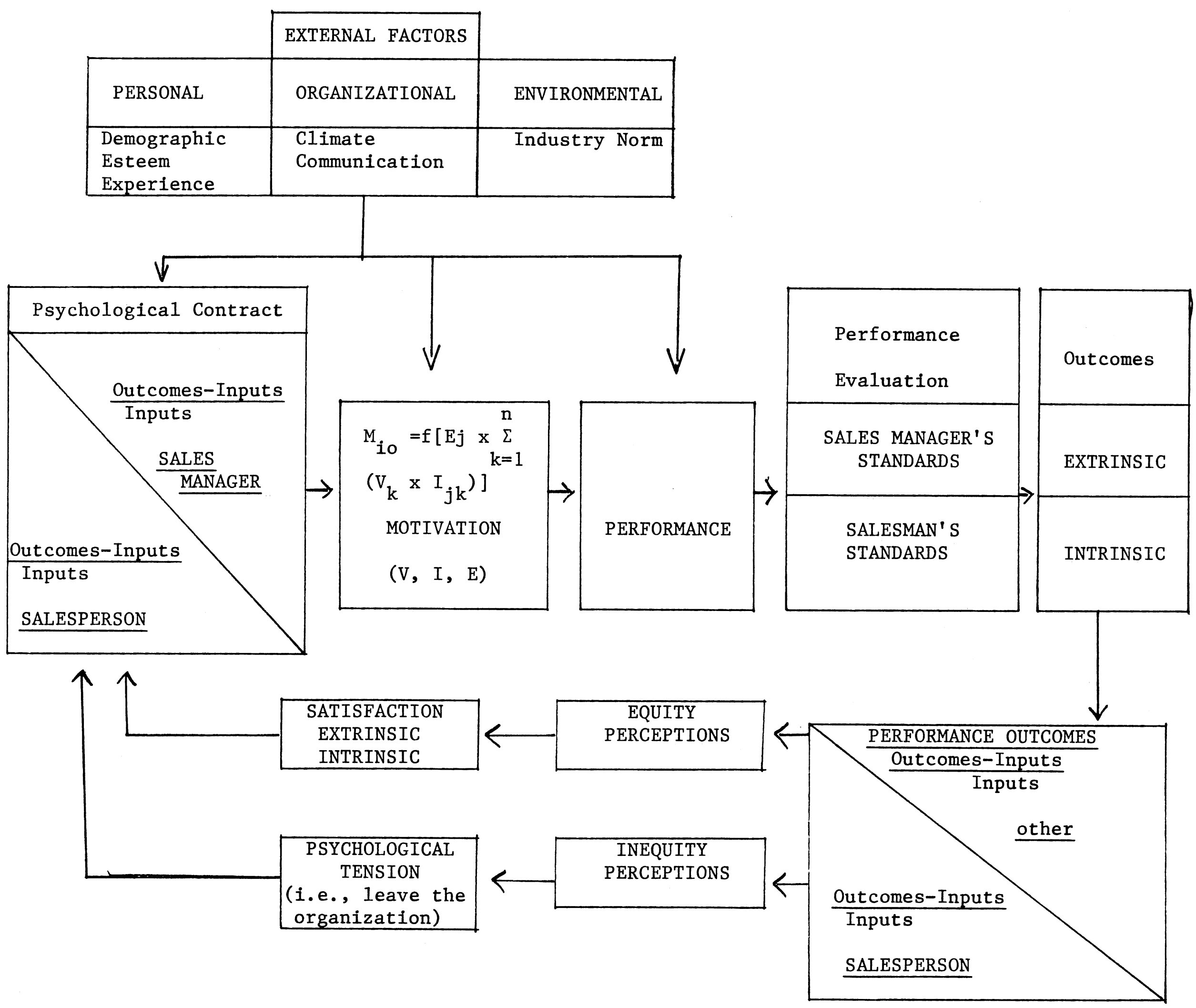
Remaining References Available Upon Request.

TABLE 1

INGREDIENTS OF A PSYCHOLOGICAL CONTRACT

1. Behavioral Expectations
2. Performance Expectations
3. Activity Bounds & Areas of Personal Discretion
4. Mutual Exchange of Interactive Goals
5. Time Frame of Agreement
6. Measures (Exact & Explicit) to Evaluate Mutual Performance
7. Employee Development Activities
8. Periodic Exchanges Between Salesmanager/Salesperson to Minimize Deviations and Maximize Expectations

Figure 1: MODEL OF SALESPERSON BEHAVIORAL PROCESS



THE ROLE OF ORGANIZATIONAL CLIMATE CONDITIONS IN ENHANCING THE DESIRABILITY OF SALESPERSON REWARDS

Pradeep K. Tyagi, San Diego State University

Abstract

This paper examines how salespersons' perceptions of organizational climate affect their desirability of available extrinsic and intrinsic rewards. Since climate can be controlled by the organization, desirability of rewards can be increased by appropriately adjusting organizational factors. Results indicate that a number of organizational climate dimensions do influence the importance that salespersons attach to various rewards.

Organizational Climate and Salesperson Rewards

The importance of rewards in increasing salesperson work motivation and performance remains one of the most frequently discussed but relatively under-researched areas in sales management. In sales job situations, sales managers have tended to use reward systems that are based primarily on past experience and current popularity. The issue of what factors may effect the attractiveness or desirability of alternative rewards has generally been ignored. An understanding of the determinants of reward attractiveness can be quite useful to the organization in designing effective reward programs for the sales force. A few studies in sales management have examined the influence of salespersons' personal characteristics (Churchill, Ford, and Walker 1979) and behavioral patterns (Darmon 1974) on reward attractiveness. These studies indicate that a number of demographic characteristics and expectations can effect salespersons' selection of rewards. Unfortunately, very little, if any, information is available as to how the factors that can be controlled or manipulated by the organization may influence the attractiveness of various available rewards. Information available from organizational psychology indicates that a number of organizational climate factors may significantly affect the attractiveness of alternative rewards available to salespersons. This is because perceptions of organizational climate serve as an important source of information which is used by individuals to evaluate the desirability or undesirability of rewards available in a given situation.

This paper examines the role of organizational climate factors in influencing the attractiveness of alternative rewards available to salespersons. Relevant theory and research in both organizational psychology and sales force management is reviewed to develop a set of research hypotheses. These hypotheses are tested with data collected from a sample of salespersons. Implications of findings are then discussed from a managerial perspective.

Salesperson Rewards

To examine the attractiveness of various rewards available to salespersons, it is useful to recognize that two major types of rewards - intrinsic and extrinsic - are generally available in sales job situations (Tyagi 1982; Walker, Churchill, Ford 1977). Intrinsic rewards come directly from the performance itself. These rewards are internally generated as the salesperson rewards himself (Baird and Hamner 1979). They represent such rewards as feelings of accomplishment, feelings of self worth, and feelings of developing one's skills and abilities. Extrinsic rewards, on the other hand, are those that are not under the control of individuals. These rewards are externally generated and are given by others (Campbell et al. 1970). Examples of extrinsic rewards may include monetary income, promotion, and respect from the supervisor.

Organizational Climate and Attractiveness of Rewards

Organizational climate is generally conceptualized as a set of global perceptions held by individuals about their objective organizational situations (Campbell et al. 1970; Churchill, Ford, and Walker 1976; Jones et al. 1977; Schnieder 1975). In organizational psychology, the basic relationship between organizational climate characteristics and perceived attractiveness of rewards has been characterized as a cognitive process. Salespersons use cues from organizational climate to develop cognitive maps that reflect how organizational characteristics effect them (e.g., friendly and supportive). Such cognitive maps, in turn, are used to evaluate available rewards. Basically, then this relationship can be represented as follows:

Organizational Climate Characteristics	→	Salesperson's Cognitive Map	→	Evaluation of Alternative Rewards

In organizational climate literature, several explanations have emerged about the dimensions that form organizational climate. The general dimensions that are commonly identified include: (1) job characteristics: challenge and variety, autonomy; (2) leadership characteristics: supervisory styles such as considerate leadership; and (3) organizational identification: the extent to which salespersons identify themselves with the organization (Campbell et al. 1970; Churchill, Ford, and Walker 1976; Jones et al. 1977; Tyagi 1982). Organizational climate characteristics examined in this study are defined in Table 1.

TABLE 1

ORGANIZATIONAL CLIMATE CHARACTERISTICS

Variable Name	Description
Considerate Leadership	The extent to which the salesperson feels that his/her ideas and opinions are sought by the supervisor and taken into consideration in designing jobs which effect his/her performance.
Job Challenge and Variety	The extent to which a job gives the salesperson a chance to use his skills and abilities, and calls for him to engage in wide range of behaviors.
Job Autonomy	The extent to which the salesperson has freedom to decide what steps should be taken to complete a given task and/or how a problem should be handled.
Organizational Identification	The degree to which the salesperson feels that the organization provides a vehicle for development of personal goals.

Considerate leadership. With respect to leadership characteristics, House (1971) contended that a leader, by clarifying paths to certain goals and assisting subordinates to reach those goals, can affect their perceptions of desirability of accomplishing related rewards. If the leader is viewed as considerate and is trusted by salespersons, then they will respect his judgment and perceive rewards facilitated by him as desirable. This is particularly true in sales management where salespersons' tasks are varied and teamwork norms are not developed within the group. In such situations, the sales manager may establish goals and through supervision, regulate and clarify path-goal relationships. The sales manager may then specify rewards resulting from accomplishing various goals (i.e., extrinsic rewards). Importance is then attached to these extrinsic rewards by salespersons because they trust the supervisor and value his judgment.

Considerate leadership can also influence the attractiveness of intrinsic rewards by making the job itself more rewarding. This is because consideration is related to the leader's attitude toward salespersons, the warmth of personal supervisor-salesperson relationships, the supervisor's willingness to listen, and the degree of mutual trust between supervisor and salespersons. These attributes of a considerate supervisory style are likely to make the salesperson job intrinsically rewarding.

Job characteristics. With respect to job characteristics, it is argued that job dimensions such as challenge and variety and job autonomy may produce direct and significant impact on the perceived importance which individual employees may assign to different rewards (Hackman and Lawler 1971; James et al. 1977). For example, if a salesperson has considerable job autonomy on the job, he will make efforts to achieve only those rewards or outcomes which are important to him. Since these rewards can be either intrinsic or extrinsic, job autonomy is likely to have a significant influence on the importance of both intrinsic and extrinsic rewards of the salesperson.

The extent to which a job gives the salesperson a chance to use his skills and abilities, and calls for the individual to engage in a wide variety of behaviors, will also affect his desirability for intrinsic rewards. Only if an individual feels that his abilities are being tested by a job and his job makes an important contribution to the organization, will he place more value on intrinsic rewards such as feeling of accomplishment and self worth. Some early laboratory studies (Alper 1946; French 1955) have shown experimental evidence that when people are given tasks they see as testing their abilities, intrinsic rewards become more important.

Organizational identification. When salespersons perceive opportunities available with the organization as providing them a vehicle for development of personal skills and accomplishment of personal goals (i.e., organizational identification), they begin to take personal interest in the matters of organization. Such personal involvement encourages them to do everything possible to make the organization's programs successful. Job involvement studies indicate that when individuals are highly involved in their jobs, they often take partial credits for the success and accomplishments of the work results. Such accomplishments may also influence intrinsic rewards such as feelings of accomplishments and growth. Therefore, if an individual develops the feeling of organizational identification, it is likely that he/she will attach importance to various intrinsic rewards (Campbell et al. 1970).

Based on the preceding discussion, the following hypotheses are stated:

H1: The higher the perception of considerate leadership, the greater the salesperson's perceived importance of intrinsic and extrinsic rewards.

H2: The greater the job autonomy perceived by the salesperson, the greater the salesperson's perceived importance of intrinsic and extrinsic job rewards.

H3: The greater the job challenge and variety perceived by the salesperson, the greater the salesperson's perceived importance of intrinsic job rewards.

H4: The greater the amount of organizational identification, the greater the salesperson's perceived importance of intrinsic job rewards.

Method

Sample and Data Collection Procedure

A medium-size insurance company in the Southeastern United States was selected for data collection purposes. The company employed 230 full-time salespersons. Data collection from an insurance sales population may be advantageous because salespersons work in relatively unstructured settings and therefore a greater intersubject variability may be obtained as compared to other sales populations which operate in much more structured settings (Oliver 1974). As a first step, 20 questionnaires were sent to randomly selected salespersons for pretesting the questionnaire contents. Salespersons were told about the purpose and were requested to identify possible vague questions and make comments regarding any modification in the questionnaire. Sixteen salespersons returned the questionnaire with minor suggestions for modifications. Additionally, the company's executive vice president and the general sales manager were personally interviewed for their input to check the adequacy of the questionnaire.

In 1982, a modified version of the questionnaire was sent to the company's remaining 210 salespersons along with a letter from the executive vice president requesting them to cooperate in the study and a letter from the researcher explaining the purpose of the study. Anonymity was also guaranteed in the researcher's letter. In all, 156 salespersons returned questionnaires. Nine questionnaires were eliminated due to incomplete and unusable responses. This resulted in a final sample size of 147 (70%) of the salesperson population.

Measurement

Organization climate characteristics. To measure the relevant perceived organizational climate characteristics (Table 1), a modified version of the instrument developed by Jones et al. (1977) was used. This instrument consisted of a number of Likert-type statements such as:

> "In my work situation, a person is almost always certain to hear about mistakes, but seldom hears about successes."

____ Strongly Agree	____ Agree	____ Somewhat Agree	____ Not Sure
____ Somewhat Disagree	____ Disagree	____ Strongly Disagree	

A number of items corresponding to each organizational climate characteristic were summed together to obtain measurement for each climate dimension.

Importance of rewards. A list of 12 salient rewards was developed after interviewing sales managers and a randomly selected group of salespersons (Table 2). This list included six intrinsic outcomes and six extrinsic outcomes. A thermometer scale was used to measure perceived importance in terms of the amount of additional satisfaction people receive from a specific increase in a given reward. Salespeople were asked to rank all of the rewards listed on the questionnaire according to the relative amount of satisfaction they would receive from each. They were then told to place their highest ranked reward at the 100° mark on a 100-point "thermometer" scale and to position all of the remaining rewards on the scale according to the satisfaction each would provide relative to their most desired reward. This scale has been recommended by Churchill, Ford, and Walker (1979) for the importance of reward measurement as it is able to provide scores that approximate interval scale data.

A factor analysis using a varimax rotation was performed on reward items to examine the appropriateness of intrinsic versus extrinsic rewards selection (Table 2). As a result, two major factors emerged. One factor included five extrinsic rewards (factor 1), and the other included six intrinsic rewards (factor 2). The reward "Greater freedom to do what I wish on my job" did not load on any of the factors and, therefore, was precluded from the consideration.

TABLE 2

FACTOR ANALYSIS OF EXTRINSIC AND INTRINSIC REWARDS

Rewards	Factor 1	Factor 2
Extrinsic		
High respect from supervisor	.73	.18
Greater freedom to do what I wish on my job	.21	.13
High job security	.75	.11
Respect from fellow salespersons	.74	.23
High earnings	.69	.15
Special awards and recognition	.72	.29
Intrinsic		
Feelings of worthwhile accomplishment	.23	.71
Personal growth and development	.28	.59
Feelings of stimulating and challenging involvement in the work	.11	.60
A sense of being creative and imaginative in my work	.17	.57
A sense of being innovative in my work	.25	.62
Feeling of loyal association with the company	.18	.73

By and large, factor analysis supported the initial selection of intrinsic and extrinsic job outcomes. Rewards under factors 1 and 2 were combined to obtain scores for "intrinsic rewards" and "extrinsic rewards" respectively.

The measures used in this study are consistent with the previous practices of measuring similar constructs both in sales management and behavioral sciences. Nevertheless, it is possible that scales used in this study may not produce truly interval scale data. In most of the behavioral science research, however, slight deviations from the assumption of true interval scale data have not been regarded as serious.

Results

Regression Results

To assess multicollinearity, intercorrelations among independent variables were examined and were found to be less than .20 in magnitude. Thus it seems that multicollinearity is not present and the independent variables may be treated as relatively distinct.

Among the organizational climate characteristics, job challenge and variety showed the most significant influence ($\beta = .43$, $p < .01$) on the importance of both extrinsic and intrinsic rewards, thus suggesting that sales jobs designed on the basis of challenge and variety considerations can play a significant role in influencing salesperson work motivation (Table 3). After job challenge and variety, considerate leadership showed the next most significant effect ($p < .01$) on the importance of extrinsic rewards. This indicates that a participative supervisory style may increase the attractiveness of extrinsic rewards presumably by letting salespersons select the rewards they value most. Organizational identification showed a significant influence on the importance attached to intrinsic rewards but little effect on the attractiveness of extrinsic rewards. This indicates that when salespersons feel that the organization provides a vehicle for the development of personal goals, they may start to value such intrinsic rewards as feelings of growth and development.

As the β weights indicate, climate variables considerate leadership and job autonomy were shown to be related to the importance of extrinsic rewards ($p < .01$), thus partially supporting hypotheses H1 and H2. Consistent with hypotheses H3 and H4, climate variables, job challenge and variety, and organizational identification produced a significant influence on the importance salespersons attach to intrinsic rewards.

Variables considerate leadership and job autonomy did not show significant relationships with intrinsic reward thus not supporting corresponding hypotheses. However, these results should be examined with caution as they may be situation specific or they could have resulted due to a low variance in the value of intrinsic rewards in the present job situation.

TABLE 3

REGRESSION RESULTS WITH IMPORTANCE OF REWARDS AS THE DEPENDENT VARIABLE

	Extrinsic Rewards			Intrinsic Rewards		
Independent Variables	β	t	Signif. Level	β	t	Signif. Level
Considerate Leadership	.37	3.19	.01	.18	1.44	NS
Job Challenge and Variety	.43	3.72	.01	.51	4.12	.01
Job Autonomy	.26	2.21	.01	.20	2.04	NS
Organizational Identification	.12	1.05	NS	.27	2.46	.01
	Adjusted $R^2 = .37$			Adjusted $R^2 = .20$		

NS: Not Significant

Adjusted R^2 values show that organizational climate characteristics explained significantly higher variance in the attractiveness of extrinsic rewards (adjusted $R^2 = .37$) than in the attractiveness of intrinsic rewards (adjusted $R^2 = .20$).

Discussion

The results of this study are encouraging as the hypothesized relationships were either supported or partially supported by the data. A major conclusion emerging from this study is that a number of organizational climate dimensions are significantly related to salespersons' perceived desirability of intrinsic and extrinsic rewards. However, the effect of organizational climate characteristic seems to be more significant on the desirability of extrinsic as opposed to intrinsic rewards. Among the job characteristics, job challenge and variety showed the greatest influence on both types of rewards. Considerate leadership was shown to influence the attractiveness of extrinsic rewards while organizational identification was shown to have a significant relationship with salespersons' perceived desirability for intrinsic rewards. Since some of the hypotheses were only partially supported, these results should be examined with some caution as they may be situation specific. Replication studies done in the context of other sales job settings will be helpful in further clarifying these relationships.

Since the findings of this study are based on cross-sectional data, no true cause and effect implications may be drawn. Nevertheless, statistically significant findings in the hypothesized directions may be considered as suggestive of some possible implication. First, since organizational climate dimensions and conditions are controllable from an organization's perspective, the understanding of how they affect salespersons' desirability of various rewards may be particularly useful. Sales organizations should attempt to determine how situation-specific organizational dimensions can influence the desirability of specific extrinsic and intrinsic rewards. For example, an assessment can be made as to whether or not a certain type of challenging environment may increase the attractiveness of rewards relating to quota competition. Appropriate steps may then be taken to design the job in such a way that salespersons perceive it as providing sufficient challenge and variety. A number of excellent job design strategies have been suggested in the job design literature (e.g., Hackman and Oldham 1980) that can be used to create a climate of job challenge and variety, autonomy, etc.

Possible Limitations

In this study, a possibility of some conceptual or measurement overlap between independent and dependent variables may be considered. It may seem that contents of organizational climate characteristics and intrinsic/extrinsic rewards overlap. However, a careful examination of these variables reveals that organizational climate represents organizational characteristics (i.e., the extent to which these characteristics exist in the organizational setting), whereas importance of reward is a characteristic of the individual salesperson. For example, "job challenge and variety" is a characteristic that is perceived to be a part of an organizational setting. On the other hand, a reward such as "feelings of worthwhile accomplishment" is an individual's characteristic because it reflects the extent to which a salesperson values such a reward. Studies in organizational climate and reward outcomes support the above position (Ingram and Bellenger 1983; James et al. 1977). Thus, it seems that organizational climate characteristics and importance of job outcomes may be treated as conceptually different variables.

Since the sample used in this study represents only a specific population, generalizability of results can be questioned. Different sale populations may operate under different organizational climates and respond differently to various reward offerings. Similar findings in organizational psychology do improve confidence in the generalizability of present results. Nevertheless, similar studies using other sales populations would be helpful in determining the generalizability of present findings.

References

Alper, T. G. (1946), "Task-Orientation vs. Ego-Orientation in Learning and Retention," American Journal of Psychology, 224-238.

Baird, L. S. and W. C. Hamner (1979), "Individual versus System Rewards: Who's Dissatisfied, Why, and What is Their Likely Response," Academy of Management Journal, 22, 9, 783-792.

Campbell, J. P., M. Dunnette, E. E. Lawler, III, and K. E. Weick, Jr. (1970), Managerial Behavior, Performance, and Effectiveness, New York: McGraw-Hill, Inc.

Churchill, G. A., N. M. Ford, and O. C. Walker, Jr. (November 1976), "Organizational Climate and Job Satisfaction in the Salesforce," Journal of Marketing Research, 13, 323-332.

__________ (1979), "Personal Characteristics of Salespeople and the Attractiveness of Alternative Rewards," Journal of Business Research, 7, 25-50.

Darmon, R. Y. (November 1974), "Salesmen's Response to Financial Incentives: An Empirical Study," Journal of Marketing Research, 11, 418-426.

French, E. G. (1955), "Some Characteristics of Achievement Motivation," Journal of Experimental Psychology, 232-236.

Hackman, J. R. and E. E. Lawler, III (1971), "Employee Reactions to Job Characteristics," Journal of Applied Psychology Monograph, 55, 259-286.

Hackman, J. R. and G. R. Oldham (1980), Work Redesign, Reading, MA: Addison-Wesley.

House, R. L. (1971), "A Path Goal Theory of Leader Effectivenes," Administrative Science Quarterly, 1, 485-500.

House, R. L. and T. R. Mitchell (1974), "Path Goal Theory of Leadership," Contemporary Business, 16, 321-338.

Ingram, T. N. and D. N. Bellenger (May 1983), "Personal and Organizational Variables: Their Relative Effect on Reward Valences of Industrial Salespeople," Journal of Marketing Research, 20, 198-205.

James, L. R., A. Hartman, M. W. Stebbins, and A. P. Jones (1977), "Relationships between Psychological Climate and a VIE Model for Work Motivation," Personnel Psychology, 30, 229-254.

Jones, A. P. and L. R. James (1977), Psychological and Organizational Climate: Dimensions and Relationships, (Tech. Rep. 76-4), Fort Worth: Texas Christian University, Institute of Behavioral Research.

Lawler, E. E., III (1973), Motivation in Work Organizations, Monterey, CA: Brooks/Cole Publications Co.

Oliver, R. L. (August 1974), "Expectancy Theory Prediction of Salesmen's Performance," Journal of Marketing Research, 11, 243-253.

Tyagi, P. K. (1982), "Perceived Organizational Climate and the Process of Salesperson Motivation," Journal of Marketing Research, 19, 240-254.

Vroom, V. H. (1964), Work and Motivation, New York: John Wiley and Sons, Inc.

Walker, O. C., G. A. Churchill, and N. M. Ford (1977), "Motivation and Performance in Industrial Selling: Present Knowledge and Needed Research," Journal of Marketing Research, 14, 156-168.

SALES FORCE SATISFACTION AND PLANNING ACTIVITY

John M. Gwin, University of Virginia

Abstract

Considerable previous research indicates that salespeople are generally dissatisfied with their jobs, and that at least some, if not most of this dissatisfaction occurs as a result of job or role-related issues. This article proposes that one way the individual salesperson may attempt to moderate the negative effects of role characteristics on satisfaction is through active participation in the process of planning.

Introduction

There has been consistent concern by firms with field sales forces for ways to increase the productivity and/or the performance of those sales forces. Research efforts have evaluated how relationships among organizational, personal and environmental variables work to affect the performance or productivity of the individual salesperson. While progress has been made toward the development of a general model of the relationships mentioned, that modeling process is still incomplete.

One stream of research has evaluated the variables which influence job satisfaction and the relationship between job satisfaction and performance. This research consistently supports the conclusion that job satisfaction and job performance are positively related to one another, though the causal relationship between the two constructs is still the subject of some debate. Similarly, there is empirical evidence that organizational, environmental and personal variables have varying degrees of influence on job satisfaction (Behrman and Perreault, 1984). Based on this evidence, it seems logical that, if there are ways to moderate negative affectors of job satisfaction, the individual salesperson will be more satisfied and this will, in turn, lead to more productivity.

A study by Churchill, Ford and Walker (1976) found that industrial salespeople are a generally dissatisfied group, especially with those parts of their jobs which are management controlled, such as pay, promotion, field support and supervision. Other parts of the organizational climate caused less dissatisfaction among salespeople. In another study, Walker, Churchill, and Ford (1977) found that there are several variables in the organizational climate which influence total job satisfaction. From these studies, we can say that salespeople tend to be dissatisfied, and there are a number of organizational variables which influence that dissatisfaction.

The Sales Job

Salespeople have, by the nature of their jobs, discretion in the allocation of their work time. Sales managers spend a great deal of energy encouraging their salespeople to use their time more productively, expecting that this will increase salesperson performance. Most salespeople have an implicit "time-budget" which constrains the total hours available for job tasks. At the same time, the categories of sales job time use often have fixed time components which cannot be changed. Of the categories of job time--customer contact, travel, preparation, administrative, office and waiting--only customer contact and preparation time are easily varied by the salesperson. The other categories, over the long run, require fixed amounts of time. Gwin and Perreault (1981) have posited that salespeople should consider tradeoffs between these two categories in terms of their marginal utility versus opportunity costs. The question which logically arises from this thought is what relationship exists between preparation and performance outcomes? That is, what is the "payoff" for being well prepared? The answer may lie in the relationship between preparation and satisfaction.

Preparation and Job Satisfaction

Common experience tells us that the better prepared we are for a situation, whether it involves our work or personal life, the more comfortable we are in that situation, and the more satisfied we are likely to be with the outcome. In the same way, the level of our preparation for an event may help us moderate the effect of any unpleasant expectation we may have. As an example, the scenario of a field salesperson meeting with his or her sales manager for an annual review has the potential to be filled with uncertainty and unpleasantness. In this case, the salesperson may not have a clear understanding of the "performance" outcome--the evaluation process itself--but may be able to anticipate some of the comments that will be made and may be able to prepare responses to those comments. For example, the salesperson may anticipate that the sales manager will comment about the fact that the sales volume generated did not meet the quota set at the end of the year. There may have been circumstances which caused the salesperson to fall short of the goal which were out of the control of the salesperson, like a competitor launching a major marketing effort in the territory. By anticipating the comment and preparing an explanation of the issue, the salesperson is attempting to increase his or her satisfaction with the evaluation. The "performance" cannot be changed, but the salesperson will feel less dissatisfied with it because a rebuttal to a negative comment was prepared. If the salesperson had not anticipated the comment and prepared an explanation, the comment may have been unexpected, been seen as a very negative event, and may have had a considerable negative effect on the satisfaction the salesperson felt with the meeting. In this case, the salesperson may have felt the outcome to be unfair, because the measure was based on events beyond control, but the satisfaction level may have been relatively high because the circumstances could be explained.

In field selling, the actual outcomes of a selling effort are influenced by circumstances other than the effort of the salesperson. In one study (Gwin, 1979), it was found that as much as 70% of the variance in sales volume from one territory to another was attributable to a combination of environmental (level of competition and concentration of accounts) and organizational (marketing effort other than selling and territory workload) variables. When as little as 30% of the sales volume in a territory is the result of the efforts of the salespeople there must be some reconciliation of the fact that the outcomes may not reflect effort--and satisfaction may suffer as a result. The issue in this case is whether being as prepared as possible, no matter what the outcome, will moderate the potential decline in job satisfaction as a result of poor (objective) performance. The relationship between preparation and job satisfaction is both apparent and logically compelling. The question is, what is the nature of this relationship?

Job Satisfaction

In the Churchill et al. study of job satisfaction and organizational climate mentioned earlier, job satisfaction was found to be significantly related to certain organizational variables. For example, salespeople were found to be more satisfied with their jobs when they were more closely supervised. Role ambiguity, the extent to which a salesperson has the necessary information to perform his job adequately, was negatively related to satisfaction. That is, the more ambiguous the salesperson felt his role to be, the more dissatisfied he was with his job. Role conflict, the circumstance where the salesperson has conflicting demands from two or more of his role partners which cannot be simultaneously satisfied, was also found to be negatively related to job satisfaction. As well, other organizational climate variables were found to be related to salesperson satisfaction.

Traditional recommendations for increasing the job satisfaction of salespeople have been made to management. Clearly an enlightened managerial team will attempt to respond to the needs of its salespeople. But on those occasions where management cannot or will not make changes in the organizational climate which will increase job satisfaction by moderating those climate variables which affect satisfaction, the individual salespeople are left to their own efforts to do so. One means by which the negative impact of organizational climate variables such as role conflict and ambiguity can be moderated appears to be participation in the planning process.

The Study

In order to evaluate the extent to which salespeople used planning to moderate the impact of role ambiguity and conflict, it was necessary to develop a measure of participation in the planning process. A random sample of 973 industrial and commercial salespeople were surveyed by mail and asked to indicate how often a menu of 32 planning activities were a part of their planning process. From the 267 responses, a Likert-scaled measure of 15 planning activities was developed [for more detail see Gwin (1979)] which exhibited high levels of validity and reliability. This scale was the basis for evaluating the extent of salesperson participation in the planning process.

The Sample

The sales force of a single firm was the sample used for this study. The force consisted of 111 salespeople in 16 sales districts. The firm was a major competitor in the carpet industry and was noted for offering relatively high quality products in this competitive market.

Each of the 111 salespeople was sent a self-administered questionnaire, a cover letter from the research team explaining the response procedure and a letter from the vice-president of marketing of the firm encouraging response. Of the 111 salespeople surveyed, 96 (or 88%) responded.

Data Collection Instrument

The data collection instrument consisted of six sections: the call planning activity inventory, a measure of role ambiguity, a measure of the salesperson's need for role clarity, a measure of the perceived control by management, the extent to which the salesperson feels internally or externally controlled, and measures of the sales job (account responsibilities and others).

Results

Multicollinearity

The constructs which were used as predictor variables in this study might appear to be interrelated. If that was the case, then the use of the constructs as separate variables in the analysis would not be possible because of the effect of the multicollinear relationship between them. For this reason, a pairwise correlation matrix for the predictor variables was constructed to examine the relationships among them. This matrix is presented in Table 1.

Overall, the correlation matrix shows relatively little multicollinearity among the predictor variables, and so they were treated as separate constructs in the analysis.

Impact of Planning of Climate Variables

A simple regression analysis was used to examine the impact of each of the predictor constructs on participation in the planning process. Table 2 presents the beta coefficients and F values for the analysis.

TABLE 1

Pairwise Correlation Matrix of
Predictor Variables and Planning

	Variables	X_1	X_2	X_3	X_4	X_5	X_6
X_1	Planning Participation	1.00					
X_2	Ambiguity............	- .39	1.00				
X_3	Need for Clarity......	.32	- .29	1.00			
X_4	Locus of Control......	- .28	.21	- .10	1.00		
X_5	Sales Manager Control.	.24	- .19	.27	- .20	1.00	
X_6	Experience...........	.31	- .26	.21	- .36	.04	1.00

TABLE 2

Regression Results for Each Construct
on Planning Participation

Predictor Variables	Beta Estimate	Planning F Value[a]	PrB[b]
Ambiguity...........	- .92	20.27	.0001
Need for Clarity.....	1.42	7.73	.007
Locus of Control.....	- .96	8.79	.0038
Sales Manager Control	.40	4.41	.038
Experience..........	.3375	.92	.018

[a] df = 1,94
[b] at alpha = .05

As Table 2 indicates, the extent of participation in planning is strongly related to both the climate variables and the salesperson's internal needs.

The strong negative relationship between participation in planning and ambiguity argues that the more ambiguous the salesperson feels his job expectations to be, the more planning he is likely to do to reduce that ambiguity. One way to overcome not knowing what is expected is to try and be prepared for any eventuality. Similarly, the greater the salesperson's need for clarity in his job, the greater his participation in planning activities.

The measure of the locus of control indicated that internally focused salespeople planned more. The logic of this result is indisputable. If a person believes the events of his life are more controlled by his efforts than by external forces, then planning is a means of maintaining that internal control.

The more control the sales manager exerts, the more planning the salesperson will do. This result may indicate that salespeople understand the need and usefulness of planning but, when left to themselves, they will not do much of it. If their activities are more tightly controlled by their sales manager, then they will do more planning because the sales manager expects that to be part of their job.

Last, more experienced salespeople plan more. This result seems counterintuitive, because one would expect experience to routinize the selling job and thus reduce the amount of planning required. On the other hand, one might argue that as a salesperson gains experience he realizes the value of planning as an aid to sales success. As a result, experiences causes more, not less, planning.

Conclusions and Implications

The results of this study indicate that planning activity is one means by which salespeople moderate those organizational variables which have a negative impact on their job satisfaction. When faced with an ambiguous set of job tasks, the salespeople will not necessarily depend on the firm to reduce that ambiguity through more fully defined job roles, but rather they will use the vehicles available to them, such as planning activity, to reduce ambiguity through their own efforts.

Similarly, since salespeople tend to be more satisfied when they are subjected to more sales manager control, (Churchill, et al, 1976) and they plan more under the same set of circumstances, it seems that firms should evaluate their sales management styles and provide greater controls for the field sales force.

This study has not provided a direct link between salesperson satisfaction and participation in the planning process, but the relationship is intuitively compelling. The fewer the number of unpleasant surprises in a set of circumstances, the happier a person is likely to be. Planning is a means of reducing the likelihood of those unpleasant surprises.

Sales organizations cannot completely eliminate those characteristics of sales jobs which decrease salesperson satisfaction. Even enlightened management has no control over forces outside the firm, such as customer expectations, which may cause problems for the salespeople. It is incumbent on the firm in these cases to find ways to help the salespeople individually cope with the job characteristics that may affect their satisfaction with their jobs.

One method salespeople already use is participation in planning. By capitalizing on an already used technique, and improving the effectiveness and efficiency of the planning process, the firm can make an important contribution to the well being of its sales force. Since satisfied salespeople are less likely to leave, the results will be not only a more satisfied (and more productive) sales force, but a more stable one as well.

Authors Note:

The author gratefully acknowledges the financial support of the Summer Research Grant program of the McIntire School of Commerce, University of Virginia during the completion of this manuscript.

References

Armstrong, Gary M. (1976), "The Schedule Model and the Salesman's Effort Allocation," California Management Review, Vol. 18, no. 6 (Summer), 43-52.

Bailey, Ronald E., Dennis R. McDermott, and John Wilson (1976), "Time Allocation of a Pooled Industrial Sales Force," Industrial Marketing Management, Vol. 5, p. 343-350.

Behrman, Douglas N. and William D. Perreault, Jr., "A Role Stress Model of the Performance and Satisfaction of Industrial Salespersons," Journal of Marketing, Vol. 48, No. 4, (Fall, 1984), 9-21.

Busch, Paul and David T. Wilson (1976), "An Experimental Analysis of A Salesman's Expert and Referent Bases of Social Power in the Buyer-Seller Dyad," Journal of Marketing Research, Vol. 1-13 (February 1976), 3-11.

Churchill, Gilbert A., Jr., Neil M. Ford, and Orville C. Wakler, Jr. (1976), "Organizational Climate and Jobs Satisfaction in the Salesforce,' Journal of Marketing Research, 13 (November), 323-332.

Comer, James M. (1974), "ALLOCATE: A Computer Model for Sales Territory Planning," Decision Scineces, Vol. 3 (July), 323-339.

Cravens, David B., Robert B. Woodruff, and Joe C. Stamper (1972), "An Analytical Approach for Evaluating Sales Territory Performance," Journal of Marketing, Vol. 36 (January), 31-37.

Dauner, Jack R. And Eugene M. Johnson (1979), "Poor Use of Time is Major Problem with Sales," Marketing News, (October 19), 1.

Donnelly, James H. and John M. Ivancevich (1975), "Role Clarity and the Salesman," Journal of Marketing, Vol. 39, no. 1 (January), 71-74.

Futrell, Charles M., John E. Swan, and John T. Todd (1976), "Job Performance Related to Management Control Systems for Pharmaceutical Salesmen," Journal of Marketing Research, Vol. 13 (February), 25-33.

Futrell, Charles M., John E. Swan, and Charles W. Lamb (1977), "Benefits and Problems in a Salesforce MBO System," Industrial Marketing Management, Vol. 6, 265-272.

Green, Paul E., Michael H. Halbert, and Patrick J. Robinson (1966), "A Behavioral Experiment in Sales Effort Allocation," Journal of Marketing Research, Vol. 3 (august), 261-8.

Gwin, John M. (1979), "The Effect of the Sales Call Planning Process on the Performance Outcomes of Commercial and Industrial Sales Forces," doctoral dissertation, University of North Carolina.

Gwin, John M. and William D. Perreault, Jr., "Sales Call Planning," Industrial Marketing Management, Vol. 10, (October, 1981), 225-234.

Jackson, A.W. (1975), "Developing a Sales Plan," Industrial Marketing Management, Vol. 4, 217-221.

Jackson, Donald W. Jr, and Ramon J. Alday (1974), "Managing the Sales Force by Objectives," MSU Business Topics, Vol. 22, No. 2 (Spring), 53-58.

Kahn, R.L., P.M. Wolfe, R.P. Quin, J.D. Snock, and R.H. Rosenthal (1964), ORGANIZATION STRESS, New York: John Wiley & Sons, Inc.

Katzenback, Jon R. and R.R. Champion (1966), "Linking Top-Level Planning to Salesman Performance," Business Horizons, Vol. 9, No. 3 (Fall), 91-100.

Little, John D. (1970), "Models and Managers: The Concept of a Decision Calculus," Management Science, Vol. 16, no. 8 (April), 466-485.

Lodish, Leonard M. (1971), "CALLPLAN:. An Interactive Salesman Call Planning System," Management Science, Vol 18, no. 4 (December), 25-40.

Lodish, Leonard M. (1974), "'Vaguely Right' Approach to Sales Force Allocation," Harvard Business Review, (January-February), 119-124.

Lodish, Leonard M. (1976), "Assigning Salesmen to Accounts to Maximize Profits," Journal of Marketing Research, Vol. 13, (November), 440-444.

Montgomery, David, Alvin J. Silk and Carlos Zarogoza (1971), "A Multiple Product Sales Force Allocation Model," Management Science, Vol. 18, no. 4 (December), 3-24.

Oliver, Richard J. (1974), "Expectancy Theory Predictions of Salesman's Performance," Journal of Marketing Research, Vol. 11 (August), 243-253.

Rizzo, John R., Robert J. House, and Sidney I. Lirtzman (1970), "Role Conflice and Ambiguity in Complex Organizations," Administrative Science Quarterly, 15 (June), 150-163.

Ryans, Adrian B. and Charles B. Weinberg (1979), "Sales Territory Response," Journal of Marketing Research, Vol. 16 (November), 453-465.

Smith, P.C., L.M. Kendall, and C.L. Hulin (1969), THE MEASUREMENT OF SATISFACTION IN WORK AND RETIREMENT, Chicago: Rand-McNally.

Spiro, Rosann L. and William D. Perreault, Jr. (1978), " Factors Influencing the Sales Call Frequency of Industrial Salespersons," Journal of Business Research, Vol. 6, 1-16.

Spiro, Rosann L., William D. Perreault, Jr., and Fred D. Reynolds (1976), "The Personal Selling Process: A Critical Review and Model," Industrial Marketing Management, Vol. 5 (December), 351-364.

Tapiero, Charles S. and John U. Farley (1975), "Optimal Control of Sales Effort in Time," Management Science, Vol. 21, No. 9 (May), 976-985.

Teas, R. Kenneth (1980), "Empirical Tests of Linkages Proposed in the Walker, Churchill, and Ford Model of Salesforce Motivation and Performance," Journal of the Academy of Marketing Science, 8 (Winter), 58-72.

Teas, R. Kenneth, "Supervisory Behavior, Role Stress, and the Job Satisfaction of Industrial Salespeople," Journal of Marketing Research, Vol. xx (February 1983) 84-91.

Tracy, Lane and Thomas W. Johnson (1981), "What Do the Role Conflict and Role Ambiguity Scales Measure?," Journal of Applied Psychology, 66 (August), 464-469.

Walker, Orville C. Jr., Gilbert A. Churchill, Jr., and Neil M. Ford (1975), "Organizational Determinants of the Industrial Salesman's Role Conflict and Ambiguity," Journal of Marketing, Vol. 39, (January), 32-39.

Walker, Orville C. Jr., Gilbert A. Churchill, Jr., and Neil M. Ford (1977), "Motivation and Performance in Industrial Selling: Present Knowledge and Needed Research," Journal of Marketing Research, Vol. 14 (May), 156-168.

Weigand, Robert E. (1968), "Why Studying the Purchasing Agent is Not Enough," Journal of Marketing, Vol. 32 (January), 41-45.

Weitz, Barton A. (1978) "Relationship Between Salesperson Performance and Understanding of Customer Decision-Making," Journal of Marketing Research, Vol. 15 (November), 501-516.

SELF-RATINGS AND MANAGERIAL EVALUATIONS
OF SALESPEOPLE'S PERFORMANCE: A COMPARISON

Yao Apasu, Florida International University
Seth Buatsi, Hofstra University

Abstract

Studies involving the evaluation of performance of salespeople tend to rely on salespeople's self-reports as the measure of performance. The studies assume that self-ratings are highly correlated with managerial ratings of performance. This paper discusses several issues that researchers should consider in drawing managerial inferences from self-reports. The paper suggests that although self-ratings and managerial ratings may not be interchangeable, the former may be useful in identifying inaccuracies in salespeople's perception of the appraisal system.

Introduction

Several recent studies have been concerned with the meaningfulness of the use of salespeople's self-ratings of performance in sales research (Churchill, Ford, Hartley and Walker 1985; Behrman and Perreault 1982). Performance, as used in recent studies refers to salespeople's activities appraised on the basis of the organization's goals and objectives (Walker, Churchill and Ford 1979). The activities define salespeople's role in the organization, and performance on the activities is measured by either self-ratings (Busch and Bush 1978) or managerial evaluations (Apasu 1982; Bagozzi 1976). The use of self-ratings has been criticized as providing data which are biased upward and contaminated by common method variance associated with self-reports. Such criticisms may be unwarranted if it can be shown that self-ratings closely approximate managerial evaluations in sales contexts. This paper, therefore, presents findings from a study designed to assess the interchangeability of managerial and self-ratings of performance.

Salespeople's Performance

Historically, studies in personal selling (Baehr and Williams 1968; Cotham 1969; French 1960) correlated either socioeconomic, demographic, personality or other dispositional measures which impact salespeople's ability with performance. The studies were silent on what constituted performance of salespeople and identified only antecedents of performance. The studies invariably used a singled criterion variable such as volume of sales as the measure of performance.

Recent studies, however, attempt to understand the multidimensional nature of salespeople's performance (Behrman and Perreault 1982; Apasu 1982; Walker, Churchill and Ford 1979; Lamont and Lundstrom 1977; Bagozzi 1976). Performance is construed in these studies as the extent to which a salesperson carries out activities that define his role in the organization. The activities involve technical competence, territory management, selling skills (Behrman and Perreault 1982; Apasu 1982), supportive and developmental strength, and relations with customers (Lamont and Lundstrom 1977; Apasu 1982). In order to truly assess salespeople's performance, managerial evaluations have to be obtained on the extent to which each salesperson discharges the activities describing his role. Yet, salespeople operate across organizational boundaries and are rarely observed by sales managers (Adams 1976). A sales manager's evaluations of salespeople may be accurate, however, where his implicit theories of salespeople's behavior are accurate, and he is willing to infer salespeople's behaviors from limited information (Rothstein and Jackson 1980). This is because evaluations of performance involve cognitive categorization processes (Bernadin and Beatty 1984; Caroll and Schneier 1982; Feldman 1981). Performance evaluation may simply involve a sales manager's ability to recall categories to which he has previously assigned his salespeople. A sales manager with limited number of observations about his salespeople, therefore, may be accurate in his evaluations where his underlying theories of occurrence of sales behaviors are consistent with the actual occurence of such behaviors among his salespeople. Managerial evaluations, thus, have face validity. They may, however, be inaccurate where a manager is unwilling to infer a pattern of behaviors from limited observed behaviors (Nathan and Alexander 1985).

Although managerial evaluations of performance are useful for understanding organizational appraisal of performance, they are difficult to obtain from managers for research purposes. Usually, the requested information on dimensions of performance which a researcher may be studying is unavailable as part of the organization's regular process of appraisal. Sales managers are unwilling to spend the time to obtain the requested information. Researchers have, therefore, used salepeople's self-ratings of performance relative to the performance of others doing similar work (Busch and Bush 1978; Pruden and Reese 1972). The measures of performance are either multiple measures (Behrman and Perreault 1984) or single indicators "in terms of quantity and quality of performance" (Busch and Bush 1978).

The use of self-ratings may be justified on the basis of their high correlation with managerial evaluations (Busch and Bush 1978). For example, Pym and Auld (1965) found high correlations between self-ratings and managerial evaluations. The validity of the self-ratings was higher when salespeople rated themselves anonymously (Pym and Auld 1965). In addition, Heneman (1974) found self-ratings to have less restriction of range, halo error, and leniency than managerial evaluations. Similarly, Churchill, Ford, Hartley and Walker (1985) found that self-ratings of performance do not significantly result in higher correlations with determinants of performance, when compared with managerial evaluations. The use of self-ratings is attractive because it allows the researcher to sample many companies without having to develop "full co-operative relationships with host-firms" (Behrman and Perreault 1982). The use assumes that salespeople know the set of activities that define their role in the organization, and that they assess themselves accurately.

Studies comparing self-ratings and managerial evaluations of performance in other disciplines, however, suggest that "superior and self-ratings rarely do" agree (Miner 1968, p. 84). Little convergent and discriminant validities for self and superior ratings have been found (Nealy and Owen 1970; Miner 1968). The Heneman (1974) results may be explained in terms of the context of the study. The self-raters were managers. Measuring performance is part of managers' role definition. Therefore, in an organization where managers share the same implicit belief system about performance, the correlations between managerial and self ratings by managers are likely to be higher. In addition, where the self ratings reflect interactions within the organization as in Pym and Auld (1965), and Heneman (1974), the ratings and managerial evaluations are likely to be closer than in an industrial sales context. The industrial salesperson's role involves interacting with others both within and outside the organization. The implicit evaluative models of performance of the two groups may differ because both groups may have little opportunity to interact outside the organization.

In addition, the link between the determinants and self-evaluations of performance may be attributable to common method variance, although the correlations may be no greater in meta-analysis than those of managerial evaluations (Churchill, Ford, Hartley and Walker 1985). Where self-reports are used, the degree to which the findings reflect method variance and salespeople's attempt to maintain cognitive consistency should be assessed. The meaningfulness of self-ratings in a sales context as surrogate measures for managerial evaluations becomes more questionable where cross-sectional data are used. This is because organizational contexts influence the appraisal system (Zammuto, London and Rowland 1982). The preceding concerns may be unnecessary where self-ratings are established as approximating managerial evaluations in different sales contexts. This study, therefore, presents some evidence on the degree to which self-ratings approximate managerial ratings in a sales context.

Methodology

Salespeople of a major U.S. based multinational corporation were used in the study. The firm's products are highly technical and are often designed to meet the specifications of original equipment manufacturers. The salespeople, therefore, have to be flexible in dealing with customers and know which products are suitable for a particular customer. A sales call usually involves discussion of what the customer is doing and what results are expected. The salesperson then explains various alternatives to the client, and recommends one. Salespeople operate from a district sales office.

A random sample of 260 out of approximately 625 salespeople of the firm was surveyed. In addition, 24 sales managers were requested to fill out evaluations on the performance of salespeople in the study. The evaluations were essentially the same as those of the salespeople. The sales managers evaluated only salespeople under them. Twenty-one sales managers returned the evaluations. One hundred and fifty-three questionnaires were returned by the salespeople and matched with the managerial evaluations. Ninety-seven percent of the salespeople were males. Sixty-four percent were college graduates.

Data Collection

Discussions with the sales manager, General Manager and some salespeople of the firm's subsidiary on the West Coast were carried out prior to the administration of the questionnaires. In addition, telephone interviews were conducted with the National Sales Manager on the organization and its policies, measures of performance, and salespeople's role in the organization.

The instrument used in the study was pretested on an industrial sales organization in Los Angeles. The questionnaires to both the salespeople and managers were sent through the company's internal mailing system. A cover letter indicating that the study was purely for academic purposes, and was being conducted by the local university was sent with each questionnaire. The salespeople were asked to evaluate themselves. They were assured of complete anonymity of their responses. They were asked not to sign their names and were to send their responses directly to the researcher. These procedures were to lessen variations in scores attributable to social desirability of the responses. The procedures also approximate the assumptions underlying the use of self-ratings of salespeople's performance.

Measures Used

Performance was operationally defined as a salesperson's scores on a set of activities defining his role in the organization. These activities were evaluated in terms of each salesperson's contribution to attainment of the organization's goals and objectives. Following Bagozzi (1976) and Busch and Bush (1978), the measures reflected "quantity" and/or "quality" of tasks carried out relative to others doing similar work. The measures included the following:

Technical Competence. Composite score on items measuring salespeople's knowledge about the company's and competitor's product mixes, and knowledge of company policy.

Territory Management. Composite score on items measuring the degree to which salespeople file sales reports (Likert 1962), cover territories, and plan sales routes (Vance 1963; Thompson and McNeal 1967).

Selling Skills. Scores on items measuring the quality of sales presentations, and ability to handle sales objections and close sales.

Customer Relations. Scores on items measuring the degree to which salespeople get along with their customers and superiors, and maintain satisfactory business relations between clients and company.

Supportive and Developmental Strength. Scores on items measuring the degree to which salespeople service their customers, and prospect for new accounts (Lamont and Lundstrom 1977).

A 9-point Likert scale was used for all items except those measuring customer relations, for which a 7-point Likert scale was used. In exception of customer relations, three items were used to measure each dimension. Four items were used for performance on customer relations. Higher scores on all items represent higher performance.

Results

The measures used in the study are robust, with all reliabilities except self-ratings on customer relations above .75. The reliability of self-ratings on customer relations is .72 (Table 1). The means and standard deviations of both groups are not significantly different (Table 1).

The canonical analysis results are presented in Table 2. The technique is appropriate because the study emphasizes the relationship between managerial and salespeople's own evaluation of performance. The relation between three out of the five corresponding covariates are significant at $p<.05$ (Table 2). However, the canonical correlations are fairly low. For evaluations of technical competence, selling skills and territory management, the canonical correlations are .50 ($p<.01$), .27 ($p<.01$) and .19 ($p<.05$) respectively. Each pair of managerial and self evaluations for technical competence, selling skills, and territory management share only 25%, 7% and 4% of the variance between them respectively.

For evaluations on customer relations, and support and developmental strength, the canonical correlations are .16 and .06 respectively. The relations between self and managerial evaluations on these two dimensions are not significant. The variance shared by the two types of evaluations is 3% for customer relations, and 1% for support and developmental strength.

Implications

The findings of this study show weak relations between managerial evaluations and self-ratings of salespeople's performance. The findings tend to support Miner's conclusion that "superior and self-ratings rarely do" agree (1968). The score generally used in studies on salespeople's performance is the composite score on the overt job-related acts of the salespeople. The score assumes that sales managers and salespeople have similar beliefs about "good" and "poor" performance which can be associated with a number of observed behaviors. The relations between self and managerial evaluations are significant on dimensions on which salespeople traditionally file sales reports (e.g. territory management) or interact more often with sales managers (e.g. selling skills, learning about new products). These activities also involve interactions within the firm. Sales managers and salespeople may therefore have more similar underlying assumptions than activities dealing with customers.

Where the activities are external to the organization (customer relations or support and development strength) managers and salespeople have less opportunity to develop similar beliefs about performance expectations. Managerial and self-ratings of performance are, therefore, less likely to agree.

In addition, evaluation of performance is not usually part of the job definition of salespeople. Their job involves occupying a boundary position to interface with a number of social systems (Bagozzi 1976; Spekman 1978). Salespeople interact internally with sales managers, marketing personnel, production and engineering managers, etc., and externally with purchasing managers and others from client companies (Spekman 1978). "Good" performance on a task defining the role of salespeople may not be particularly meaningful to a salesperson unless he perceives the task as relevant to the attainment of his personal values and goals.

For the sales manager, on the other hand, performance evaluation is an integral part of his role definition. He evaluates his salespeople's behaviors primarily in terms of the contribution to the attainment of the organization's goals and objectives. Performance, therefore, may have different meanings for salespeople and the sales manager.

Where managers share the values of the organization, it is easy to concede that the managers will have common implicit beliefs about measures of performance in the organization. It is difficult to justify such an assumption across organizations, and for salespeople across organizations. There are different types of organizations (Pascale and Althos 1981). The emphasis on self-ratings and cross-sectional data ignores the influence of organizational characteristics on performance ratings (Kane and Lawler 1979). Different organizational structures, and organizations themselves may introduce situational influences on appraisers' use of criteria which may be specific to the organization. The aggregation procedure which is used in most studies ignores the differential weighting of criteria by the managers. Differences in weighting the criteria for evaluation imply differences in the underlying performance model being used by a manager. Evaluations of performance are prone to the "n = 1" problem (Campbell and Dunnette 1968). Studies in single organizations will tend to control the variations in situational factors which influence performance appraisal. That is, variance caused by organizational differences can be assumed to be constant. The use of one organization, as in this study, restricts the generalizability of the findings. However, in appraisal of salespeople's performance, the meaningfulness of measures across organizations is questtionable where organizational contexts influence appraisal (Zammuto, London and Rowland 1982). Future studies should, therefore, assess the influence of organizational and rater differences on the accuracy of appraisals of performance. The studies will be helpful in assessing the usefulness of standardized performance measures across industrial organizations.

The results also do not show any significant difference in the means and standard deviations of the measures. This would suggest an overall absence of upward bias as found by Churchill, Ford, Hartley and Walker (1985).

TABLE 1

CORRELATION MATRIX, MEANS, STANDARD DEVIATIONS, AND RELIABILITIES OF PERFORMANCE MEASURES

PERFORMANCE DIMENSION		1	2	3	4	5	6	7	8	9	10
Technical Competence	Self (1)	1.00									
	Managerial (2)	.55	1.00								
Selling Skills	Self (3)	.59	.25	1.00							
	Managerial (4)	.33	.67	.26	1.00						
Territory Management	Self (5)	.24	.04	.51	.07	1.00					
	Managerial (6)	.08	.35	.12	.68	.19	1.00				
Customer Management	Self (7)	.19	.17	.48	.21	.28	.13	1.00			
	Managerial (8)	−.06	.15	−.03	.47	.04	.55	.16	1.00		
Support and Development Strength	Self (9)	.19	.15	.44	.06	.63	.12	.41	− .04	1.00	
	Managerial (10)	.08	.36	.09	.68	.09	.79	.87	.46	.07	1.00
Means		21.7	21.7	22.6	21.7	21.1	21.1	26.5	23.7	20.7	21.2
Standard Deviations		3.8	3.6	3.6	4.1	4.11	4.5	2.7	3.2	4.2	4.0
Reliability α[1]		.89	.88	.82	.87	.79	.85	.72	.83	.75	.75

[1]Reliability measure is Cronbach α

TABLE 2

CANONICAL CORRELATIONS BETWEEN SELF AND MANAGERIAL RATINGS OF PERFORMANCE

COVARIATE	SHARED VARIANCE	CANONICAL CORRELATION
Technical Competence	.25	.50[1]
Support & Developmental Strength	.01	.06
Selling Skills	.07	.27[2]
Customer Relations	.03	.16
Territory Management	.04	.19[3]

[1]$p < .001$

[2]$p < .01$

[3]$p < .05$

The findings also point to a gap between theoretical concerns for reliability of measures of performance and the needs of managers. Managers are generally concerned with the need to increase organizational support for the appraisal system. They need to use as small a number of variables as possible to accurately measure performance. Researchers should, therefore, be concerned with the formation, retention and use of appraisal styles of managers (Feldman 1982; Balzer 1983: Lord 1985; Murphy et al. 1985). Such research concerns are useful in suggesting ways of improving appraisal systems. In the meantime, the meaningfulness of the use of self-ratings as an approximation of managerial evaluations of performance in sales contexts is doubtful. Self-ratings, however, are useful in identifying discrepancies between salespeople's and managers' perception of performance.

References

Adams, J. S. (1976), "The Structure and Dynamics of Behavior in Organizational Boundary Roles," in M. D. Dunnette, (Ed.), Handbook of Organizational Psychology, Rand McNally: Chicago, 1175-1199.

Apasu, Y. (1982), The Role of Personal Values in the Explanation of Salespersons' Performance, Satisfaction and Propensity to Quit, unpublished doctoral dissertation, University of Southern California, Los Angeles.

Baehr, M. E. and G. B. Williams (1968), "Prediction of Sales Success from Factorially Determined Dimensions of Personal Background Data," Journal of Applied Psychology, 52, 98-103.

Bagozzi, R. P. (1976), Toward a General Theory for the Explanation of the Performance of Salespeople, unpublished doctoral dissertation, Northwestern University, Evanston.

Balzer, W. K. (1983), "Biased Attention to and Encoding of Behaviors During Performance Appraisal: The Effects of Initial Impression and Centrality of the Appraisal Task," unpublished dissertation, New York University.

Behrman, D. N. and W. D. Perreault, Jr., (1982), "Measuring the Performance of Industrial Salespersons," Journal of Marketing, (Fall), 9-21.

Bernadin, H. J. and R. W. Beatty (1983), Performance Appraisal: Assessing Human Behavior at Work, Boston: Kent.

Busch, P. and R. F. Bush (1978), "Women Contrasted to Men in the Industrial Salesforce: Job Satisfaction, Values, Role Clarity, Performance, and Propensity to Leave," Journal of Marketing Research, 435-448.

Campbell, J. P. and M. D. Dunnette (1968), "Effectiveness of T-Group Experience in Managerial Training and Development," Psychological Bulletin, 70, 73-104.

Carrol, S. J. and C. E. Schneier (1982), Performance Appraisal and Review System, Glenview, IL: Scott Foresman.

Churchill, G. A., N. M. Ford, S. W. Hartley, and O. C. Walker (1985), "The Determinants of Salesperson Performance: A Meta-Analysis," Journal of Marketing Research, (May), 103-118.

Cotham, J. C. (1969), "Using Personal History Information in Retail Salesman Selection," Journal of Retailing, (Summer) 31-38.

Feldman, J. M. (1981), "Beyond Attribution Theory: Cognitive Processes in Performance Appraisal," Journal of Applied Psychology, 66, 127-148.

French, C. L. (1960), "Correlates of Success in Retailing Selling," American Journal of Sociology, 66, 128-134.

Heneman, H. G. (1974), "Comparisons of Self and Superior Ratings of Managerial Performance," Journal of Applied Psychology, 59, 638-642.

Kane, J. S. and E. E. Lawler, III (1979), "Performance Appraisal Effectiveness: Its Assessment and Determinants," in B. M. Star, (Ed.), Research in Organizational Behavior, Greenwich, Conn: Jai Press, 425-478.

Lamont, L. M. and W. J. Lundstrom (1977), "Identifying Successful Industrial Salesmen by Personality and Personal Characteristics," Journal of Marketing Research, (November), 517-529.

Likert, R. (1962), "New Patterns in Sales Management," in M. A. Warshaw (Ed.), Changing Perspectives in Marketing: Sixth Annual Conference on Marketing Management, University of Michigan.

Lord, R. G. (1985), "Accuracy in Developing Measurement: An Alternative Definition Based on Raters' Cognitive Schema and Signal Detection Theory," Journal of Applied Psychology, 70, 60-71.

Miner, J. B. (1968), "Management Appraisal: A Capsule Review and Current References," Business Horizons, 11, 83-96.

Murphy, K. R., W. Balzer, M. Lockhart and E. Eisenman (1985), "Effects of Previous Performance on Evaluations of Present Performance," Journal of Applied Psychology, 70, 72-84.

Nathan, B. R. and R. A. Alexander (1985), "The Role of Inferential Accuracy in Performance Rating," Academy of Management Review, 10 (1), 109-115.

Nealy, S. M. and T. W. Owen (1970), "A Multitrait-multimethod Analysis of Predictors and Criteria of Nursing Performance," Organizational Behavior and Human Performance, 5, 348-365.

Pascale, R. and A. Athos (1981), The Art of Japanese Management, New York: Simon & Schuster, Inc.

Pruden, H. O. and R. M. Reese (1972), "Interorganizational Role-set Relations and the Performance and Satisfaction of Industrial Salesmen," Administrative Science Quarterly, (December), 601-609.

Pym, D. L. A. and H. D. Auld (1965), "The Self-Rating as a Measure of Employee Satisfaction," Occupational Psychology, 39, 103-113.

Rothstein, M. and D. N. Jackson (1980), "Decision-making in the Employment Interview: An Experimental Approach," Journal of Applied Psychology, 65, 271-283.

Spekman, R. E. (1978), "Organizational Boundary Behavior: A Conceptual Framework for Investigating the Industrial Salesperson," in R.P. Bagozzi (Ed.), Sales Management: New Developments from Behavioral and Decision Model Research, Cambridge, Massachusetts: Marketing Science Institute, (April).

Thompson, W. W. and J. U. McNeal (1967), "Sales Planning and Control Using Absorbing Markov Chain," Journal of Marketing Research, (February), 62-65.

Vance, J. O. (1963), "The New Salesman," Sales Management, (December), 139-143.

Walker, O. C., Jr., G. A. Churchill, Jr., and N. M. Ford (1979), "Where Do We Go From Here? Selected Conceptual and Empirical Issues Concerning the Motivation and Performance of the Industrial Salesforce," in G. Albaum and G. A. Churchill, Jr., (Eds.) Critical Issues in Sales Management: State-of-art- and Future Needs, Eugene: University of Oregon, (June).

Zammuto, R. F., M. London and K. M. Rowland (1982), "Organization and Rater Differences in Performance Appraisals," Personnel Psychology, 35, 643-658.

RESEARCH IN PROGRESS

THE USE OF A POLITICAL FRAMEWORK IN INTERNATIONAL MARKETING

David M. Ludington, Saint Mary's of California

Abstract

This paper addresses the need for American Multinationals to develop a political decision framework for situations such as South Africa. It recommends several variables that should be used in such a framework.

Introduction

The international marketplace is of strategic importance to most American corporations. Market planners now recognize, due to increasing competition both home and abroad, that the changing environment requires firms to be more aggressive in marketing in terms of market penetration and market development and this will expose them to greater political pressures from a number of sources, both official and unofficial.

Political Considerations

Marketing experts have written that home and host governments are 'silent partners' with a great deal of control over multinationals. This need for control usually comes from the desire for the development of the economy, expanding trade, and promoting political aims (Cateroa 1983). American multinationals must also weigh the positions of various political interest groups which may run counter to those of the U.S. government. This presents a problem since American firms have operations in many countries whose governments are different from the U.S. For example, they are encouraged to develop trade relationships with Russia and China, countries whose human rights policies are repugnant to most in the U.S. We provide food to Ethiopia although its marxist regime continues to starve millions of political opponents.

The situation for multinationals in South Africa is the best example of the need for a decision framework to address political issues. Political interest groups have heated up the question of human rights in South Africa although they are better today than in previous years---and they are certainly better than many other, including African, nations where more brutal regimes exist. Firms are following the directions of the State Department, yet are subjected to pickets, harassment, and economic boycott and not just by the usual leftist activists, but also by universities and local governments that have given in to the pressures of these socialist groups.

Of even greater concern to American multinationals is the precedent that may be set in South Africa and the resultant need to address these same pressures in other host countries. There is little doubt that American multinationals will be put into similar situations in other countries if the disinvestment movement is successful in South Africa.

Elements of a Decision Framework

It is important for companies to consider a number of variables in building a political decision framework. First and foremost, a multinational enterprise owes a fiduciary responsibility to its stockholders. Its major mission is the long-term growth of the firm. While they may have other goals, missions, and social responsibilities, they must be good investments if they are to attract capital. Second, American multinationals must operate in a manner consistent with the acceptable norms for industry and society. Firms must develop ethical positions and use these positions as benchmarks in making decisions. Third, since it is the duty of our elected federal officials to establish and promote American foreign policy, they should follow this direction. Fourth, they must engage in political and economic risk assessment by weighing the short-term risk against long-term risks since a short-term, expedient solution (such as disinvestment in South Africa) may set precedent that causes longer-term risks to the enterprise or to multinationals in general. Fifth, they operate in host countries at the pleasure of established governments and should be sensitive to the political concerns of that government. Sixth, they must decide if the macroenvironment is an uncontrollable variable to be considered in decision-making or a controllable variable to be manipulated to see if they have an obligation to manipulate the domestic policies of home and host environments to meet their ethical obligations to themselves, their stockholders, and to the people of both countries.

Conclusions

The American multinational needs to develop a political decision framework to guide it in dealing with situations such as South Africa. An expansion of such a situation could lead to our excluding trade with the majority of the world's countries. Even our neighbor Mexico and our allies in Israel (for their treatment of the Palestinians) would have to be dropped if the criteria used to judge South Africa were used to judge them.

It would be myopic to think any action plan that American multinationals could follw in these situations would leave them free from criticism. However, this does not mean that they should remain passive. Multinationals will see a greater use of economic blackmail should these tactics work in South Africa. The development and implementation of a decision framework and careful application of the sound principles of public relations will assist them in meeting these dilemmas.

References

Cateroa, Philip R. International Marketing. Homewood, Illinois: Richard D.Irwin, Inc., 1983.

DOES COUNTERTRADE HELP SMALL BUSINESS EXPORTS?

William Renforth, Florida International University
Constance Bates, Florida International University

Abstract

Countertrade has rapidly grown to one-third of all world trade. A survey of Florida countertrade firms showed that 81 percent were small businesses. Half of the countertraders reported a high level of satisfaction, while one-quarter reported serious problems such as delivery delays, delays in finalizing agreements, and product quality. The results suggest that small businesses have a comparative advantage in countertrade and can, with experience, use it successfully to overcome foreign exchange scarcity and to enter new markets.

Introduction

Countertrade - goods/services exchanged for goods/services, with little or no cash involved - is becoming an important part of international trade. Experts have indicated that countertrade and equivalent type transactions today account for a $100 billion share of total world trade (Sender 1984). Moreover, the use of countertrade transactions for U.S. exports is growing rapidly. The National Foreign Trade Council reported a 50 percent growth in such activity in 1981, an additional 64 percent increase in 1982, and 117 percent growth in 1983 (Briggs 1984). Among large U.S. exporters half of the Fortune 500 companies are involved in countertrade, along with 65 percent of the firms listed on the New York Stock Exchange (Fishman 1984).

Underlying these impressive statistics is the realization that countertrade, in all its various forms, is now a significant and timely technique for international trade activities. Foreign countries, hard pressed by increasing oil prices, international debt repayment problems, and shortages of hard currencies are turning more and more to such transactions as their preferred means for carrying out export and import activities.

A growing number of developing countries encourage or require countertrade arrangements of their importers, usually to meet foreign exchange scarcities. A recent Department of Commerce publication, for example, reported on the institutionalized procedure that had been established by 13 Latin American countries to facilitate countertrade (Verzarfu 1984). Factors cited by these countries as relevant in the decision to countertrade include a continued need for economic growth, which is dependent on sustained levels of imports as well as exports. Also important is the accumulated and growing debt of these nations, as well as constraints imposed on obtaining additional loans.

Factors at work in the developed nations have also influenced the expansion of countertrade. These factors include promotion of countertrade by Western exporters as a hedge against declining trade levels and as a tool to open new markets or protect existing export markets from competitors who are inclined to countertrade. Business literature is beginning to reflect this increased interest in countertrade. Several recent books on countertrade have been published. These are predominately how-to books designed to introduce the businessperson to countertrade practices. Three serial publications appeared in 1984, devoted exclusively to countertrade. Descriptive articles, limited primarily to definitions of countertrade and vignettes of experiences, have appeared in many trade journals. Scholarly and empirical research is just beginning to emerge. The National Center for Export-Import Studies (Walsh, 1984), the U.S. International Trade Commission, the World Trade Center at Cleveland State University, and the National Foreign Trade Council recently have all undertaken research projects.

This existing literature suggests that there is no definitive information on the amount of countertrade being conducted today and that hard data estimates based on research are lacking. Moreover, most discussions have focused on very large, Fortune 500 type multinationals. The Journal of Small Business Management published an article describing domestic barter arrangements in July, 1984 (Williams, Tandkar, and Coffman 1984), but little attention has been given to small business participation in international countertrade. Yet, small business firms currently represent a majority of the number of American firms participating in foreign trade and devote a surprising portion of their efforts to exporting. Today, companies with 24 or fewer employees export 11.5 percent of their output, compared with 9.5 percent for firms with 1,000 or more employees (Marion, 1984).

The purpose of this paper is to examine, from the viewpoint of U.S. small business, key aspects of international countertrade relationships. Specifically, the paper identifies (1) the characteristics of a sample of small U.S. firms who are involved in countertrade, (2) the motivations that led these business into countertrade arrangements, (3) the problems associated with countertrade, (4) satisfaction with these types of transactions, and (5) the intentions of exporters to engage in countertrade in the future.

SWEDISH FIRMS IN SOUTH EAST ASIA
THEIR EFFECTS ON THE LOCAL INDUSTRIES

Pervez N. Ghauri, University of Uppsala

Abstract

One of the major problems for the Newly Inudustrialised Countries (NIC) in South East Asia is to create a balance between the foreign firms, their establishments, and the local industries. A very little research has been done which analyses the effects of these foreign establishments on the local industries. The effects of Swedish establishment on the local industries, in these countries, have not been studied before. The study would analyse the Swedish establishments in Thailand, Philippines and Indonesia, that how these establishments have effected the local industries. The theoretical background of the study is the research already done in Uppsala, interorganisational theory, transaction cost theory and the network approach. Data collection is to be done by interviewing ten Swedish firms and their subsidiaries.

INTERNATIONAL EXPANSION OF THE U.S.-BASED FRANCHISORS: OPPORTUNITIES AND PROBLEMS

Nizamettin Aydin, Suffolk University
Madhav Kacker, Suffolk University

Abstract

This paper describes a research in progress on the international business involvement of the U.S.-based franchising firms and the opportunities and problems associated with their international franchise operations. The preliminary findings of the research will be presented at the conference.

Introduction

One of the bright spots in the U.S. economy has been the franchising business. The U.S. Department of Commerce estimated that in 1985, there were 481,234 franchising establishments in the U.S. with a sales volume of $529 billion. The industry provided 5.6 million people with employment. The sales volume has been growing at a compound annual rate of 10.50 percent since 1972. According to the U.S. Department of Commerce survey, retail sales of all firms associated with franchising will constitute 33 percent of estimated total retail sales in 1985. It appears, however, that the franchising market has reached a mature stage with regard to the number of franchising outlets, growing only at a compound annual rate of 0.49 percent during the years 1972-1985. This slow growth is partly due to business failures but it mostly suggests that the market has been well covered. Therefore, the 10 percent compound growth in sales was accomplished not through a greater market coverage and penetration but rather through an increase in the sales volume of already existing outlets. Furthermore, part of the increase in sales volume is attributable to inflation. The question that arises, therefore, is whether or not will the franchising business be able to sustain the present growth rate in the domestic market? At the individual firm level, the increasing sales may mean greater marketing costs due to more intense competition.

As an alternative growth strategy, a firm can contemplate an expansion into international markets. In fact, the existing evidence suggest that the companies who have already ventured into international markets have been growing faster in these markets. The number of U.S.-based franchisors with foreign operations increased from 156 in 1971 to 305 in 1983. The number of outlets associated with the overseas operations of these firms grew at a compound annual rate of 18.5 percent during the years 1971-1983 compared to 0.19 percent growth rate for domestic franchising for the same period. However, the figures indicate that this growth rate has been slowing down. For example, the growth for the 1971-1975 period was 34 percent, and the growth rates for the periods 1975-1980 and 1980-1983 were 13 and 8 percent respectively. Considering the fact that the overseas markets have not yet reached the saturation stage, this slow down may be due to other factors. In addition, there are a host of other operational issues that deserve further investigation.

A greater interest and involvement on the part of the U.S.-based franchisors in international markets would benefit not only this industry but also the nation as a whole. First, franchising does not export jobs. Individual overseas franchisees of the U.S. firms pose no threat to the U.S. employment. Second, franchising abroad does not require outflow of funds from the U.S. in the same degree as the manufacturing because the bulk of the financing is provided by the foreign franchisee. Third, the changes in exchange rates have very little impact on the overseas market share of the U.S. franchisors because export-import content of their business is negligible. Fourth, as explained above, the domestic market expansion may be reaching a maturity stage.

Research in Progress

This research deals with the internationalization of the U.S.-based franchisors. Two sets of mail questionnaires have been prepared, one for the franchisors with international involvement, and another for the franchisors who have no foreign market involvement. The questionnaires have gone through several revisions and have already been tested with a select number of franchisors, the U.S. Department of Commerce, and the International Franchise Association.

The sample for this study includes over one thousand franchisors. The questionnaires have been designed to gather information from the sample firms on the issues associated with international expansion. Some of these issues include the following:

- Market potential analysis: How do the firms go about evaluating markets? What are the country prerequisites for a given form of franchising?
- Expansion path: Do franchisors follow a certain path in expanding abroad?
- Motives for going abroad?
- Organizational approach and its impact.
- Standardization vs. adaptation; market induced or government imposed factors.
- Franchisor - franchisee interaction. The role of culture, infrastructure, legal-political system, etc.
- Sources and nature of competition (i.e., host country franchisers, third-country franchisers).
- Sources of future expansion.
- Perceptual - attitudenal issues: reasons for not going international.

Students' Perceptions of Faculty Evaluations

Sivayya Kolla, Clarkson University
Beheruz N. Sethna, Clarkson University

Abstract

The focus of this paper is student-teacher evaluations, which are generally an important input in the determination of a faculty member's teaching. Findings from this study indicate that the students do appear to know the purpose, do exercise their privilege, but they are not entirely serious in carrying out their resonsibility.

Introduction

The quality of higher education depends, to a large extent, on the performance of faculty members. As such, evaluation of faculty performance is of concern to the administrators of almost all academic institutions. A recent survey of AACSB business schools indicated that 90% of the faculty believed that teaching is an important factor in tenure/promotion decisions. A major input (though not the only one) in the overall evaluation of a professor's teaching, are the students' evaluations of his or her teaching ability on a variety of dimensions. There has been considerable research in the area of faculty evaluation by students: Marsh (1984), Kassaye and Feldman (1983), Stutts and Thoede (1984), Cornwell (1984), and Varble (1983). The current study is mainly concerned with the students' perceptions of the major purpose of teaching evaluations and how serious they are in exercising their responsibility in evaluating faculty.

Methodology

The study consisted of 219 upper-division students of different majors, taking courses in a private, AACSB-accredited School of Management in Fall of 1984 at a University in New York State. Respondents were administered a questionnaire containing twelve questions (in addition to classification information). A combination of yes-no, multiple choice, likert-type scales (strongly agree to strongly disagree) was used. (Questionnaire available upon request)

Findings

The data from 199 useable questionnaires (out of 219) were tabulated. There were 130 males, 69 females, 100 seniors, and 99 juniors. 64.5% of the respondents feel that faculty evaluations serve a useful purpose. However, 21.5% of them feel that they do not. 70% of the respondents stated that they are aware of the purpose of student evaluation, while about 30% did not know. 81% believed that the major purpose of evaluation was feedback on the abilities of the teacher. Only ~7% felt that the purpose was for use in tenure/promotion decisions.

While 35.5% of the respondents agree that most students take their responsibility seriously, 48.5% feel that they don't take this seriously. 14.5% have no opinion.

The teacher's performance was the major basis of evaluations (75.5%). Personality and student's grade accounted for 10.5% and 6.5% respectively.

Findings from this study indicate that the students are experienced in the evaluation process. 95.5% participated in the process in the immediate past semester. More than half of them filled four to five such forms/semester 64.5%* of the respondents felt that the evaluations serve a useful purpose. The rest feel differently or have no opinion. 98%* said that they do not remain absent to avoid this duty. 91%* of those who receive the form, complete and turn them in. Only a small percent (11%) filled the same answer for all questions. 85% of the respondents felt that evaluations provide good feedback to the teacher.

An interesting finding is that only 35.5% of the respondents said most students take this responsibility seriously, while 48.5%@ feel that they do not (14.5% have no opinion). This ties well with the specific comments made by more than half (56.5%) of those who recorded their comments in this study; i.e., they do not take seriously as they doubted the effect. If this attitude, arising out of doubt, is true, it may cause some questions as to the basis on which students fill out the forms. This in turn raises questions as to the reliability of the ratings for decision-making purposes. Perhaps students should be more educated/informed that this input is an important determinant (along with research, professional development and service) of the overall evaluation of a professor. This would give better purpose and credibility to the whole process.

Limitations and Conclusions

Clearly, the findings from one private university in New York State are not necessarily representative of university education in the U.S as a whole. However, the results are significant enough for the study to merit replication in other universities which are concerned about the quality of their student-teacher evaluation process.

* significantly >50% (0.5) at 0.05 level of significance.

@ not significantly different from 50% (0.5)

References

Available on request.

A SYSTEMS APPROACH FOR THE USE OF LIVE CASE STUDIES

Jim Finlay, Western Illinois University

Abstract

As a means of creating a realistic situational application for marketing research theory, many professors have opted for the use of client-sponsored projects. This concept has been discussed by a number of authors (Santos and Jensen 1985; Prestly 1983; Jones 1982; Humphreys, 1981; Browne 1979). Gilberto de los Santos and Thomas D. Jensen, in particular, have utilized this technique at both the graduate and undergraduate levels. Although this concept has been tried by a number of professors, it has been rejected by many as too time consuming. One reason for this rejection is the difficulty encountered in organizing the project and the classroom instruction. For this reason, a systems approach was designed to assist in the organization of all activities associated with the client-based activity.

The System

The system has five identifiable components. First, is the professor and the class. In this segment, normal instruction must take along with the class project. The second component includes groups of 4-5 students which are used for instructional purposes as well as completion of the group project. The third component is the meeting between the professor and a steering committee comprised of one representative from each group. It is at this point that the professor provides his/her consulting expertise to the groups who are performing the study. A fourth segment of the system is the professor. On an individual basis, he/she will develop the initial proposal and have the first contact with the client. The final component of the process is the client. The client must agree to meet with the steering committee to outline the project and this meeting should coincide with the proposal which has been previously agreed upon by the client and the professor. Finally, the client must agree to meet with the class after all final reports have been submitted so that the students can share their findings.

Suggestions for Implementation

Having used this system for a period of time, the author has noticed certain facets of the process which require a high degree of attention.

First, any researcher/consultant finds that many private consulting opportunities which cannot be accepted due to the limited resources of the client. These projects can often be used for pedagogical consulting since, although the clients cannot afford to pay for a normal research project, they can afford to make a donation to the department. In addition, campus administrative office can save considerable amounts of funds by having their surveys conducted by students rather than outside firms.

Second, the professor should attempt to select projects that provide the maximum degree of student exposure to practical application of research theory.

Third, data analysis will depend upon the students' prior exposure to statistics and computer based decision making. Projects involving complex multivariate decision making models should not be accepted if the students have not previously been exposed to these statistical techniques.

Fourth, this process can be formalized by establishing a Center for Instructional Research headed by those professors who wish to use this technique in their research classes. This serves as a formum for ideas on further development of the system and as a clearing house.

Fifth, the major strength of the systems approach is that the entire semester's project can be "layed out" in advance. This allows the professor to more effectively budget classroon time to the project and will reduce the feeling of being pressured by this activity.

Summary

The systems approach to pedagogical consulting provides the professor with a means through which to oversee client-based projects without he traditional amount of time consuming involvement which they may have experienced in the past. Client-based instruction is an excellent method by which to introduce "real world" research experiences as well as providing a means by which to secure additional financial resources. When properly applied, results show that it is a rewarding experience for both faculty and students.

References

Browne, William G. "Using Corporate Sponsored Marketing Management Projects," Journal of Marketing Education November, 1979), 39-47.

de los Santos, Gilberto and Thomas D. Jensen. "Client Sponsored Projects: Bridging the Gap Between Theory and Practice," Journal of Marketing Education (Summer,1985), 45-50.

Humphreys, Marie Adele, "Client-Sponsored Projects in a Marketing Research Course," Journal of Marketing Education (Fall, 1981), 7-12.

Jones, Ann Dickinson. "Student Research in Marketing," Journal of Business Education (November, 1982), 60-62.

THE INTERNATIONAL MARKETING COURSE IN THE AACSB SCHOOLS*

John Thanopoulos, The University of Akron

Abstract

The present study examines the AACSB member schools with respect to the International Marketing course. It is based on an analysis of the responses of 384 schools and relates the frequency of offerings to the number of other international business courses regularly offered, number of other international business courses not regularly offered, number of professors having an interest in international topics, number of students for the present academic year (1984-85), and, growth of the student body during the last three years. The study examines separately the graduate and the undergraduate levels of instruction for this course.

Introduction and Methodological Concerns

Although the internationalization of business curricula was not a well-pronounced priority before the eighties, the American Assembly of Collegiate Schools of Business (AACSB) had some conviction of this need as early as 1959 (Nehrt 1981). Furthermore, Professor Nehrt reports that the first courses of international business were offered in the mid-1950's. Following the initial awareness AACSB proceeded to prepare appropriate guidelines and frequent seminars to educate its members on the complexities of the new topics (Business, 1977; the Internationalization, 1979).

International business education includes many different specific titles. International marketing is one of its most important topics. This paper examines the AACSB member schools with respect to this particular course. It is based on an analysis of the responses of 384 schools and relates the frequency of offerings to the following variables: (1) number of other international business courses regularly offered, (2) number of other international business courses not regularly offered, or only being in the school's bulletin, (3) number of professors having interest in international topics, (4) number of students for the present academic year (1984-85), (5) growth of the student body during the last three years. The study examines separately the graduate and the undergraduate levels of instruction for the international marketing course, through a series of linear regression models.

Six hundred and ninety four (694) institutions were identified from the AACSB Directory. Their Deans received personalized letters by February 20, 1985 and those who did not respond were sent reminders by April 15. The questionnaires sent included a large number of questions, only a few of them referring to the international marketing course. At that time, three hundred and eighty four (384) usable answers were received, approximately, 55.3 percent of the sampling frame.

Findings

At the basic undergraduate model the variables "number of professors having an interest in international topics" and "the student body growth" do not satisfy the t-tests. Thus, only the existence of other international business courses and the size of student body become important predictors of the frequency the international marketing course is offered.

At the "best" graduate model the only variable that may be a good predictor of the frequency the international marketing course is offered may be other international business courses regularly available at the graduate level.

In general, it appears that there is a strong correlation between regularly offered international marketing courses and fully developed programs in international business. Faculty interests and number of students are not important factors in determining how often this course is offered. It appears also that more institutions are involved in teaching international business in the East than in the West. In total, 68 percent of the responding schools regularly offer international marketing at the undergraduate level, 61 percent at the masters level, and 37 percent at the doctoral level (Thanopoulos, 1986).

References

America's Competitive Challenge: The Need for a National Response, Business-Higher Education Forum, Washington: April 1983.

Business and International Education, International Education Project, American Council on Education, Washington: May, 1977.

Critical Needs in International Education: Recommendations for Action, National Advisory Board on International Education Programs, Washington: December 1983.

Thanopoulos, John and J. W. Leonard, Editors, International Business Curricula and Directory of International Schools of Business Administration, Academy of International Business, Cleveland: 1986.

The Internationalization of the Business School Curriculum, Proceedings, AACSB, St. Louis: March 1979.

Nehrt, Lee C., Case Studies of Internationalization of Business School Curriculum, AACSB, St. Louis: October 1981.

*Credit for advice in developing this paper is given to Professor C.P. Rao of the University of Arkansas.

IMPACT OF MARKETING TRENDS ON RETAIL EMPLOYEE PERCEPTIONS OF ORGANIZATIONAL CLIMATE, JOB SATISFACTION, AND JOB MOTIVATION

Jack A. Lesser, Miami University
Martin L. Schwartz, Miami University

Abstract

A study was performed to determine the changes which occurred in employee perceptions of organizational climate, employee satisfaction, and motivational benefits offered by retailers during the period, 1969 to 1977. Results indicated a significant improvement in employee satisfaction, a partial improvement in employee perceptions of motivational climate, and almost no improvement in motivational benefits offered by retailers.

Hypothesized Changes

Four changes in the retailer customer relationship are perceived to have had an effect on retail employee satisfaction, motivation, and organizational climate perceptions since the 1960's. These changes include: (1) the development of innovative retail establishments; (2) shortened retail institution life cycles; (3) the accelerated hiring of managers trained by university business schools, and (4) the increased sophistication of analytical/decision making tools.

Findings

Table 1 summarizes the findings of this study. Plus "+" signs under MGt in Table 1 indicate that significantly more management employees scored the applicable statements higher in 1977 than they scored them in 1969. Minus "-" signs indicate that significantly more employees scored the applicable statements lower in 1977 than in 1969. The level of significance used was .05.

Results of the study, shown on Table 1, indicate that the job satisfaction improvement hypothesis was supported. The improvement in job satisfaction between 1969 and 1977 was stable across the four categories tested (management, nonmanagement, large retailers, and small retailers) for all three questions assigned to the job satisfaction dimension. The results are significant at the .05 level.

Other hypotheses tested in the study were not totally supported.

References

Quinn, Robert P. and Graham L. Staines (1979), 1977 Quality of Employment Survey (Ann Arbor: Institute for Social Research, Survey Research Center, the University of Michigan).

Quinn, Robert, Stanley E. Seashore, and Thomas W. Mangione (1974), 1969 Survey of Working Conditions (Ann Arbor: Institute for Social Research, Survey Research Center, the University of Michigan).

TABLE 1

CHANGES IN EMPLOYEE RESPONSES TO STATEMENTS BETWEEN 1969 AND 1977
(Based on Chi Square Analysis)

	MGT	NON-MGT	LGE RET.	SML RET.
ORGANIZATIONAL CLIMATE				
Leadership Structure				
I am given a lot of freedom to decide how I do my own work.		-		-
Management Concern				
My supervisor is very concerned about the welfare of those under him or her.	+	+	+	+
Role ambiguity				
I have enough information to get the work done.	-			-
My responsibilities are clearly defined.	+	+	+	+
Role Overload				
I have enough help and equipment to get the work done.	-			-
I am not asked to do excessive amounts of work.	-	-		
Job Tension				
The job security is good.	+	+	+	+
JOB SATISFACTION				
All in all, how satisfied are you with your job?	+	+	+	+
Would you recommend your job to a friend?	+	+	+	+
Knowing what you know now, if you had to decide all over again whether or not to take the job you now have, what would you decide?	+	+	+	+
JOB MOTIVATION				
Extrinsic Job Outcomes				
The pay is good.				-
My fringe benefits are good.	+	-		-
The physical surroundings are pleasant.	+	+	+	+
I am given a lot of chances to make friends.		-		
Intrinsic Job Outcomes				
I am given a chance to do the things I do best.		-		-

Note: "+" indicates a significant improvement (at the .05 level) in employee response between 1969 and 1977.

"-" indicates a significant deterioration (at the .05 level) in employee response between 1969 and 1977.

A blank indicates no significant change (at the .05 level) in either direction.

NEW PRODUCT EVALUATION
AN APPLICATION OF A
MULTI-CRITERIA DECISION MAKING APPROACH

James W. Beck, Montclair State College
Nick Bahmani, Montclair State College

Abstract

The Analytical Hierarchy Process (AHP) was used successfully in a new product evaluation case study on a New Jersey food processing company. It led to a clear quantifiable decision to go with one of five proposed products. Briefly, AHP structures any complex, multi-criteria problem hierarchically. Five major criteria (gross margin, capital investment, consumer preference, competition and line capacities) were structured by which potential new products were evaluated by key company personnel. In this manner, it organized intuition and logic into a framework for objective decision making. The model seemed both reliable and efficient given the number of key personnel involved.

METHODS FOR ESTIMATING PRICE-QUANTITY RELATIONSHIPS:
A PILOT STUDY UTILIZING A SURVEY TECHNIQUE

Daulatram B. Lund, Iowa State University
James C. McConnon, Jr., Iowa State University

Abstract

This paper presents a brief review of some of the major studies dealing with the construction of price-quantity relationships. A pilot study is presented that utilizes a survey technique to illustrate the feasibility of generating price-quantity relationships.

Introduction

One of the pricing problems facing retail store managers is the determination of consumer price sensitivity for particular lines of merchandise. One measure of consumer price sensitivity that has been utilized by both economists and marketers is the price elasticity of demand. The estimation of specific price elasticities usually involves the development of price-quantity relationships. There have been a number of methods used for gathering price and quantity data. These methods range from the economist's use of ex post prices and quantities to the marketer's laboratory shopping experiments. Table 1 lists some of the important research studies that have focused on the construction of price-quantity relationships in order to estimate the price elasticity of demand.

TABLE 1
METHODS USED FOR CONSTRUCTING
PRICE-QUANTITY RELATIONSHIPS

Author	Year	Method
Hawkins, .E.R	1957	In-Store Experiments
Pessemier, E.A.	1960	Simulated Shopping Trips
Bell, C.S.	1960	In-Store Experiment
Abrams, J.	1964	Mail Panel Survey
Dalrymple, D.J.	1966	Correlation Analysis
Stout, R.G.	1969	In-Store Experiment Trailer Experiment Personal Interview
Jones, D.F.	1975	Survey Technique

Pilot Study

The objective of this pilot study was to generate a price-quantity relationship using a modified version of the survey technique discussed by Jones (1975).

Interviews were conducted with ten local residents who were frequent shoppers at the test grocery store and who frequently purchased the test product (6½ oz. chunk light tuna) during their weekly shopping trips. After the initial briefing, each participant was first shown four price cards. Each card listed a particular brand at a specified price. The first four price cards were drawn from the middle row of Table 2. This table lists the current prices for all four brands as well as the prices that would prevail on all brands given the manager's suggested price discounts and price increases. Each participant was asked to indicate which brand he would buy at the current prices shown. After the brand was selected, the price of the control brand was replaced with another card showing the next lowest price for that brand. If the control brand was selected at its current price, then that price card was replaced with the next highest price. In either case, the respondent was then asked to make a second selection from this modified list of brand and price combinations. This procedure continued until all prices were exhausted, or until the respondent indicated he would not buy any of the brands at the prices shown. This procedure was repeated for each participant in the pilot study.

TABLE 2
PRICE MATRIX

Price Level	Brand			
	A	B	C	D
-$.10	$.80	$.79	$.69	$.77
-$.05	.85	.84	.74	.82
current	.90	.89	.79	.87
+$.05	.95	.94	.84	.92
+$.10	1.00	.99	.89	.97

Results and Conclusions

By tabulating the responses of the ten participants, a price-preference relationship was constructed for each brand given the current price levels of the other brands. For example, Table 3 shows the demand for each brand as the price of Brand A was increased from $.80 to $1.00, while the other brands were held at their market prices.

TABLE 3
DISTRIBUTION OF SHARES OF PREFERENCE

Brand and Current Price	Estimated Shares Price of Brand A				
	$.80	$.85	$.90	$.95	$1.00
A	80%	60%	20%	10%	0%
B ($.89)	0	20	40	40	50
C ($.79)	10	10	20	20	20
D ($.87)	10	10	20	30	30
	100%	100%	100%	100%	100%

It is important to stress that this was a pilot study with a small sample size. Hence, the results are not generalizable. Also, specific price-change recommendations cannot be made without accurate product cost data. Careful analysis of the impact of changing demand on profits will be necessary before final pricing recommendations are formulated.

REFERENCES

1. Abrams, J. "A New Method for Testing Pricing Decisions," Journal of Marketing 28 (July 1964), 6-9.

RETAIL ADVERTISING AND THE FORMATION OF STORE PRICE IMPRESSIONS

Anthony D. Cox and Dena Thometz Saliagas, Georgia State University

Price is among the most important consumer store choice criteria (e.g., Arnold, et al 1983); but how do consumers form perceptions of a store's prices, and what role does advertising play in this process? This paper presents a series of research propositions on this important topic.

PROPOSITION 1: IT IS DIFFICULT FOR MOST CONSUMERS TO RELY ON DIRECT OBSERVATION IN FORMING STORE PRICE IMAGES. THEREFORE, THEY RELY ON INDIRECT CHANNELS OF INFORMATION, INCLUDING ADVERTISING. First, most consumers visit only a small subset of the available stores (Food Marketing Institute 1984), making it hard to have current price data on a large number of stores. Second, consumers may not attend to prices in the stores they do visit (Wells and LoSciuto 1966). Third, even consumers who pay attention to the prices in a store may have little idea how these prices compare to those in their "regular" store (e.g., Dietrich 1977). Finally, consumers may have difficulty assessing a store's overall economy, since most stores' prices are inconsistent. Brown and Oxenfeldt (1972) found that even in stores with below average overall prices, 35% of products were priced above average. Buyukkurt (1983) discovered that consumers faced with many varied prices use shortcuts in judging a store's price level (e.g. counting the number of discounted prices vs. calculating total market basket savings).

Since it is hard for consumers to make accurate observations of stores' overall price levels, it seems likely that they rely on indirect sources of information, such as word of mouth and advertising. Lynn (1981) found that over 60% of consumers listed newspapers as their primary source of retail price information.

PROPOSITION 2: IT IS HARD FOR CONSUMERS TO JUDGE A STORE'S OVERALL PRICE LEVEL BASED ON THE FEW PRICES INCLUDED IN A RETAIL AD. As suggested earlier, many consumers cannot recall products' regular prices. Their recall is poor enough for items they regularly purchase; however, retail ads often depict the prices of brands most consumers don't normally buy. Dietrich (1977) found that consumers could accurately recall only 18% of such prices. Further, it is not known whether most consumers view advertised items as isolated "specials", or whether they also use them to draw inferences about the prices of unadvertised products.

PROPOSITION 3: RETAIL ADS WHICH STATE "REFERENCE" PRICES IN ADDITION TO SALE PRICES ARE MORE EFFECTIVE IN SHAPING THE STORE'S OVERALL LOW PRICE IMAGE. Again, studies show (Dietrich 1977) that many consumers do not carry around such reference prices in their memories. Also, research indicates that consumers perceive greater savings on advertised products when reference prices accompany sale prices (e.g., Bearden, et al 1984). However, many retail advertisements do not state reference prices (Dietrich 1977).

PROPOSITION 4: AN AD'S EFFECTIVENESS IN SHAPING A STORE'S PRICE IMAGE DEPENDS ON WHICH PRODUCTS' PRICES ARE ADVERTISED. Several authors have speculated consumers may use certain products as indices of a store's overall price level (e.g., Gabor 1973). Buyukkurt (1983) speculated that such products may be frequently purchased, very stable in price, etc. However, the existence and characteristics of such "index" products has not been empirically examined.

PROPOSITION 5: CONSUMERS RELY HEAVILY ON AN AD'S NON-PRICE CUES WHEN TRYING TO ASSESS A STORE'S PRICE LEVEL. Research in psychology (e.g., Hammond 1955) and marketing (Cohen 1972) shows that when humans must assess a hard-to-observe variable, they are likely to rely on easily observed cues believed to be associated with this variable. Thus, consumers having difficulty assessing a store's price level may look for non-price cues by which to judge it. Both Brown and Oxenfeldt (1972) and Buyukkurt (1983) found a perceived relationship between a store's price level and its other characteristics (for example, its decor).

PROPOSITION 6: THE CUES WHICH SHAPE STORE PRICE IMAGE ARE NOT NECESSARILY RELATED TO STORE PRICES; THE CHOICE OF CUES IS BASED MORE ON CONSUMERS' PRECONCEPTIONS THAN ON THEIR EXPERIENCE. Experimental subjects generally do a poor job of assessing correlation, being influenced more by their preconceptions than by actual correlation in the data (Jennings, et al 1982). Consistent with this, Cohen (1972) reports that cues used in consumers' judgments are sometimes completely useless. Specifically, Brown and Oxenfeldt (1972) found that the cues used to form store price images are often unrelated to actual prices.

PROPOSITION 7: CONSUMERS WITH A LOW LEVEL OF INVOLVEMENT (WITH SHOPPING, PRICES OR BOTH) ARE MORE STRONGLY AFFECTED BY INDIRECT CUES REGARDING STORE PRICES THAN MORE HIGHLY INVOLVED CONSUMERS. Petty and Cacioppo (1983) report that uninvolved consumers tend to be particularly susceptable to "peripheral" advertising cues. In addition, uninvolved consumers process information in a superficial way: Petty and Cacioppo's uninvolved subjects were more influenced by the number of arguments than by their cogency; similarly, uninvolved consumers might be more influenced by the number of ostensibly low prices in an ad than by the legitimacy of each product's supposed discount.

References

(A complete reference list is available from the authors).

CONSUMER SATISFACTION WITH THE AUTOMOBILE INDUSTRY

Vinod K. Thukral, Tulane University
Ravi Parameswaran, Oakland University

Abstract

In this study recent car buyers' satisfaction with the automobile industry is examined. The satisfaction literature is reviewed and Lundstrom and Lamont's discontent scale is adopted for the data collection. The findings suggest that buyers are generally satisfied with car manufacturers but dissatisfied with car dealers' service departments and their selling techniques. The respondants also felt that there are too many styles and types of automobiles to choose from. Specific sources of discontent are identified.

POSITIONING: ANOTHER LOOK

Susie Simon, Dobbs Houses Inc. and Ernest F. Cooke, Memphis State University

INTRODUCTION: The Positioning concept introduced over ten years ago, is not clear or well defined. Professionals in marketing frequently refer to Positioning but rarely use it in a universally understood context. Academicians tend to apply the term hand-in-hand with classical Market Segmentation and Product Differentiation or occasionally use Positioning to describe spatial models and clustering techniques related to forecasting and new product development. Advertising agencies sell Positioning as an innovative technique to be used to psyche consumers into believing what the marketers wants the person to perceive about his product, particularly compared to other products. Recognized marketing authorities either interpret and relabel Positioning relative to their own theories, ignore or deny its existence as a new or innovative concept, or loosely apply it to a myraid of marketing related situations. Determining Positioning's place as a strategy begins with a look at the evolution of the term and its relevance to well-established concepts.

REVIEW: The 50's are called the Product Era, epitomized by hard sell with emphasis on the unique features or benefits of the product (Trout & Ries, 1972). Technological advances coupled with increasing competition forced marketers to search for ways to build market share and increase penetration. From the Fifties comes the now-classic article by Smith discussing the roles of Market Segmentation and Product Differentiation as strategic alternatives. Smith (1956) thought of Market Segmentation as the merchandising alternative where the marketers and the manufacturers adjusted a marketing mix to satisfy consumers. Demographic, geographic, and psychographic research were the keys to determining consumer needs. Product Differentiation was defined by Smith as taking a homogenous product and using heavy advertising to tell the consumer how this product is different, better than all the competitive products. Smith suggests that these two strategies are nearly inseparable, and could be used simultaneously; although, in his opinion, the most effective application is sequential.

The Sixties were labeled the Era of Creativity where image was the buzzword and the company was nearly as important as the product (Trout & Ries, 1972). Competition became fierce and many markets stabilized as more product life cycles entered the mature stage. The Seventies focused on strategy and began the Positioning Era. In a three-part series in Advertising Age in 1972, Ries and Trout introduced this new concept. In modern American society, they contended, there existed too many products, too many companies, and too much noise and clutter. Consumers were so bombarded with advertising messages that this overcommunication led to mass sensory overload. Positioning was not what to do to a product, but what you do to the mind of the consumer. As they said, "the basic approach of positioning is not to create something new or different, but to manipulate what's already up there in the mind" (Ries and Trout, 1981). According to them in a fiercely competitive market, a company is foolish to go head-to-head with the leader. They recommended that through careful research and definition the company find a position that has strong consumer appeal and be first in that position.

Maggard (1976), thought that this was a repackaging of the old standbys-market segmentation and product differentiation-with a heavy emphasis on image importance. As an umbrella term, Maggard agreed positioning was acceptable, but as an innovation it missed the mark. McCarthy ignored the idea completely until 1978 when he included "product positioning" in Basic Marketing. Barnett (1969) had already written about product positioning in much the same terms as McCarthy but called it Product Segmentation which is the same as Benefit Segmentation (Haley, 1968). Kotler (1980) waited until 1980 and then discussed Competitive Positioning, defined as "a general idea of what kind of offer to make to the target market in relation to what the competition offers." Ray (1973) explained that a product's position consisted of appeals or characteristics to be communicated to target segments, and that the development of various computer models supported the validity of this theory. He pointed out that the Fishbein-Rosenberg model, combined an overall weighting of consumer perceptions of important product characteristics with a specific weighting of brand preferences. Stefflre (1968) wrote on advertising's importance and found that similar products tended to substitute for and compete with each other, therefore splitting the purchase. However, advertising, Stefflre said, can create in the mind of the consumer distinct differences between competitive brands through the use of selective attribute emphasis and clever creative ad copy. If successful, advertising can fit the product to the consumer. Although not Positioning, this is similar to Trout and Ries.

Brand personality or how people feel about a brand rather than what the brand does is currently being discussed by Madison Avenue ad agencies as the "elisive quality that separates exceptional advertising from ordinary" (Abrams, 1982) Some call it brand character or imagery, and others say it's this year's term for positioning. However, most agree with Purdy (1982), creative director of Young and Rubicam, who says "In today's marketplace, product categories are packed with competitive entries that seem, for all practical purposes, to be very much alike ... the most distinctive thing about a brand may well be its personality." Ennis (1982) in Advertising Age says "there are so many interpretations and usages of the concept of Positioning that the expression has been relegated to a catch-all phrase to cover virtually any aberration in a brand's approach to its market." To Ennis all types of positioning are marketing tools to be chosen and implemented on the basis of the product and its marketing environment. Where the product fits into the environment on the basis of "marketable differentiation" determines which types of positioning are necessary. Ennis has effectively combined both the product and the consumer's perception into his explanation of positioning. Aaker & Shansby (1982) admit that positioning means different things to different people including what Cooke (1984) has defined as segmentation, positioning and differentiation.

REFERENCES available from Ernest F. Cooke, Marketing Department, Memphis State University, Memphis, TN 38152.

MODERATING EFFECT OF EXCELLENCE ON PREDICTION OF VOTING INTENTIONS[1]

By

Sadrudin A. Ahmed
Faculty of Administration
University of Ottawa

Abstract

The study examined the moderating effect of Excellence personality scale on the cognitive consistency between attitude and bahavioral intention. Analysis showed that respondents who scored high on Excellence had a stronger correlation between attitude and intention to vote for an energy supply measure than respondents who scored low. It is, therefore, speculated that Excellence has potential as a segmentation variable for marketing complex, high involvement policy issues.

APPLYING MARKET RESEARCH TO A SERVICE ORGANIZATION: A CASE STUDY OF THE UNITED WAY OF GREATER RICHMOND, VIRGINIA

Dennis R. McDermott, Virginia Commonwealth University

Abstract

The United Way of Greater Richmond, Virginia recently sponsored a market research project designed to assess the public's general perceptions of United Way, importance ratings of tasks and services United Way performs, knowledge and attitudes regarding United Way's performance, donation-related behavior and motives, and demographics. The data, based on 1,120 completed employee questionnaires from 15 major employers, are analyzed relevant to United Way's future marketing efforts regarding market segmentation, product and service offerings, and promotional or educational programs. Key differences regarding potential and existing contributors to United Way are highlighted based on a profile of those aged 35 or over compared to those under 35.

Survey Results

Approximately 80 percent of the 1,120 respondents either agree or strongly agree that UW assists those in need, volunteers should be involved, UW appreciates contributions, and UW strengthens the community. In addition, some 85 percent to 90 percent of the respondents feel positively that UW should tell potential users about available services and where to go for them, as well as to ask donors about needed services. The highest negative feelings relate to UW suggesting appropriate amounts to contribute and giving to religious groups. Some 81 percent of the respondents feel favorably about donors having the ability to specify to which agency or service their donations should be allocated. Services to the elderly, child welfare services, and family counseling services are rated as being most important by the majority of the respondents. The widespread perception exists that community volunteers best reflect community views regarding allocating UW funds, but only 23 percent have the correct perception that volunteers determine which agencies UW will fund and how much money each receives. Overall, roughly one-half of the respondents are either fairly satisfied or very satisfied with the way UW performs its functions, allocates funds among service agencies, and raises money, while some 20 percent are dissatisfied, and approximately 30 percent indicate a "don't know" response. Of the total sample of respondents, 83 percent revealed they contributed some amount to United Way in the past twelve months, with 60 percent of the total giving less than \$100, 12 percent from \$101 to \$200, six percent from \$201 to \$300, and five percent over \$300. Helping other people, their employer expecting them to donate, and the fact that it makes them feel good are the most-mentioned reasons for the respondents' donating to UW. The major reasons for not contributing to UW include they either could not afford or were not asked to contribute, they already gave to another charity, or they felt excessive pressure from their employer to contribute. Of the demographics obtained in the survey, age was determined by the chi-square test to be most significant as an indicator of a typical respondent's overall perceptions and support of UW. General perceptions of younger employees are more likely to be negative regarding UW, and the type of services they rate as more important do not coincide with ratings of the older employees, as the younger employees preferred services consisting of recreational, educational, community action, employment, and housing services and programs.

Research Implications

Regarding employees aged 35 or over, the data indicate a generally supportive set of attitudes and donation patterns toward UW. Ways to maintain loyalty among these employees include matching the services rated as most important by these donors, consisting of services to the elderly, child welfare services, family counseling services, and services for the poor and needy, to the primary offerings supported by UW. In addition, a better understanding should be emphasized regarding first, the quality of services offered; second, the role that community volunteers have in making all major policy decisions; third, the efficiency of UW as related to how much of each dollar contributed actually gets passed on to a service agency; fourth, the donor option policy of allowing the contributors to specify which service agency, if any, they would prefer their donation support; and, fifth, ensuring more communication in the work-place to increase the number of contacts and solicitations made by UW's volunteers employed by their firm or organization. Employees under 35 are more likely to express concern about UW's efficiency, to feel pressured into giving, and would feel better about giving if they knew more about UW. To this segment, services in the recreation, education, community action, health research, employment, housing and day care areas are rated as being important. Due to the future importance of this younger segment, strategies to educate these employees regarding UW's structures, operations, and services would seem necessary. An obvious alternative to accomplishing these ends would be to more actively recruit younger employees as UW volunteers as members of the UW Board of Directors or key committees. In addition, younger employees could be the UW representatives at the work-place who could communicate to their peers the UW message.

THE EFFECT OF ACTUAL AND PERCEIVED TIME AVAILABILITY ON VOLUNTARISM

Lynette S. Unger, Miami University

Abstract

This study investigates the relationship between actual time availability and perceived time availability to hours volunteered on an individual level of analysis. A direct relationship was hypothesized for both variables, given that time is the currency one pays for the rewards of volunteering. Neither hypothesis was supported, with actual time unrelated and perceived time negatively related to voluntarism.

THE U.S. MARKET FOR COMPUTER SERVICES

Andrew C. Gross, Cleveland State University

Abstract

This paper reports on the results of a major survey of the U.S. computer services industry which is one of the largest and most important service industry in the nation. The key forces, both economic and technical, which affect the industry are identified. Major marketing opportunities and specific niches are still available as the industry is fragmented. Four major segments exist; data processing; software; professional consultancy; and turnkey systems. While end users' needs are quite diverse, competitive strategies for creating new customers and forging loyalty bonds with existing ones can be implemented. Extent of interaction with clients, degree of customization, and pricing methods are key variables.

ON IMPROVING MEASURE QUALITY BY ALTERNATING LEAST SQUARES OPTIMAL SCALING

Greg J. Lessne, University of Rhode Island

Abstract

This paper presents a discussion of principal component analysis by alternating least squares optimal scaling (PRINCIPALS) and its application to measure development.

PRINCIPALS was presented by Didow et al (1985) as being capable of improving measure quality. The present paper presents a discussion of the approach advocated by Didow et al (1985) and should prove useful to those contemplating the use of PRINCIPALS in measure development. The data presented by Didow et al (1985) provide a basis for the discussion which follows.

Two examples were presented by Didow et al (1985) each having as dependent measures the tripartite components of attitude (affect, belief and behavioral intention). In both examples, a principal component analysis (with a varimax rotation) was presented which did not provide total support for the convergent and discriminant validity of the measures. This was demonstrated by the fact that a number of variables loaded heavily on components which they were not intended to measure. Cronbach's coefficient alpha for four of the six measures was reported as failing to indicate sufficient reliability for basic research. The authors proceeded to rescale the data by applying the PRINCIPALS algorithm and presented the factor loadings and coefficient alphas for the new "optimal scale values". The resultant factor loading matrices and coefficient alphas demonstrated a greater degree of convergent and discriminant validity and reliability. This apparently makes the point that PRINCIPALS is capable of improving the reliability and validity of deficient data.

The driving force behind PRINCIPALS is to give the data the appearance of being reliable and valid. This is accomplished by rescaling the original values so as to "maximize the variance explained by a one-component principal component analysis" (Didow et al 1985, p. 34). PRINCIPALS will result in larger coefficient alphas and "cleaner" factor structures. Unfortunately, the goal of the method is not to create new scales which best capture the attitudinal state of the respondents. PRINCIPALS' major shortcoming resides in the manner in which it is virtually unconcerned with creating scales which mirror the sentiments of the respondents. Therefore, it's ability to truly increase the validity of measures is greatly hampered.

The Table presents the original 1-7 scale values and PRINCIPALS "Optimal Scale Values" (OSV's) for two measures of affect, AFF1 and AFF5. Responses one through five for AFF5 were all collapsed to a common value of 2.999. PRINCIPALS' rescaling would lead one to believe that there is no difference in the attitudinal state of a respondent who indicated 1 on AFF5 and a respondent who indicated 2, 3, 4 or even 5. Evidence of the fact that the respondents did not differentiate between the first five response categories would be required to legitimately allow such drastic rescaling. PRINCIPALS, however, is not motivated in this manner.

TABLE
SELECTED OPTIMAL SCALE VALUES[a]

Original Values	Optimal Scale Values AFF1	AFF5
1	-3.211	2.999
2	4.482	2.999
3	4.482	2.999
4	5.713	2.999
5	6.312	2.999
6	6.460	6.042
7	6.829	7.648

[a](Didow et al 1985, p. 35)

PRINCIPALS rescaled AFF1 in a manner drastically different than AFF5. One might maintain that such differences are not problematic; that the original Likert scale data were ordinal and therefore any rescaling which maintained order is appropriate. However, the authors point out that analytical results based on the rescaled data are likely to differ from results obtained from the original data. The burden of proof is on the advocates of PRINCIPALS to demonstrate that the rescaled values are indeed more appropriate measures of the respondents' sentiments than are the original values. For AFF1 this would mean that if a respondent chose response category number two s/he did not mean to be one unit from Strongly Agree and five units from Strongly Disagree but rather 7.693 units from Strongly Agree and 2.347 from Strongly Disagree. PRINCIPALS would thus transform the original "agree" response to "disagree". In this sense the algorithm acts as if it knows the respondents' attitudes better than the respondents do. This is a most unfortunate aspect of the method.

PRINCIPALS only improves the apparent reliability and validity of the data by a rescaling approach which is not concerned with capturing the true sentiments of the respondents. The meaning of the rescaled values must therefore be viewed with much suspicion. PRINCIPALS is basically an approach which is concerned with the cosmetic appearance of the data. Such concern for the superficial will not serve to improve the quality of measures.

References

Didow, Nicholas M., Jr. Kevin Lane Keller, Hiram C. Barksdale, Jr., and George R. Franke 1985, "Improving Measure Quality by Alternating Least Squares Optimal Scaling," Journal of Marketing Research, 22 (February), 30-40.

ATTITUDE SCALES: SHOULD WE SYSTEMATICALLY IGNORE POSITION LABELING AND ORDER EFFECT?

Robert C. Greene, Jr., University of Arkansas

Abstract

The use of scales to measure attitude strength and/or polarity is an accepted practice in marketing as well as other social sciences. Often these scales are systematically reversed by shifting the polarity labels. Scales may also be presented alternatively with other types of scales. This paper presents an empirical study of the effects of these practices.

AN EFFICIENT METHOD FOR DEVELOPING TAILORMADE SEMANTIC DIFFERENTIALS FOR SPECIFIC SMALL BUSINESS CONTENT AREAS

Robin T. Peterson, New Mexico State University

Abstract

Small business researchers are in need of means of developing scales for inclusion in semantic differential questionnaires that are high in validity. Some researchers utilize generalized scales, but these may not be appropriate for a particular population under study or object that is evaluated. A technique exists that can provide indices of validity with a minimum expenditure of time and effort. This manuscript indicates how this technique can be employed by small business managers and researchers.

Introduction

Many small businesses can make use of measures of customer, non-customer, employee, and general public attitudes toward the business, its products and services, and its practices. These measures are of substantial value in formulating both strategies and tactics in general management, human resource management, and marketing. The semantic differential is a valuable tool for smaller enterprises' attitude measurement efforts, because it has been widely used and validated and is simple and inexpensive to administer. However, some firms are not able to select scales for this instrument in the manner employed by larger companies and consultants because of insufficient funds, talent, time, or other resources. This manuscript indicates a means of overcoming this obstacle.

Problem

Axiomatically, the validity of any semantic differential attitude measurement attempt is highly dependent upon the meaningfulness of the particular scales chosen for inclusion on the face of the instrument. The scales should accurately elicit the subjects' affective connotations of the object that they are to evaluate. There is a need for methodologies which enable researchers to ascertain what bipolar adjectives should be selected and which to reject.

One technique for selecting scales is simply to borrow them from the output of other research endeavors. The classic Osgood et. al. (1957) listed a number of scales that manifested relatively high factor loading in studies conducted by them and by other researchers. The consistent large magnitudes of these loadings across multiple studies have led some researchers to speculate as to whether or not global, all-pervasive scales exist that can be applied to different groups of subjects and/or to diverse objects--products, groups of employees, companies, advertisements, etc. Some researchers have taken the position that the scales are all-encompassing. They have adopted for their own measurement purposes those scales producing high factor loadings in Osgood et. al. and other factor analyses.

This practice dates back to the 1960's. According to Mindak (1961):

> In attempting to set up standardized scales, certain researchers have concentrated on the classic list of fifty word-pairs, factor analyzed by Osgood. This direction offers comparative possibilities and a hope of generalized attitude scales. In rating TV commercials Burleigh Gardner of Social Research, Inc., consistently uses thirty word-pairs with heavy factor loadings on evaluation, activity, strength, etc.

Another early user of the standardized scales was Endler (1961). In a study of changes in meaning during psychotherapy, he employed nine scales that Osgood et. al. had isolated in factor analytic studies. These were not tested, other than through face validity checks, for their relevance to the particular inquiry that was undertaken.

The practice of borrowing scales has not disappeared from the research scene. Martin and Bellizzi, in an analysis of congruous relationships between self-images and product images, used 22 scales which Dolich employed in a similar study (1969). The scales were picked to represent several of the different underlying dimensions of meaning previously documented in the work by Osgood et. al.

Holbrook and Moore used canonical correlation to construct product spaces for objects with known feature structures (1982). Subjects were asked to rate pictures of sweaters on 20 semantic differential scales. The selection of scales by the researchers was based on the evaluation--activity--potency factor loadings reported by Osgood et. al. Fifteen additional scales were included, based upon suggestions raised by informal interviews with fifteen respondents who were asked to provide reactions to samples of real sweaters.

In other cases, researchers have borrowed scales from other studies. The rationale is that the studies were sufficiently similar to permit valid generalization from one to another. Dwyer and Walker, in a study of bargaining in an asymmetrical power structure, used scales (1981) which were adopted from those developed by Scott for measuring morale (1967). The reliabilities of the scales were assessed by Dwyer as a device for measuring morale, but not for other types of attitude assessment (1980).

In another instance of borrowed scales, Lundstrom and Ashworth studied customers' perceptions of saleswomen in the automotive industry (1982). A set of self administered semantic differential scales was used to measure perceptions of women automobile sales representatives by buyers, on personality, task and evaluative variables. The scales employed were developed by Robertson and Hackett (1977) in their generalized study of saleswomen.

AN ASSESSMENT OF THE EQUALITY OF SEMANTIC AND PERCEPTUAL RELATIONSHIPS BETWEEN TWO SCALING FORMATS

Taylor E. Little, Jr., Georgia State University

Abstract

This research extends the comparison between the Stapel and Semantic Differential scaling formats to include multiple objects, interitem covariance matrices, interpretation of extracted factors, and perceptual spaces. It is recommended that the methodologically simpler Stapel scaling format not be substituted for the Semantic Differential scaling format when the purpose of a study is to either identify and interpret the dimensions of a semantic space, or to describe the location of the objects in a product space.

THE IMPACT OF ALTERNATIVE RATING PROCEDURES ON THE MEASUREMENT OF STORE IMAGE: AN EXPERIMENTAL STUDY

Bob T. W. Wu, Bowling Green State University
Susan M. Petroshius, Bowling Green State University

Introduction

This study examined the effect of two different rating procedures on the measurement of store image and on the magnitude of the halo effect present in the ratings. One rating procedure required subjects to evaluate alternative objects, one at a time, on various attributes. The other rating procedure required subjects to evaluate all stores on one attribute, then all stores on another attribute and so on until all attributes were exhausted. In addition, the impact of familiarity of the stores on the halo effect was examined. Specifically, the following hypotheses were investigated:

1. The rating procedure that requires subjects to rate a store on all attributes at a time will be significantly different from that of ratings from the alternative procedure which requires subjects to rate all stores on one attribute at a time.

2. The rating procedure that requires subjects to rate a store on all attributes at a time will exhibit a higher halo effect than the alternative procedure which requires subjects to rate all stores, one attribute at a time.

3. The more familiar the subjects are with the store, the lower the halo effect will be.

Methodology

The procedure involved subjects rating each of ten stores on 20 attributes using one of the two alternative measuring instruments. The ten stores used in the study were screened from a pilot study to ensure that the majority of subjects would have some knowledge of the stores. The final sample of stores used in the study included a variety of discount and department stores located in the area of research. The 20 attributes examined were determined by the pilot study and a review of past store image studies. While trying to keep the number of attributes to a minimum to prevent the procedure from being excessively long, attributes were selected that would tap different dimensions of store image and yet be relevant for all the stores being evaluated.

The actual procedure consisted of randomly dividing 86 male and female student subjects into two groups. One group received the measuring instrument requiring them to rate all attributes for one store before moving to the next store (high halo procedure). The second group received the instrument which required subjects to rate all stores on one attribute before moving to the next attribute (low halo procedure). All subjects were requested to rate the ten stores on the 20 attributes using a 7-point Likert scale. In addition, subjects were requested to: (1) indicate the number of times within the last 12 months that they visited each of the ten stores, on a 5-point scale ranging from no visits to over 24 visits; and (2) indicate their familiarity with each store on a 6-point scale ranging from extremely familiar to not at all familiar. Both the shopping experience and self report familiarity rating were jointly used to measure the concept of familiarity.

Results

The results revealed there were no significant differences in ratings between the two rating instruments at the .05 level across any of the ten stores. Thus, hypothesis one was not supported by the data in this study. Further, the second hypothesis that suggests that a high halo procedure will generate a high halo effect was also not supported by the data. Finally, the influence of familiarity with store on halo effect was not conclusive in this study. Since shopping experiences and perceived familiarity with stores were not subjected to the experimental manipulations, they were treated as covariates in the analysis of variance. For those stores where these two covariates were not statistically significant, the F values and corresponding probabilities from ANOVA <u>without</u> covariates were examined. Four out of ten stores resulted in significant joint covariate effects at the .05 level. For those stores with a significant familiarity-shopping experience joint effect, Pearson correlation coefficients calculated to determine the direction of the impact revealed that the effect was consistently positive for perceived familiarity but inconclusive for shopping experience. In other words, the more familiar the subjects were with the store, the lower the halo effect shown. Therefore, hypothesis three was partially supported by the results of the study.

THE EFFECT OF APPEALS ON SURVEY FOLLOW-UP MAILING RESPONSE BEHAVIOR

Allen E. Smith, Florida Atlantic University
Daulatram B. Lund, Iowa State University

Abstract

The purpose of this study was to test the effect of five different appeals on follow-up mailing response rate, response speed, and response completeness. Analysis of variance results indicated that the effect of different appeals was statistically significant on response speed, but not on response rate and response completeness.

Introduction

Roscoe, Lang, and Sheth (1975 p.20) concluded that "while there is a general consensus that any follow-up or prodding generates additional response, there is little agreement about the relative effectiveness of different follow-up procedures." The purpose of this study is to determine which follow-up letter appeals facilitate responding. Four appeals and a control message were tested.

Previous work by Childers, Pride, and Farrell (1980) and Houston and Nevin (1977), provide the theoretical base for the utilitarian and egoistic appeals. Comments obtained from focus group and pretest panelists provided the impetus to differentiate the general from the specific appeal. The specific appeals differ from the general in that the former presents and describes the specific ways by which research findings are distributed to key people. The latter appeal does not.

Control: If you have already completed and returned this survey, please reconsider.

Utilitarian-general: YOUR ASSISTANCE IS NEEDED. If you have not already completed and returned this survey, please reconsider. Your attitudes and opinions can provide information that contributes to understanding how the community can be better served by local business and professional organizations.

Utilitarian-specific: YOUR ASSISTANCE IS NEEDED. If you have not already completed and returned this survey, please reconsider. Your attitudes and opinions can provide information that contributes to understanding how the community can be better served by local business and professional organizations. For example, seminars, consultations, and educational programs are continually being given to manufacturing executives, retail store owners, real estate people, chamber of commerce members, and professional service providers (e.g., hospital administrators, doctors, lawyers, tax preparers, dentists, etc.).

Egoistic-general: YOUR OPINIONS ARE IMPORTANT. If you have not already completed and returned this survey, please reconsider. It's important for you to express your opinion so local business and professional people will know the types of products, services, and facilities which would best serve you.

Egoistic-specific: YOUR OPINIONS ARE IMPORTANT. If you have not already completed and returned this survey, please reconsider. It's important for you to express your opinion so local business and professional people will know the type of products, services, and facilities which would best serve you. For example, seminars, consultations, and educational programs are continually being given to manufacturing executives, retail store owners, real estate people, chamber of commerce members, and professional service providers (e.g., hospital administrators, doctors, lawyers, tax preparers, dentists, etc.).

Findings

The follow-up study was conducted in the spring of 1984 in several South Florida suburban cities. The follow-up mailing was sent two weeks after the initial mailing and included a questionnaire, the appropriate cover letter, and a postage-paid business reply envelope.

Response Rates. The follow-up mailing generated only 63 returns (7.4%). Statistically (at $p<=.05$) there was no difference in the follow-up mailing response rates due to different cover letter appeals.

Response Speed. The results indicate that the follow-up mailing response speed is significantly (at $p=.0018$) affected by the type of cover letter appeal used. A least significant difference (at $p=.05$) analysis of response speed means indicated that the effect of only the egoistic-specific appeal was significantly different; the effect of all other appeals on response speed was on a par.

Response Completeness. The results indicate that the effect of different types of appeals on follow-up mailing response completeness was statistically not significant.

Conclusions

The results of the analyses indicated that the type of appeal in the cover letter did not affect follow-up mailing response rate and response completeness, but significantly affect response speed. The egoistic-specific appeal generated slower responses to the follow-up mailing than other appeals considered in the study.

COMPONENTS OF JOB SATISFACTION RELATED TO INTENTIONS TO LEAVE: A STUDY OF THE PURCHASING PROFESSION

James R. Lumpkin, Baylor University
Lawrence B. Chonko, Baylor University

Abstract

Research has related job satisfaction to employee turnover in the purchasing profession. However, little research has been done to establish which aspects of job satisfaction contribute to this turnover. This research reports on a survey of almost 400 purchasing executives nationwide and establishes a link between intention to leave and the components of job satisfaction.

Employee turnover has been frequently investigated as a dependent variable in organization research (e.g., Staw 1984). Most of this research has employed attitudinal variables such as job satisfaction to account for variance in the turnover criterion. Many of these studies point to the consistent, although weak impact of job satisfaction as a predictor of turnover (Price and Mueller 1981; Michaels and Spector 1982; Mobley 1982; Steers and Mowday 1981). Other research has suggested that intentions to leave may be a better predictor of turnover than job satisfaction (Atchison and Lofferts 1972). Researchers following this approach argue that an employee's intention to leave may be the next step after the experienced dissatisfaction. In a study of salespeople, Donnelly and Ivancevich (1975) reported a positive relationship between dissatisfaction and intention to leave. Similarly, Busch and Bush (1978) reported that female sales people were slightly less satisfied with their jobs than their male counterparts, but more inclined to leave, although no direct test of this relationship was provided.

Recently, Parasuraman and Bower (1983) reported that approximately one third of purchasing executives surveyed appeared ready to switch fields. They found that propensity to leave the field of purchasing was related to selected personal and job factors, including an overall measure of job satisfaction. While consideration of overall job satisfaction in the decision to stay with an organization is important, such a measure offers little insight into the roots of dissatisfaction. Knowing that a purchasing executive is dissatisfied and ready to leave does not tell us why he/she is dissatisfied. Consequently, little can be done in an effort to retain his/her services. To answer these questions, it is necessary to take a closer look at aspects of the work situation and job satisfaction as they relate to a purchasing executive's intention to leave. The purpose of this paper is to examine the relationship of several aspects of job satisfaction with purchasing executives' intentions to leave. The purpose of this paper is to examine the relationship of several aspects of job satisfaction with purchasing executives' intentions to leave the organization.

Methodology

The Sample

The data for this study was gathered via a mail questionnaire sent to a random sample of 1000 purchasing executives. A total of 395 questionnaires were returned for a response rate of 39.5%.

The sample included purchasing executives from a wide range of industries including government and all sizes of organizations. Fifty-two percent of the sample reported only one purchasing agent in their organization while 14 percent had 6 or more. Forty-four percent of the respondents represented organizations with 500 or fewer employees and 34 percent had over 2000. Finally, 54 percent of the organizations represented had annual sales revenues of $100 million or less while 20 percent had sales of $1,000 million or more.

Data Collection Instrument

As part of a larger study, the purchasing officers were asked to rate their job satisfaction on a 91 item scale using a five-point agree/disagree format. The scale is based on the one developed by Churchill, et al. (1974) for salespeople and was slightly modified for purchasing executives. The satisfaction scale consists of statements that indicate satisfaction or dissatisfaction with specific aspects of the purchasing executive's work environment and includes seven components--the job itself, coworkers, supervision, company policy and support, pay, promotion, and suppliers and salespeople. A detailed discussion of the measurement of job satisfaction is beyond the scope of this paper. Interested readers can consult Smith, Kendall and Hulin (1969), Futrell (1979) and Futrell and Parasuraman (1984). The scale allows for obtaining scores for each purchasing executive on each component. A factor analysis and subsequent measurement of internal consistency (Cronbach's (1951) Alpha Coefficient) indicated the scale works as well for purchasing executives as with salespeople (Churchill, et al. 1974). Table 1 shows the alpha coefficients for each of the seven job satisfaction components.

Intention to leave was measured on a five-point scale from "not at all" (1) to "A very great extent" (5) in response to the question "To what extent are you presently seeking to change employers?" In order to determine the relationship between intention to quit--a precursor to turnover--and the seven job satisfaction components, regression was used with intention to quit as the dependent variable.

COMPETITIVE SESSION PAPERS
ADDENDUM

THE ENVIRONMENT - ORGANIZATION INTERFACE: THE IMPACT OF OPERATING ENVIRONMENT ON DISTRIBUTION ARRANGEMENT OF FIRMS IN DEVELOPING ECONOMIES

Rowland C. Chidomere, North Carolina A&T State University

Abstract

It has been suggested that an effective marketing strategy is one in which organizational arrangements and practices are matched with environmental opportunities. Despite the importance of marketing in the third world nations' quest for development, few researchers have investigated empirically the appropriateness of existing marketing strategies. Furthermore, previous research has failed to establish the nature of relationship between the environment and the design of the channel for distribution of most products in developing countries. This paper examines the channel of distribution for household appliances in Nigeria, and assesses the extent to which the organizational structure of the firms is influenced by the environment in which they operate.

Introduction

In recent years, the continued realization of the importance of marketing in the growth of third world's economy has precipitated research designed to understand more clearly, the nature of the relationship between the environment and the organization of marketing firms in these economies (Douglas 1971; Douglas and Wind 1973-1974; Wadimambiaratchi 1965; Kaynak 1980; Nwa-ogwugwu 1979; Chidomere 1984). These studies suggest that the environment in developing nations contains certain operating conditions that limit the scope of the marketing institutions' activities, and affect their organizational structure. However, as pointed out by Kaynak (1980), the precise nature of the relationship between environmental factors and the marketing system remains a matter of speculation. The research reported here is designed to aid marketing practitioners and international marketers (1) understand the nature of these relationships, in order to maintain their functional as well as operational viability by adapting to environmental changes; (2) appreciate what has to be done to change the underlying factors; and (3) design marketing strategies more suitable for their requirements.

Specifically, the purpose of this study is to explore the relationship between selected environmental factors and the organizational structure of household appliance distributors in Nigeria. It investigates the relationship between economic, socio-cultural, technological factors and such organizational structural arrangements as the product assortment and market coverage.

Background and Previous Research

This section presents the theoretical justifications for the variables to be examined, and reviews previous studies which employed these measures. The independent variables are discussed first, followed by discussions of the organizational structure variables.

Economics

The characteristics and development of the marketing organizations for household appliances in Nigeria has been mostly influenced and conditioned by two economic factors: the source of manufactured goods, and the disparities in the rural-urban dichotomy. With a limited number of manufacturers for these products in the country, there is a strong dependence by distributors on multinational corporations for their stock. The foreign-based supply system, controlled by the few importers, is often blamed for the low and sporadic supply of household appliances in Nigeria. This situation, often aggravated by stringent government foreign exchange policies and import controls (U.S. Department of Commerce, 1982), has created a seller's market for these products in this economy. Another major economic factor shaping the development of the marketing system in Nigeria is the sharp disparities between the rural and urban population structure. Despite the large rural market (over 60 percent of the total population), demand for appliances has been dominated by the urban segment. Such factors as low income level, low per capital consumption, and lack of electricity supplies have persistently precluded rural population as a potential market for these products. This economic dualism results in a highly fragmented market system with little opportunity or incentive to develop large-scale operations (Kaynak 1982, p. 17).

For this study, the economic environment is operationalized as the level of demand, capital, and inventory supply. The level of demand is measured in terms of units of products sold in the last accounting period; capital is measured in terms of availability and rate of utilization of sources of funds; while inventory supply includes the number and closeness of suppliers, as well as the level of inventory computerization.

Socio-Cultural

Such basic social and cultural factors as law value custom and more have been documented as having influence on the structure of any organization existing within them. According to Walters and Bergiel (1982), consumer expectation of product quality and services, and government regulations exert indirect influence on channels of distribution and often determines the prerogatives of management in the marketplace. For this study, the socio-cultural evironment is operationalized as government regulations and consumer expectations. These were measured in terms of level of existence and enforcement of regulations, and the level of consumers' expectations of product availability, services, and price.

Technology

In the context of marketing, technology consists of the modes and the procedures by which marketing inputs are used to create customer utility and to create a sale (Etgar 1977). Technology is considered increasingly important as a determinant of structure and functioning of a market system. Inadequate transport, communication, and storage facilities contributes to the lag in advanced marketing activities in most developing countries, including Nigeria. The existence of gaps in communication between these firms and the consumers (mostly in rural areas) would affect their ability to shift toward broader geographic distribution, and therefore, impact on their operations. For this study, technology is operationalized as communication and physical transfer facilities. These were measured in terms of the extent of their availability, and the rate of their usage.

Structural Variables

As stated at the outset, this study examines the impact of three factors - economic, socio-cultural, and technology - on product assortment and market coverage. Several alternative measures of product assortment exist including width-category of products in each category; and depth - the number of items carried or available for sale. Market coverage has been described as (1) gaining the optimum volume of sales obtainable in the market in which the company is operating; (2) securing a reasonable market share, and (3) attempting satisfactory market penetration. For this study product assortment and market coverage are conceptualized as described above.

Hypotheses

The research hypotheses are designed to address the two research questions. First, do environmental factors such as economics, technology, society, and culture affect a firm's organizational structure? Secondly, to what extent are specific environmental conditions such as economic, social and technological patterns associated with the nature of product assortment, and the extent of market coverage of firms in Nigeria?

An experimental design is used to determine the extent of the relationship between the variables and the measures. The null hypothesis of no significant difference is tested as follows:

- H_1: There exists no relationships between the development in technology, and such firms' organizational structures as product assortment.
- H_2: There exists no relationship between the development in technology, and such firms' organizational structures as the extent of market coverage.
- H_3: There exists no relationship between socio-cultural environment, and such firms' organizational structure as product assortment.
- H_4: There exists no relationship between the socio-cultural environment, and such firms' organizational structure as the extent of market coverage.
- H_5: There exists no relationship between the economic environment, and such firms' organizational structure as the extent of market coverage.

Methodology

Measurement

As previously discussed, several measures of product assortment commonly employed are utilized in the present study. These include: category of product carried; types of products in category; and the number of items carried or available for sale. Four variables were used to measure market coverage: geographic dispersion, scale of operation, speed of product delivery to customers, and type of customers. (Douglas 1976; Khandwalla 1974)

Research Design

The data for this study were collected from firms involved in the distribution of air conditioners and refrigerators in Nigeria. The research questionnaire was divided into two sections. In the first section, the firms were asked some background questions. Also included in this section were questions designed to determine the level of customer expectations of the firms' products and services, the extent of availability, and the rate of usage of communication and physical transfer facilities, the types of inventory systems and warehouse facilities used, and the extent of existence and level of enforcement of government regulations. In the second section of the questionnaire, the firms were requested to rate the extent to which they perceive the environment to be influencing the product assortment and market coverage of the firm, using a 5-point Likert summated rating scale (1-strongly agree, 5-strongly disagree).

Data Analysis

The extent of relationship between the environmental variables, product assortment, and markets was examined using canonical correlation coefficient; canonical weights; and the Stewart and Love's redundancy index (Alpert 1972; Alpert and Peterson 1972; Zarrel and Durrand 1975; Jackson 1983).

In the second stage of the analyses, the responses to the perceptual measures were factor analyzed. Each set of data was analyzed using principal component factor analysis with varimax rotation.

Results

The result of the analysis of the relationship between the economic variables, the product assortment and market coverage measures are presented in Table I. Of the six linear combinations formed in the canonical correlation, three are significant beyond the .05 level. The rank order of the contributions to the relationship in the predictor set are the rate of usage the various sources of fund, the number of firms' suppliers, and the number of units sold by the firms. These are associated with the number of models in the product lines, the number of units available for sale, and the percentage of electric-operated air conditioners and refrigerators in the product lines. Table I also shows that four combinations between the economic variables and the market coverage measures are significant beyond the .05 level. The number of firms' suppliers, the extent of availability of funds, the location of major suppliers, exclusively outside the country of operation, are associated with the extent of local operations, the extent of emphasis placed on price, the number of firms' locations, and the extent of geographic operations.

Table 1

Results of Canonical Analysis for the Economic Variables, Product Assortment, and Market Coverage Measures

Predictor Set Economi Variables	Canonical Weights	Loadings
1. Extent of availability of funds	-.072(-.125)	.149(.175)
2. Rate of usage of sources of funds	.566(.149)	.316(.291)
3. Number of firm's suppliers	.444(-.333)	.587(-.448)
4. Extent of warehouse usage (public)	.125(.334)	.132(.538)
5. Location of the firm's suppliers within the country of operation	-.126(.224)	.034(.364)
6. Extent of demand for firm's product	.428(.167)	.432(.287)
Redundancy Coefficient	.290(.337)	
Criterion Set Product Assortment	**Canonical Weights**	**Loadings**
1. Number of units available for sale	.366	.192
2. Number of models in the product line	.457	.319
3. Percentage of electric operated air conditioners and refrigerators in the product line	.512	.433
Redundancy Coefficient	.432	
Market Coverage		
1. Extent of geographic operations	.335	.215
2. Number of locations	.411	.512
3. Extent of emphasis placed on marketing activities	-.035	-.215
Redundancy Coefficient	.425	
Canonical Correlation Coefficient	=	.05
Total Percentage of Squared Loadings	=	100%

( ) Canonical analyses of economic variables and market coverage measures.

The analysis of the relationship between the technological variables and product assortment measures presented in Table 2 indicates that two of the four canonical correlation coefficients formed from the linear combinations are significant. The extent of availability of carriers and communication facilities, and their rate of usage are associated with the number of products available for sale and the percentage of electric operated refrigerators in the product line. Predictor variables are associat4d with the number of firms locations and the extent of firms geographic operations.

Table 2

Result of Canonical Analysis for the Technological Variables, Product Assortment, and Market Coverage Measures

Predictor Set - Technological Var.	Canonical Weights	Loadings
1. Extent of availability of communication facilities	-.514 (-.359)	-.391(-.322)
2. Rate of usage of communication facilities	-.389 (-.206)	-.293(-.125)
3. Extent of availability of carriers	.331 (.515)	.416(.377)
4. Rate of usage of carriers	.413 (.672)	.380(.425)
Redundancy Coefficient	.199 (.320)	
Criterion Set - Product Assortment		
1. Number of units available for sale	-.499	-.269
2. Number of models in the product line	.028	.299
3. Percentage of electric air conditioners and refrigerators in the product line	.313	.121
Redundancy Coefficient	-0-	
Market Coefficient		
1. Extent of geographic operations	.435	.182
2. Number of locations	.350	.262
3. Extent of emphasis placed on marketing activities	-.208	-.198
Redundancy Coefficient	.176 (.229)	
Canonical Correlation Coefficient	=	.05
Total Percentage of Squared Loadings	=	100%

( ) Canonical analysis of technological variables and market coverage

Of the three linear combinations that were formed from the socio-cultural variables and the assortment structure measures, two are statistically significant. The rank order of the weights for the socio-cultural variables contributing to the relationships (Table 3), is the level of enforcement of government regulations, and the level of importance of consumers' expectations. These are associated with the assortment structure measure of the number of products available for sale. In the second analysis, the level of importance of consumers expectation associated with the market coverage measures of the number of firms' locations and the percentage of sales to subwholesalers in the urban areas.

Table 3

Results of Canonical Analysis for the Socio-Cultural Variables, Product Assortment, And Market Coverage Measures

Predictor Set - Socio-Cultural Var.	Canonical Weights	Loadings
1. Extent of existence of government regulations	.148 (.221)	.206(-.138)
2. Level of enforcement of government regulations	-.429(-.854)	-.169(-.450)
3. Level of importance of customer expectations	.429(.881)	.303(.744)
Redundancy Coefficient	.294(.299)	
Criterion Set - Product Assortment		
1. Number of units	.729	.548
2. Number of models in the product line	-.040	-.174
3. Percentage of electric operated air conditioners and refrigerators in the product line	.444	.194
Redundancy Coefficient	.124	
Market Coverage		
1. Extent of geographic operations	.480	.113
2. Number of locations	.576	.670
3. Extent of emphasis placed on marketing activities	-.413	-,216
Redundancy Coefficient	.114	

Canonical Correlation Coefficient = .05
Total Percentage of Squared Loadings= 100%

( ) Canonical analyses of socio-cultural variables and market coverage

Table 4 shows the results of the factor analyses of the firms' perceptions of the influence of economic, technology and socio-cultural factors on their product assortment and market coverage. The findings show that the lack of capital to buy products from suppliers is perceived by household appliance distributors as a major factor limiting the number of items available for sale. Also identified is the limitations imposed on the extent and nature of products available by the inadequate sources of supply. The delay in product arrival, mostly due to the location of major suppliers outside Nigeria, is perceived as contributing to the constant product stockouts.

Table 4

Result of Factor Analyses of Distributors Perceptions of the Influence of Environmental Factors, on Their Product Assortment and Market Coverage

Perceptual Measures	Loadings
1. Lack of capital to buy products from suppliers limit the number of items for sale.	.39
2. Number of products available for sale limited by insufficient credit line.	.28
3. Inadequate source of supply limits the variety of products for sale	.69
4. Delay in product arrival from suppliers cause shortage of products for sale.	.43
5. Inability to set up new facilities due to lack of capital.	.54
6. Restrict operations to urban areas to avoid the high cost of servicing rural markets.	.47
7. Distribution centers are restricted to areas with highest demand.	.48
8. Product delivery from suppliers delayed by the lack of adequate motor carriers and/or railroad systems.	.55
9. Inadequate telephone and telegraph facilities to inform suppliers about sudden changes in consumer demand	.43
10. Variety of items for sale limited by the inability of suppliers to inform the firm about new products	-.10
11. Setting up establishments only in areas with fast and dependable communication facilities.	.42
12. Concentrates operations in areas with mass communication media.	.23
13. Government regulates product safety.	.15
14. Suppliers are legally restricted to sell only on the condition that the firm purchases other products.	-.07
15. Restricts product lines to products that are warranted by the manufacturers.	.26
16. Laws against resale restrictions prevent suppliers from stipulating where and to whom the products are sold.	.25
17. Rules and regulations set by some states prevent the firm from operating in those states.	-.32

As a result of inadequate source of capital supply, household appliance distributors in Nigeria limit the extent of their market coverages. Operations are mostly concentrated in urban areas, avoiding the higher cost of serving the less lucrative rural markets. The lack of adequate transportation and communication facilities such as motor and railroad carriers, telephone, and telegraph also limits operations. Finally, consumer expectations of product and service availabilities featured more than government regulation and restrictions in decisions concerning product quality, durability, and performance.

Conclusions and Implications

The primary objective of this study was to examine the nature of relationship between selected environmental factors and the organizational structure. The result of the analyses leads to the rejection of the six null hypotheses. This is congruent with the findings of previous research by Wadinambiaratchi (1965), DuBick (1978), Litvak and Banting (1968), Goldstucker (1968), and Douglas (1975, and contradicts Douglas (1971), and Douglas and Wind (1973).

The results of this research suggest sveral implications for distributors in Nigeria and international marketers. First, in light of the limitations imposed of firms' operations by economic, technological, and socio-cultural factors, marketing programs should be designed more efficiently using the existing resources. Larger firms with higher borrowing abilities may seek out more avenues for additional funds.

In presence of inadequate funds, household appliance distributors in Nigeria should enhance the level of services by seeking stronger distributor support from the manufacturers. Such supports could include increased discounts, more credit, training of firms' salespeople, fairer policy of adjustment and returns, and other essential technical and non-technical supports.

Due to the dissimilarity in buying practices between the urban and rural segments of the population, new marketing policies should be formulated or existing ones reinforced to accommodate the need in both market segments. For example, existing product lines could be altered to reflect the demand for gas-operated air conditioners and refrigerators in the rural market. Significant changes could be made in the nature of operation to facilitate product deliveries to both areas. Such changes should include the use of more knowledgeable salespeople to maintain frequent contact with the customers, increase in the use of existing physical distribution facilities to speed up deliveries to both urban and rural markets and the establishment of service centers in rural areas to provide product information and services to customers in this segment. Lastly, customer confidence in the quality of the products and their patronage of the distributors could be increased using product warranties, more liberal refund policies, and exchange for defective products.

Particularly for international marketers, the small number of suppliers, the inadequate inventories and constant product stockouts found among firms in Nigeria due to low avialability of funds and insufficient product supplies is significant. It points out the necessity to provide local warehousing facilities or extend long-term credits to enable the distributors provide these. Provision of product discounts may also encourage these intermediaries to carry larger inventories. As an alternative, higher product availability could be assured by establishing branch sales office, branch plant assemble operations, or if possible, wholly owned manufacturing subsidiaries.

Finally, the finding showing a high segmentation of the consumers into urban markets is useful to international marketers. Products must be designed to fit such technical specifications as laws and power usage, and/or modified to reflect the demand requirements of the market. Promotion and distribution activities must be designed with the consideration of reaching both urban and the inherent large rural market.

INDEX OF AUTHORS