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SURVEY RESEARCH METHODOLOGY, 1990-1999

An Annotated Bibliography

Graham R. Walden

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**SURVEY RESEARCH
METHODOLOGY,
1990–1999**

An Annotated Bibliography

Compiled by Graham R. Walden

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In memory of

Seymour Sudman

1928-2000

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Preface

In this work, the last decade of the twentieth century is considered in terms of bibliographic access to the polling and survey research methodology literature utilizing scientific sampling. In conjunction with the author's two earlier works (*Public Opinion Polls and Survey Research: A Selective Annotated Bibliography of U.S. Guides and Studies from the 1980s*, New York, NY: Garland Publishing, 1990, 306 pages, and *Polling and Survey Research Methods 1935-1979: An Annotated Bibliography*, Westport, Connecticut: Greenwood Press, 1996, 581 pages), this book concludes the sixty-five-year historical record of modern scientific survey research. When viewed as a set, the volumes document the trends, developments, and growth of the field. These books are designed for practitioners, researchers, students, librarians, and the general public.

Perhaps the most important development in the survey literature during the 1990s was the continuing interest in applying the theories and methods drawn from cognitive psychology and other social sciences to the understanding and reduction of survey measurement error. Central to the cognitive aspects of survey methodology (CASM) movement, officially dating to June 1983, was the establishment of experimental laboratories to study the response process and the errors introduced, with the goal of identifying flawed questions and improving questionnaire design. CASM II was held June 1997. Respondents' thought processes involving perception, encoding, comprehension, memory retrieval, editing, and reporting are significant aspects in much of the literature, as are the interviewing techniques developed, such as behavioral coding, vignettes, focus group interviewing, intensive interviews, and so forth. Other trends reflect the application of new technologies: computer-assisted interviewing, random digit dialing, answering machines, and Caller-ID services. The use of mixed-mode surveys became the data collection method of choice for many studies.

Every entry in the bibliography is available from at least one location in the United States, whether academic, archival, or other type of lending environment. All items are available via interlibrary loan. Resources housed in collections which are not available for loan have been excluded (such as privately held materials, and closed or restricted corporate collections).

SCOPE

Subject areas covered include the following: business, criminology, education, health and medicine, law, law enforcement, library science, local government, mass media, military science, political psychology, politics, population studies, psychology, public administration, religion, sex research, social work, and women's studies. Market research has been included when specific references to polls and surveys are presented. Cross-cultural comparisons have not been considered.

The literature of survey research data collection can be divided into two main areas: the self-administered questionnaire method, and face-to-face and telephone interviews. This bibliography does not consider purely self-administered formats, only those that appear within comparative considerations. A significant challenge in the preparation of this book has been the separation of the two areas of the literature. Because researchers do not always clarify the full nature of the techniques employed, many thousands of items required careful examination (and frequently a complete read) before the appropriate selection could be made. (This is standard for compiling any bibliography, but considerably more challenging for survey research, as this field is highly cross-disciplinary with resources found in a wide variety of online databases and print tools.)

COVERAGE

Survey research methodology is, of course, the focus of this work. Poll and survey data are included only as part of a particular methodological example being presented. The following types of materials have been annotated: books (latest edition), chapters in books, dissertations, ERIC RIE/microfiche, government documents, journal articles, and a few items from the popular press. There are 129 journals included, from which 301 articles were selected for annotation. Twenty-one doctoral dissertations were annotated.

Materials excluded from consideration include book reviews, censuses, computer programs, editorials, English-language publications in foreign countries, foreign authors and publications (non-U.S. authors and non-U.S. publications), general encyclopedia articles, Internet resources, letters and comments (published and unpublished), master's theses, newspaper articles, opinion pieces, proceedings (with a few exceptions, such as Item No. 110), translations, and unpublished papers and data. Articles written by Americans, and others, but appearing in the following examples of well-known foreign publications (as well as others not listed) do not appear in this bibliography: the *International Journal of Opinion and Attitude Research* (Mexico); the *International Social Science Bulletin*

(Paris); *Survey Methodology* (Ottawa, Canada); and these eight publications from the United Kingdom: *Applied Cognitive Psychology*, *International Affairs*, *Population Studies*, *Public Administration*, *Sociological Review*, *Sociology*, *Social Service Quarterly*, and *Social Work*.

The conference proceedings of the American Association for Public Opinion Research (AAPOR) have been excluded. The official journal of AAPOR is *Public Opinion Quarterly*, which provides detailed reporting on the conferences, including the program, the minutes of the annual membership meetings, and an overview by the conference chair.

METHODOLOGY

Online databases were used, including OSCAR (The Ohio State University Libraries catalog); OhioLINK (a statewide union resource consisting primarily of academic libraries' catalogs, both small and large); OCLC (Online Computer Library Center, Dublin, Ohio); and dozens of specialized subject databases such as ERIC, PAIS, and SSCI. Online databases, and print resources where an online option was unavailable, were thoroughly searched.

CITATIONS

The *Chicago Manual of Style* was used for bibliographic form and other issues (with a few exceptions, such as including the total number of pages following each book citation). Each citation appears only once, even though in many instances multiple postings would more accurately reflect the nature of the contents.

ANNOTATIONS

All entries are annotated, descriptive, and nonevaluative, averaging 222 words. Evaluative observations belong to the author(s) of the entry, and are found within quotation marks (with the page number(s) provided for longer passages). Quotations include unusual phraseology, or simply state the point in such a clear way that paraphrasing would be a disservice. The phrase "African Americans" is used in this annotated bibliography, except when quoting an author's differing terminology. Cross references from one annotation to another have been included, particularly when there is a direct relationship from one author's work to another. When footnotes, references, or bibliographies are included, such annotations end with an indication of the number found.

APPENDIXES

Appendix A, Source Journals, provides a list of the 129 journal titles cited, along with appropriate annotation numbers. The ten most frequently cited journals are the following (with the number of times cited): *Public Opinion*

Quarterly - 81; *Sociological Methods and Research* - 9; *American Journal of Epidemiology* - 8; *Journal of the American Statistical Association* - 7; *American Journal of Public Health* - 6; *Journal of Sex Research* - 6; *American Journal of Political Science* - 5; *American Sociological Review* - 5; *Monthly Labor Review* - 5; and *Rural Sociology* -5.

Appendix B, Organizations, provides directory access to the major organizations in survey research.

AUTHOR INDEX

The author index has 943 entries, including authors, editors, and compilers. The following ten authors and/or editors contributed the largest number of items selected for this bibliography: Groves - 12; Turner - 12; Catania - 11; Schaeffer - 11; Schwarz - 11; Smith, T. W. - 11; Sudman - 11; Lessler - 10; Dillman - 9; and Fowler - 9. When an item has multiple authors, every name has been indexed (which in some cases may be as many as twelve). With items where multiple entries have been individually annotated, only the primary entry will list the editors name(s)—all of the other entries are indexed by the name of the individual chapter annotated. Therefore, Seymour Sudman has only a few entries in the index, when in fact he was the editor for dozens of chapters individually annotated. There are fourteen examples of this type, including annotation numbers 24, 55, 59, 110, 317, 340, 414, 434, 487, 517, 521, 523, 577, and 589.

All names appear in the index as found in the original source document. Therefore the same person may have indexing entries under differing formats (such as with or without a middle initial).

SUBJECT INDEX

The index includes “see” and “see also” references. Personal names, names of surveys or organizations, or titles of articles or books included in an annotation have received indexing entries. All significant subject terms found in annotations and the bibliographic citations have been added to the subject index.

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Special thanks to Professor Jon A. Krosnick, The Ohio State University, for writing the Introduction. Doug Goldenberg-Hart, acquisitions editor at Greenwood Publishing Group, has been generous, personally interested in the topic, and helpful during the preparation of the manuscript.

A quarter-length academic leave was recommended by the Advisory Committee on Research, and granted by the Director of Libraries Joseph P. Branin at The Ohio State University. An additional monetary grant was received. The author gratefully acknowledges both forms of assistance.

Thanks are extended to Jennifer Kuehn, Interlibrary Loan Librarian, and her staff for their work in supplying many titles.

The word processing of the manuscript was completed by Tamara L. Jones, a staff member at The Ohio State University, with the assistance of her daughter Taryn N. Jones. As with my 1996 book, Tammy has been patient, good humored, and has displayed her skill throughout the many revisions needed.

Seymour Sudman, former Distinguished Professor and Walter Stellner Chair of Marketing at the University of Illinois at Urbana-Champaign, had agreed to prepare the introduction for this book, as he had for this author's two previous contributions to the field. Professor Sudman served as my mentor, a role that I understand he willingly and selflessly fulfilled to many. Sadly, the survey research community has lost a prolific contributor.

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Introduction

Survey research is a blossoming enterprise in America and around the globe, appreciated worldwide as never before. A highly developed technique for empirical data gathering, it is embraced by academic psychologists, sociologists, political scientists, marketing researchers, economists, anthropologists, educators, health professionals, and scholars in many other disciplines. Billions of dollars are spent in the U.S. and abroad on surveys outside of academic arenas as well, by governments, by businesses, and by other organizations, and the value placed on survey research in these arenas has been growing exponentially as well. As the appeal of survey methodology has been increasing in these fields, so too has the demand for insights into its operation and innovations to refine the technique and improve its performance.

Fortunately, insights and innovations have been popping up at a remarkable pace in recent years. For example, the application of psychological principles in exploring how survey respondents approach their task has yielded a big improvement in our ability to understand how, why, and when different questioning methods elicit different answers from people. And technological innovations in the use of computers have changed the data collection process for the better in many ways, bringing laptops into respondents' homes for face-to-face interviewing, allowing for machine-driven, automated telephone interviewing, and permitting respondents to answer questionnaires over the Internet.

At the same time, important new challenges have emerged to make the process of effective polling more difficult. For instance, response rates for telephone interviews have been dropping in recent years, mainly because it is increasingly difficult and costly to make contact with respondents at moments when they have free time to answer questions. And the dispersion of cellular telephones is making RDD sampling increasingly difficult to accomplish as

intended. All this increases the demand for innovation even more.

In that light, Graham Walden's new book couldn't arrive on the scene at a better time. Before the fast-growing literature grows so voluminously that no one can keep up with it, we must have efficient and effective tools to help us grasp what has been learned, both to facilitate its application and to set the stage for the next phase of methodological research. And Walden's book does just that.

In fact, this is not the first such effort for Graham. In 1990, he published the first of his efforts in this regard, *Public Opinion Polls and Survey Research: A Selective Annotated Bibliography of U.S. Guides and Studies from the 1980s* (Garland Publishing). And in 1996, he published the next installment, *Polling and Survey Research Methods 1935-1979: An Annotated Bibliography* (Greenwood Press). Identifying interesting and important studies, these volumes offered remarkably readable summaries of hundreds of research investigations, allowing researchers and practitioners alike to glean the principal conclusions of an investigation quickly and pleasantly.

This latest volume in Walden's series is no less engaging, no less useful, and no less important. The book's structure separates summaries of key studies on design, sampling, interviewing, data collection methods, responses, respondents, analysis, and reporting. In addition, there is an interesting section on applications of survey methodology in a range of contexts, from business to women's studies.

This book has a special value for me, personally. For more than ten years, I have been on a hunt to locate all the published research available that would be useful for gaining insights into how to optimize questionnaire design. Through the use of computerized databases and the tracking back from the references in one article or book to the publications that preceded it, I turned up a lot: thousands of references in total, copies of which fill my file cabinets.

The most exciting moments for me in this hunt have been the discoveries of new gems, overlooked and nearly forgotten altogether, hiding in the dusty corners of university libraries around the world. But these moments have been increasingly rare in recent years, suggesting that my quest is coming to an end.

To my pleasant surprise, when I opened Walden's latest opus, I was delighted to enjoy more of those happy moments. What better evidence could there be of the value of this volume.

There is important work being done in survey methodology these days, and Graham has done a great service to bring a generous slice of it to our attention in easily digestible bites. Bon appetite!

Jon A. Krosnick
Professor of Psychology and Political Science
The Ohio State University, Columbus

Survey Research Methodology, 1990-1999

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History

1. Hawbaker, Becky Wilson. "Taking 'the Pulse of Democracy': George Gallup, Iowa, and the Origin of the Gallup Poll." *Palimpsest* 74, no. 3 (Fall 1993): 98-113.

The life of George H. [Horace] Gallup is chronicled from his birth on 18 November 1901 in Jefferson, Iowa, to his death on 26 July 1984 at his summer home in Switzerland. Gallup attended school in Jefferson, finishing third in his high-school class while serving as senior-class president and managing editor of the school paper. In 1919, he entered the University of Iowa where he became editor-in-chief of the *Daily Iowan*, a university newspaper which he helped convert to a city paper. Described as a nonconforming "maverick" student, he wrote many controversial political editorials. Gallup remained at the university through the Ph.D. degree [1928]. His dissertation, titled "An Objective Method for Determining Reader Interest in the Content of a Newspaper," was based on a survey—his first venture into scientific polling. After graduation Gallup served as head of the Department of Journalism at Drake University and then as professor of journalism at Northwestern University. Since Gallup had been active in the market research field, he accepted a position at the New York firm of Young and Rubicam, whose clients included General Foods and General Electric. Shortly thereafter he conceived the idea for a weekly national poll, and, in the following year, began experimenting with postcard polls. In 1935, Gallup and Harry Anderson founded the American Institute of Public Opinion, based in Princeton, New Jersey. Their column, "America speaks," was called the "most ambitious newspaper feature ever devised" by *Newsweek*. The following year Gallup challenged the methodology used by the best-known poll in the country—the *Literary Digest* straw poll—and correctly predicted the election outcome. His

picture appeared on the cover of both *Time* and *Newsweek* in 1948. However, the pollster also experienced some setbacks. A committee of the House of Representatives held hearings in 1944 to investigate the Gallup Poll, and, in 1948, the election between Thomas Dewey and Harry Truman was incorrectly called. Improved methodology resulted, and the Gallup Poll grew in the ensuing years, polling on the most important social, economic, and political issues of the day, as well as in the area of marketing and advertising. (16 endnotes)

2. Herbst, Susan. "Classical Democracy, Polls, and Public Opinion: Theoretical Frameworks for Studying the Development of Public Sentiment." *Communication Theory* 1, no. 3 (August 1991): 225-38.

The article was written to stimulate interest in the history of public opinion communication techniques, an area said to contain many unanswered questions about the "changing nature of opinion expression and assessment." Herbst believes that the perspectives of communication researchers should be integrated with those of scholars in other disciplines, namely, sociology, history, political science, and philosophy. The author briefly reviews the historical background of polls, sample surveys, and public opinion, a concept described as "one of the most difficult and frustrating tasks scholars have faced." Most of the article is a discussion of how polls and sample surveys integrate into two theoretical frameworks for analyzing the development of opinion expression and measurement techniques over time: the *classical democratic theory* and Max Weber's *theory of rationalization*. The former expounds the centrality of the "common good," maximum participation in government, and open debate and rational discussion about politics. Weber's theory maintains that efficient and objective reasoning would replace "more traditional, idiosyncratic forms of thinking and planning"—such as feeling, intuition, and religious dogma. This paradox is noted: "Polls are an attempt to capture the opinions of all citizens, yet diminish the quality of participation as envisioned by theorists of classical democracy" (p. 225). A table lists public opinion expression techniques from the fourth century B.C.E. (oratory/rhetoric) to the sample survey of the 1930s. (8 endnotes, 52 references)

3. Herbst, Susan. *Numbered Voices: How Opinion Polling Has Shaped American Politics*. American Politics and Political Economy Series, edited by Benjamin I. Page. Chicago, IL: University of Chicago Press, 1993. 227p.

Herbst seeks to provide the reader with insight into the history and meaning of public opinion, addressing issues of what kind of data are produced by opinion polls; what is the source of their authoritativeness; why polls play a dominant role in public discourse; and how opinion quantification has changed over time. The approach taken is interdisciplinary, with theories and concepts drawn from the disciplines of sociology, political science, philosophy, and communications. The initial two chapters establish the historical framework, borrowing perspectives

from the works of Max Weber and Michel Foucault. Among the topics covered are the rise of statistics, the use of quantification in politics, the association between numbers and rationality, the consequences of rationalization, and the nature of symbols and their relationship to public opinion. Subsequently, Herbst traces the history of public opinion by focusing on the techniques involved in opinion expression and measurement. Discussed are straw polls and their emergence in the early nineteenth century, and the rise and utilization of the sample survey since the 1930s. Empirical studies in the quantification of public opinion are considered, and the techniques used during the 1930s and 1940s by congressmen and journalists are analyzed. In the final chapter the author discusses the implications of increasing quantification for political life in the United States, with observations based primarily on preelection polls and their role in structuring campaign coverage. Endnotes for the eight chapters appear on pages 177-204, followed by a thirteen-page bibliography of 215 references.

4. Hogan, J. Michael. "George Gallup and the Rhetoric of Scientific Democracy." *Communication Monographs* 64, no. 2 (June 1997): 161-79.

Hogan reexamines the legacy of George Gallup and determines that many of Gallup's claims were, at best, efforts to place the field of polling, and more specifically, his American Institute of Public Opinion Research, in the most favorable light. While Gallup succeeded in predicting the 1936 election, he nevertheless "missed the mark badly" by underestimating FDR's vote by almost 7 percent. The 1948 election also proved Gallup's methods to be faulty. Two major areas are discussed—the early reliance of polls on quota sampling, and the underestimation of issues related to nonsampling error. Hogan continues by criticizing Gallup's claims of the scientific nature of polling by demonstrating that the Gallup Poll fell short of accurate prediction in many presidential races, including the 1948 race in which Thomas Dewey's position was overestimated by 10 percent and Harry Truman's underestimated by about the same percentage, as well as the 1980 race in which the Ronald Reagan landslide was "completely missed." The issue of question wording is discussed, with documentation provided as to how Gallup downplayed this source of error while concurrently claiming to have addressed the challenge by using filter questions and implementing what Gallup called the *quintamensional approach*, a method which permitted the pollster to exclude respondents who were not informed on a topic. The relationship between Gallup and polling, and his claims of the value of the technique for the democratic process, are discussed. The author considers Gallup's "rhetoric of scientific democracy" and concludes by observing that polls have, in fact, been manipulated by media conglomerates for the purpose of making news rather than for the scientific determination of public opinion. (8 endnotes, 63 references)

5. Hyman, Herbert H. *Taking Society's Measure: A Personal History of Survey Research*, edited and with an Introduction by Hubert J. O'Gorman,

with the assistance of Eleanor Singer. New York, NY: Russell Sage Foundation, 1991. 257p.

This volume, unfinished at the time of the author's death in 1985, is an autobiographical recounting of the development of survey research as told from the perspective of a "participant observer." Singer writes in the preface, "This history of survey research is essentially a history of certain key organizations, their key personnel, and the important researchers [*sic*] they carried out during a crucial developmental period in American survey research, roughly from 1937 through 1962" (p. x). Hyman received his Ph.D. in social psychology from Columbia University in 1942 and immediately joined the war effort to locate, on an unprecedented scale, badly needed information about society and the armed forces. The author served with three of the four most important survey research programs in the government: the Division of Program Surveys in the Department of Agriculture, led by Rensis Likert; the Surveys Division of the Office of War Information, led by Elmo Wilson; and the U.S. Strategic Bombing Surveys of Germany and Japan. Hyman was acquainted with personnel who worked in the fourth important group, the Research Branch of the Information and Education Division of the U.S. Army. Part 1 contains four chapters which trace the development during the war years of what later came to be known as survey methodology. One chapter is devoted to each of the four major wartime programs. Part 2 contains two chapters covering the postwar years, focusing on the establishment of the National Opinion Research Center (with which Hyman was associated for ten years), and the rise and fall of the Bureau of Applied Social Research at Columbia University (where the author served from 1951 to 1969 in the Department of Sociology). With considerable detail, Hyman describes the difficult technical problems encountered, the critical events at each stage, and the prominent individuals and organizations that have shaped survey research. (250 references)

6. Jacobs, Lawrence R., and Robert Y. Shapiro. "Presidential Manipulation of Polls and Public Opinion: The Nixon Administration and the Pollsters." *Political Science Quarterly* 110, no. 4 (Winter 1995-96): 519-38.

The Nixon administration's use of public opinion polls—specifically, those of Louis Harris and the Gallup Organization—is examined through interviews, archival records, diaries, memos, and other primary and secondary source materials. Nixon attached great importance to the practice of polling, stating that poll results "directly affect our ability to govern, because of their influence on Congressmen, foreign leaders, etc." (p. 521). Jacobs and Shapiro maintain that Nixon pursued polling organizations in order to manipulate poll results and public opinion. Gallup and Harris, both leaders of the polling industry in the 1970s, became prime candidates for attack by the administration, which was suspicious and vindictive toward polling activities. It was Nixon's opinion that political intrigue motivated the pollsters' reports. To induce cooperation Nixon attempted to flatter and bribe the pollsters. Harris, who had previously served as

Kennedy's political consultant, was particularly distrusted, perhaps due to his ties to the Democratic party. Gallup, on the other hand, was perceived as a "friend" who would assist in attaining White House goals. Through contact with the pollsters, the White House was able to receive advance information, influence the topics and preparation of survey questions, and shape the content and reporting of results. The authors recount an occasion when the White House successfully influenced actual poll results by urging Harris to alter his figures, thereby allowing Nixon to show a higher approval rating by the questionable practice of averaging the outcome of two polls. Gallup, too, is cited as having "regularly and secretly" communicated results to the White House—prior to public release. In the authors' view both pollsters violated standards as set forth by Dr. George Gallup, Sr., and the American Association for Public Opinion Research. In summary, the authors write this about Nixon: "He sought to influence the pollsters in order to distort information about public opinion and inflate artificially his personal political influence" (p. 538). The role of standards for pollsters is discussed. (87 references)

7. Jacobs, Lawrence R., and Robert Y. Shapiro. "The Rise of Presidential Polling: The Nixon White House in Historical Perspective." *Public Opinion Quarterly* 59, no. 2 (Summer 1995): 163-95.

From the 1800s to the early decades of the twentieth century, various informal techniques (such as straw polls, newspaper analysis, and canvassing) had been used by the White House to track public sentiment. Franklin Delano Roosevelt was the first president to take an interest in scientific survey research, especially the work of Hadley Cantril. Although Truman did not share Roosevelt's interest in public opinion analysis, Eisenhower found polls "attractive." It was Kennedy's administration, however, that instituted polling as an integral part of the presidency. (Kennedy's interest in, and use of, polls stemmed from his 1960 presidential campaign.) Polling was centralized in the White House and organized around "routinized procedures for assembling public opinion data and conducting public relations activities" (p. 164). These trends continued during Johnson's presidency, but they became a "guiding concern" of the Nixon White House. Within days of his inauguration, Nixon instructed his staff to establish procedures for public opinion analysis. Nixon spent much time reviewing poll results and became "fascinated" with the findings. The number of private polls increased dramatically, with Nixon's staff conducting more surveys than Kennedy (by a factor of ten) and Johnson (by a factor of two). A total of 233 polls were conducted during Nixon's administration. Polling was perceived not only as a means of winning electoral competitions, but also for policy-making. The level of funding increased as well. Funds came from numerous sources, usually private, as the administration was very reluctant to use government money. The Nixon administration was generally the sole sponsor of its polls, a practice that permitted greater control over timing, frequency, content, and location. Poll methodology was state-of-the-art, innovative, and technically sophisticated, utilizing tracking polls, multivariate statistical analyses, computer analysis, and

focus groups. Polling was under the direction of H. R. Haldeman with seven part-time assistants. Access to full poll results was restricted. The legacy of the presidents of the 1960s is that “public opinion analysis became an enduring and integral part of White House operations” (p. 192). There are many citations to primary source material such as memos and interviews. (119 footnotes, 42 references)

8. Moore, David W. *The Superpollsters: How They Measure and Manipulate Public Opinion in America*. 2^d ed. New York, NY: Four Walls Eight Windows, 1995. 426p.

In the preface Moore states that although there are a large number of polling enterprises and pollsters operating in the United States, only a few have a high degree of influence. These individuals are termed *superpollsters*, “not because the individuals themselves are especially proficient at polling, although usually they are, but rather because they happen to be in a situation where the results of their polling greatly influence others, especially decision makers” (p. xi). The material is presented in nine chapters, beginning with the emergence of media pollsters in the 1980s. Moore focuses on the methodology “sins” of Shere Hite, a researcher and author on sex and love issues. A discussion of the ABC/*Washington Post* versus Hite confrontation takes Moore back to a review of George Gallup and the advent of scientific sampling, the *Literary Digest* controversy, and the early polling experience. Moore considers the innovations and contributions of Louis Harris to the polling industry, particularly his work on behalf of Senator Edward M. Kennedy. Subsequently, the author discusses the Democratic presidential pollsters (namely, Pat Caddell for George McGovern and Jimmy Carter, Peter Hart for Walter Mondale, and Irwin “Tubby” Harrison for Michael Dukakis); and the Republican presidential pollsters (namely, Robert Teeter for Richard Nixon, Gerald Ford, and George Bush; and Richard Wirthlin for Ronald Reagan). In chapter 6 the various techniques of the media pollsters are discussed, including those of Warren Mitofsky (CBS), Michael Kagay (the *New York Times* poll), and Mervin Field (the California Poll). Moore concludes with comments on polling and politics in the 1990s. There are 389 endnotes cumulated on pages 397-418. These include numerous citations to personal and telephone interviews and to the archival materials used to support the text.

9. Sheatsley, Paul B., and Warren J. Mitofsky, eds. *A Meeting Place: The History of the American Association for Public Opinion Research*. [Ann Arbor, MI]: American Association for Public Opinion Research, 1992. 321p.

The volume is dedicated, posthumously, to Paul B. Sheatsley (1916-1989) who served as American Association for Public Opinion Research (AAPOR) president (1967-1968), award winner (1982), and history editor-in-chief (1982-1989). Sheatsley, along with Albert E. Gollin, Burns Roper, and Warren J. Mitofsky, contributed the first of fourteen chapters. David Sills and Don Cahalan provide

details of the association's founding which took place at a preplanning conference held in Central City, Colorado, in 1946. The seventy-three invited attendees represented the media, academe, commercial research, nonprofit research organizations, the government, and others. Harry Field, director of the National Opinion Research Center, served as conference organizer and leader. The formal establishment of the organization came one year later at Williams College in Williamstown, Massachusetts, with the adoption of a constitution. In subsequent chapters Sidney Hollander, Kathleen A. Frankovic, Herbert Abelson, and Albert E. Gollin comment on various AAPOR issues: standards of performance, AAPOR at the polls, government relations, and the relationship between the association and the media. Jack Elinson addresses the major methodological challenges faced by AAPOR throughout its history, such as quota versus area probability sampling, issues of validity assessment, the quality of interviewing and interviewer training, and data analysis. The final chapters, written by Richard Baxler, Harold Mendelsohn, Helen Crossley, W. Phillips Davison, and Laure M. Sharp, cover a number of topics including the "culture" of AAPOR, the annual conference program, membership issues, AAPOR and *Public Opinion Quarterly* (POQ), and governance and finance. Some of the conference highlights include the adoption of POQ as the official journal (1948); the acceptance of the Code of Professional Ethics and Practices (1958); the first joint conference with the World Association for Public Opinion Research (1964); the first student paper (1967); the computerization of operations (1975); the first woman president (1978); the establishment of archives at the University of Chicago library (1982); the sending of exit poll papers to federal and state legislative leaders (1984); the acquisition of the title POQ (1985); and the recognition of the fiftieth anniversary of POQ (1988). Appendixes include the Code of Professional Ethics and Practices; AAPOR presidents; Woodward/AAPOR award recipients; student paper competition award winners; conference meeting locations; officers, councils, and committee chairs; and AAPOR songs. There are references at the end of some of the chapters and a seventeen-page name/subject index.

10. Smith, Tom W. "The First Straw? A Study of the Origins of Election Polls." *Public Opinion Quarterly* 54, no. 1 (Spring 1990): 21-36.

George Gallup is quoted as stating that "the earliest counterpart of modern opinion surveys occurred in 1824," a date cited by many other writers and historians. Smith examines the inception of these "proto-straw" polls and traces their development to determine if they were, indeed, the first election polls in the United States. The author reviews the political climate leading up to the 1824 presidential election, an event marking the end of the first American party system that was formed in the 1790s. The 1824 race pitted four opponents: Andrew Jackson, John Quincy Adams, Henry Clay, and William Harris Crawford, with Adams eventually elected as president. The emerging "straw polls" of 1824 were, in part, a result of an intense need by both politicians and the public to acquire information and predict election outcomes, as well as the

collapse of the congressional caucus system and attempts to develop a new nomination process. Straw polls were taken among such diverse groups as established political parties, nominating conventions, grand juries, the military, and other public meetings, both formal and informal. The author believes that from a "modern technical standpoint," the 1824 polls were "seriously flawed and unscientific." Criticisms are directed toward the "haphazard" sampling; the "imperfect" match between sample respondents and the target universe; the "biased" data collection methods; the frequently "simplistic" analyses; and the "dubious" accuracy of the data. Despite these shortcomings, the polls did quite well in their predictions and marked a "significant development in the assessment and quantification of public opinion." Smith comments on the debate as to whether the 1824 polls were the forerunners of modern-day opinion polls, noting his disagreement with Gallup and others who maintain that newspapers conducted or sponsored the polls. Smith states categorically that newspapers "neither conducted nor sponsored the straw polls." Their origin is seen to stem from three major trends in American history: democratization, centralization, and quantification. (8 footnotes, 72 references)

11. Young, Michael L., ed. *The Classics of Polling*. Metuchen, NJ: Scarecrow Press, 1990. 572p.

Young presents a collection of thirty-eight reprints taken from a variety of books and journals published from 1963 to 1986. The volume, described as both a reference book and an anthology, is arranged into nine sections, with the number of entries shown following each section: "Historical Perspective on Modern Polling" - 3; "The Basics of Polling" - 3; "The Uses and Users of Polls" - 5; "Evaluating and Judging Polls" - 4; "Criticizing and Analyzing Polls" - 5; "Exit Polls and Public Opinion" - 5; "Polls and Public Policy" - 4; "Media, Journalism, and the Polls" - 6; and "Ethical Issues in Polling" - 3. Each section contains an introduction in which the editor provides comments on the historical setting and a brief description of the selections that follow. There is one entry from the 1960s, six from the 1970s, and thirty-one from the 1980s. The earliest selection (1963) is by Louis Harris, and the latest (1986) is by Seymour Sudman. Fourteen of the readings are from books and chapters in books, and twenty-four are from journals. The following journals are represented, followed by the number of occurrences: *Public Opinion Quarterly* - 8; *Annals of the American Academy of Political and Social Science* (March issue) - 7; *Public Opinion* - 5; *Wilson Quarterly* - 1; *Society* - 1; *Public Interest* - 1; and *Journal of Advertising Research* - 1. A twenty-four-page-postscript on alternative public opinion research and a nine-page index are also included in the volume.

Reference Sources

12. Bova, Patrick, and Michael Preston Worley, comps. *NORC Bibliography of Publications 1941-1991: A Fifty Year Cumulation*. Chicago, IL: University of Chicago, National Opinion Research Center, 1991. 452p.

While this National Opinion Research Center (NORC) publication does not fit the parameters for inclusion in the current annotated bibliography, to overlook the contribution would be inappropriate. Normally, a work of this type would be excluded because many, if not most, of the items listed are not held in academic or public libraries. Rather, they are obtainable from NORC, NTIS, ERIC, and GPO, with doctoral dissertations available from UMI. Bova and Worley have compiled thousands of studies written by NORC staff members. Areas of particular interest are the following: interviewing in its many forms; question content, wording, and context; and respondent issues such as the payment of incentives; response effects, quality, and rates; and sampling—to identify just a few of the myriad pertinent research listed. Some unpublished items are included. The bibliography is arranged alphabetically by author, followed by a section for publications in series.

13. Langendorf, Richard. *Survey Research*. CPL Bibliography, no. 269. Chicago, IL: Council of Planning Librarians, 1991. 26p.

Forty-two book titles on survey research have been selected and arranged according to the following sections, with the number of citations shown for each category: history - 1; handbooks and general references - 4; survey reliability and validity - 4; data collection modes - 5; sampling design - 4; sampling - 2; questionnaire design and item construction - 6; incomplete data - 4; secondary analysis - 4; qualitative

research (namely, in-depth interviews) - 6; and special applications - 2. Following some of the section openings, introductory paragraphs have been added that describe the concept under consideration. Several of these paragraphs cite significant early works that are not included with the annotated titles. There are thirty-six annotated items and six unannotated items. Most of the annotations are lengthy, with many extending to several paragraphs. In addition, some of the annotations are evaluative and generally indicate the knowledge level required of the intended user. All of the books reviewed or cited are included in a final list of 51 titles, with 39 from the 1980s; 5 from the 1970s; 3 from the 1960s; 3 from the 1950s; and a single entry from 1932. [Langendorf's contribution is one of a long series of bibliographies, originally called "Vance Bibliographies" or "Exchange Bibliographies," issued by the Council of Planning Librarians. This group, formerly known as the Committee of Planning Librarians, was founded in 1957 to deal with the problems of maintaining specialized collections of urban studies materials and the dissemination of information about city and regional planning. The council is affiliated with the American Planning Association and the Council of National Library and Information Associations.]

14. Miller, Delbert C. "Guides to Methods and Techniques of Collecting Data in Library, Field, and Laboratory: Social Science Data Libraries and Research Centers." Part 4 of *Handbook of Research Design and Social Measurement*, 115-230. 5th ed. Newbury Park, CA: Sage Publications, 1991. 704p.

The author observes that surveys have come to dominate empirical research in the United States. Resources for conducting a literature search are listed and described, including indexes to periodical literature, computer-assisted reference sources, microformats, and other specialized materials. Miller discusses the conduct of field research, focusing primarily on self-administered mail questionnaires. The salient features of face-to-face and telephone interviews are noted. Various commonly used scales and indices (Thurstone, Likert, Guttman, and so forth) are reviewed. Guides to Census Bureau and Bureau of Labor Statistics publications are listed for both print and tape formats. Numerous private services, such as the General Social Survey and NEXUS, are described. A list of social science data archives in the United States, and social science research centers in the United States, England, and worldwide, is provided. Most sections contain endnotes. There is a bibliography of methods guides (including the sample survey) on pages 225-30.

15. Smith, Tom W., and Frederick D. Weil. "Finding Public Opinion Data: A Guide to Sources." *Public Opinion Quarterly* 54, no. 4 (Winter 1990): 609-26.

Smith and Weil's presentation lists some of the primary sources for locating public opinion data and offers general suggestions on how to search for such information. The sources are arranged into five broad categories: (1) data archives

and their holdings; (2) organizations which conduct surveys; (3) publications containing data or guides to data; (4) compilations of scales and indices; and (5) discussions of secondary analysis. Most categories are further subdivided. The data sources included are restricted to those published in the United States and Europe, with emphasis on national studies rather than smaller geographical units. The coverage of major collections and publications is not comprehensive, focusing on American rather than European sources. All citations are unannotated, arranged alphabetically within each category, and primarily in English (a few are in French, German, Italian, and Spanish). The first category, archives, is divided into two sections: a list of survey archives in the United States and Europe (and a few others) with their addresses, and a list of guides and catalogs including computerized databases. The second section provides the names of eight prominent survey organizations. In the following section approximately six pages of national and international publications are listed. These are further subdivided into "interhouse" (those covering various data collections), "house" (those limited to a single house such as Gallup), and press releases and memorandums. The final two sections cover references on scales and indices (five titles) and secondary analysis (four titles). Information is provided for conducting a "multifaceted search procedure" to locate relevant data, including checking both general and subject-specific archival holdings; searching published sources of public opinion data; contacting various organizations and individuals having a particular interest in the topic; and reviewing the scholarly literature.

16. Walden, Graham R. *Polling and Survey Research Methods 1935-1979: An Annotated Bibliography*. Bibliographies and Indexes in Law and Political Science, no. 25. Westport, CT: Greenwood Press, 1996. 583p.

The use of scientific sampling techniques was implemented in 1935 by survey researchers. In the preface Walden states that the search for relevant citations involved selecting from in excess of 10,000 bibliographic entries, and examining 3,382 books, journal articles, and other sources from which 1,013 items were chosen for inclusion. Books, chapters in books, journal articles, doctoral dissertations, government documents, ERIC documents, research studies, reference works, handbooks, guides, textbooks, and histories are included. The contents are divided into reference sources; instructional materials; history; pollsters and polling organizations; overview studies; design and planning; sampling; questions; interviewers; interviewing; mixed-mode data collection methods; respondents; responses; analysis; discipline-oriented studies and applications to specific areas; special topics; and humor. Most of these categories are further subdivided. References were collected from a wide variety of subject areas including agriculture, business, economics, education, law, library science, mass media, medicine, political science, psychology, public relations, religion, social work, sociology, and market research where considerations pertinent to polls and survey research were undertaken. About one-fourth of the citations are from *Public Opinion Quarterly*. The mail questionnaire literature is included only in cases of comparison

with face-to-face and telephone formats. All citations contain descriptive and nonevaluative annotations designed to be sufficiently in-depth to permit the reader to evaluate whether pursuit of the full text is appropriate (annotations average 133 words per entry). Briefly noted is the debate concerning vocabulary, that is, the use of the word "poll" versus the word "survey," the distinction usually made according to the setting of the research (that is, academic versus commercial). There are four appendixes: acronyms, a list of the 168 journals from which the citations were extracted, the print and CD-ROM sources searched, and a guide to the major polling and survey research organizations. There are author and keyword indexes, the latter containing nearly 7,000 entries representing both individual terms and phrases that were selected for relevance and indexing merit from bibliographic entries as well as the annotations. The introduction to the compilation is by Seymour Sudman, Distinguished Professor, Walter Stellner Chair of Marketing, Survey Research Laboratory, University of Illinois at Urbana-Champaign (and the most frequently cited author in the bibliography). Sudman delineates a number of potential users of the bibliography—namely, historians, sociologists of science, and researchers seeking documentation on what has been written in the field.

17. Walden, Graham R. *Public Opinion Polls and Survey Research: A Selective Annotated Bibliography of U.S. Guides and Studies from the 1980s*. Public Affairs and Administration Series, edited by James S. Bowman, vol. 24. Garland Reference Library of Social Science, vol. 575. New York, NY: Garland Publishing, 1990. 306p.

Over 350 annotated references from the economic, historical, legal, methodological, organizational, and political viewpoints are included. The introduction contains sections on the purpose, scope, coverage, and methodology used, as well as discussions of the addendum, appendixes, indexes, and sources of future information. Summaries are provided for each of the twenty chapters. The chapters cover the following topics: reference sources; instructional materials; history; overview; impact, influence and perceptions; discipline oriented studies; exit polling and election projection; pollsters; administration and design; measurement and scaling; questions; sampling; interviewing; responses; data collection; statistical analysis; results; comparative studies and special topics; cross-disciplinary research; and models and theories. The author has included references to instructional materials, handbooks, reference works, textbooks, research studies, dissertations, government documents, and evaluative and critical studies. The annotations are nonevaluative and average two hundred words. Eight appendixes are included: the acronyms used in the text; the journal titles and item numbers found in the citations; the dissertations cited; a list of monograph series names and their associated item numbers; the basic bibliographic sources; the primary indexing and abstracting resources for the field; a directory to relevant organizations; and a list of the stop words not included in the keyword index. Author and keyword indexes complete the volume. In his foreword to the volume, Seymour Sudman, Distinguished

Professor, Walter Stellner Chair of Marketing, Survey Research Laboratory, University of Illinois at Urbana-Champaign, observes that the bibliography will be useful to a broad range of social science researchers, including students, information specialists, and survey methodologists. Sudman states that “public opinion research has been a major tool for setting public affairs agendas and evaluating government programs, but it has also become the primary tool of data collection for most social scientists” (p. xi).

18. Walden, Graham R. “Selected Reference Sources in Polling and Survey Research Methodology, 1971-1996.” *Reference Services Review* 24, no. 4 (Winter 1996): 49-66, 76.

Sixty-two of the most salient and library-available references from the polling and survey research methodology literature of the last quarter century were selected, annotated, and categorized. Walden has included only English-language titles, authored by Americans and published in the United States. The citations, chosen to meet the needs of both the novice and the expert, are divided into seven categories: bibliographies; dictionaries/glossaries; directories; guides; handbooks/manuals; indexes; and others. Entries are arranged alphabetically by author within each subject category. Twenty-seven of the items are from the 1970s, 19 are from the 1980s, and 16 are from the 1990s. All titles contain evaluative annotations ranging from 80 to 402 words. The annotations were written to provide sufficient detail to enable readers to determine if the cited items will serve their purposes. There are 58 references to monographs and 4 to journal articles. In the introduction the author comments on early polling practitioners, terminology variations, polling milestones, and subject heading issues. Attention is directed to several items contained in the bibliography—namely, the Young polling dictionary [Item No. 19]; the *Indexes to Survey Methodology Literature* compiled by the Bureau of the Census (1974); and books by Bradburn, Sudman, Cantril, Crespi, and Roper.

19. Young, Michael L. *Dictionary of Polling: The Language of Contemporary Opinion Research*. New York, NY: Greenwood Press, 1992. 266p.

Prior to the publication of this dictionary, there had been a fifty-seven-year void in the field of scientific polling literature, which is to say that no book-length dictionary existed before Young’s work. Approximately four hundred important terms and phrases found in contemporary public opinion research have been selected and defined. For inclusion in the dictionary, a minimum of five source citations found in books or journal articles were considered necessary. The polling literature is divided into two categories: (1) methodological, including general reference, interviewing, sampling, and question writing; and (2) context, including history, theories, critiques, political polling, evaluation, and polling and the media. American usage is emphasized, and highly technical or specialized terms have been omitted. Alphabetically arranged, each term defined usually has two or more citations to the sources where it was located. The citations refer to a

bibliography (pp. 245-55) of 215 books, journals, and newspaper articles. About 50 percent of these are from the 1980s; 30 percent are from the 1970s; 14 percent are from the 1960s; a few are from the 1990s; and the rest are divided between the 1920s and the 1950s. Definitions range in length from half a page to over one page. Some unusual entries are the "Mr. Smith Question," "Silly Polls," "Mushiness Index," "Hired Gun Poll," and "Blab Words." The entries contain cross-references to other terms as well as references to information sources. Acronyms are not cross-referenced under their full formats either in the index or the text where the acronym is the entry of choice. There is a ten-page subject index. At the end of the introductory matter, Young lists ten books and ten articles that have had a significant impact on modern polling due to their timeliness, subject matter, or stature of the author, and, collectively, "represent the accumulated knowledge of modern polling." The intended audiences are pollsters and consumers of polls, the latter category including journalists, political professionals, elected officials, and federal, state, and local officials.

Instructional Materials

GENERAL

20. Asher, Herbert. *Polling and the Public: What Every Citizen Should Know*. 4th ed. Washington, DC: CQ Press, a Division of Congressional Quarterly, 1998. 208p.

This volume is intended for several audiences: the general reader; practitioners in journalism and campaign management; and college students, especially those enrolled in courses dealing with American politics, journalism, communications, and public opinion. Asher believes that polls are not well understood by the general public. The author has attempted to simplify the field by writing a book to assist consumers of public opinion polls in the evaluation of polling methods and their merits. There are nine chapters, the first of which introduces poll types, their significance, and how citizens view polling. In subsequent chapters the methodological elements of opinion research are reviewed, such as nonattitudes, the wording and context of questions, sampling techniques, and interviewing procedures. The author remarks that sample size is a challenge “for those who wonder how a sample of 1,500 respondents can accurately represent the views of 190 million adult Americans” (p. 69). The following chapters deal with the arena of polling with which the general public is most familiar—news reporting of polls and election-time use of polls. On pages 106-7 Asher lists twenty questions journalists should ask when evaluating poll results. According to the author, the *New York Times* and the *Washington Post* are usually successful at explaining the technical details of their surveys, citing a 17 April 1986 *Times* article that, in addition to general information, describes random digit dialing and sampling error for subgroups. A distinguishing feature of the book is the addition of many examples, tables, cartoons, anecdotes, quotations, summaries, and conclusions to accompany the textual matter. (302 references)

21. Berkowitz, Susan. "Taking the Sample Survey Approach." Chap. 3 in *Needs Assessment: A Creative and Practical Guide for Social Scientists*, edited by Rebecca Reviere, Susan Berkowitz, Carolyn C. Carter, and Carolyn Graves Ferguson, 33-51. Washington, DC: Taylor & Francis, 1996. 233p.

The sample survey is described as the method of choice in qualitative primary data collection for needs assessment research. [The editors define *needs assessment* as "a systematic and ongoing process of providing usable and useful information about the needs of the target population—those who can and will utilize it to make judgments about policy and programs" (p. 6).] Berkowitz provides a framework for selecting sample survey methodology, noting the usefulness of the format when secondary data sources fail to meet all the data requirements for the assessment. The author presents a step-by-step approach, beginning with guidelines for determining an appropriate sample. Suggestions are offered for the following: choosing a data collection method from among the various options (mail, telephone, and/or face-to-face); writing the items and constructing the instrument; analyzing the data gathered; and presenting the results. Inferential and descriptive statistics, standard error, data weighting, and nonresponse bias are critical components when attempting to generalize estimates of need to a larger population. References are cumulated on pages 217-23.

22. Creswell, John W. "A Quantitative Method." Chap. 8 in *Research Design: Qualitative & Quantitative Approaches*, 116-42. Thousand Oaks, CA: Sage Publications, 1994. 228p.

The reader is guided through the essential components of planning, conducting, and analyzing a sample survey, with emphasis on the application of quantitative methodology. Creswell provides an introduction to the major design decisions, such as selecting a paradigm, stating the purpose for the study, identifying research questions and hypotheses, applying theory, and defining the significance of the research. Five steps for conducting a survey are discussed. The researcher is urged to compare various designs, consider the data collection options, prepare a sampling strategy, and determine the contents and format of the survey instrument. Procedures are outlined for presenting the results, and an example of a survey method is shown. There are nine annotated titles for further reading and references on pages 209-16.

23. Davis, James A., and Tom W. Smith. *The NORC General Social Survey: A User's Guide*. Guides to Major Social Science Data Bases, edited by Peter V. Marsden, no. 1. Newbury Park, CA: Sage Publications, 1992. 95p.

According to Marsden, the purpose of the series "is to help diffuse the knowledge required for informed secondary use of major social science data bases" (p. vii), with each member focusing on one "significant, frequently

analyzed source of information.” Each volume covers the content, study design, procedures for gaining access to the datasets, and various kinds of analyses that the data can support. The first volume examines the General Social Survey (GSS), which represents one of the largest and most frequently used data sources in the social sciences. The National Opinion Research Center (NORC), located at the University of Chicago, has conducted the GSS nearly every year since 1972. The center collects data with face-to-face interviews on a wide variety of social and political attitudes of adults in the United States. The user’s guide serves as an overview of the GSS whose mission “is to make timely, high quality, scientifically relevant data available to the social science research community” (p. 1). In addition to the collection of primary data, the GSS is an important source for secondary analysis, with researchers using the data as the basis for many studies. [The editor states that more than 2,000 research reports have been based on GSS data.] Over 25,000 respondents have answered approximately 1,500 different questions for which there were no central topics, but rather a range of variables. Chapters 1 and 2 provide an overview. Chapter 3 deals with the design of the survey, specifically rotations and split-ballots. The GSS design stresses the replication of items from one survey to the next. Sample design and weighting are considered in chapter 4. The following chapter is devoted to field procedures, covering such issues as interviewer training (NORC interviewers are used), field supervision, and nonresponse. In chapter 6 Davis and Smith explain coding procedures, cleansing the data tapes, and so forth. A final chapter concerning data analysis offers suggestions for those new to the field. NORC does not sell GSS tapes or codebooks. Rather, it deposits them in survey archives such as the Inter-University Consortium for Political and Social Research at the University of Michigan, and the Roper Center at the University of Connecticut. Because many colleges and universities belong to one or both, GSS data and codebooks are widely available. The text of the user’s guide contains many tables. An appendix, the “GSS Report Series,” categorizes reports into five areas: social change, methodological, cross-national, topical, and project. The guide is appropriate for both novice and experienced social researchers. (65 references)

24. Fink, Arlene, ed. *The Survey Kit*. 9 vols. Thousand Oaks, CA: Sage Publications, 1995.

The volumes in this paperback series were written to assist users in preparing and conducting better surveys and to help them become more effective consumers of survey data. The approach is pragmatic in that each volume contains stated objectives, exercises with answers, examples, guidelines, checklists of “dos” and “don’ts,” and annotated references. The kit is directed to undergraduate and graduate students in the social and health sciences; to individuals in both public and private sectors who must conduct surveys and utilize survey results; and to survey research practitioners. The following volumes have been selected from the set, with individual annotations found at the indicated item numbers:

20 *Survey Research Methodology, 1990-1999*

- Volume 1: *The Survey Handbook*. [Fink - Item No. 32].
- Volume 2: *How to Ask Survey Questions*. [Fink - Item No. 91].
- Volume 4: *How to Conduct Interviews by Telephone and in Person*. [Frey and Oishi - Item No. 216].
- Volume 5: *How to Design Surveys*. [Fink - Item No. 63].
- Volume 6: *How to Sample in Surveys*. [Fink - Item No. 145].
- Volume 7: *How to Measure Survey Reliability and Validity*. [Litwin - Item No. 428].
- Volume 8: *How to Analyze Survey Data*. [Fink - Item No. 425].
- Volume 9: *How to Report on Surveys*. [Fink - Item No. 442].
25. Krathwohl, David R. "Survey Research and Questionnaires." Chap. 16 in *Methods of Educational & Social Science Research: An Integrated Approach*, 351-83. 2^d ed. New York, NY: Longman, 1998. 742p.

This textbook is designed for graduate students, both at the master's and doctoral levels. All phases of the survey research process are covered, beginning with the rationale for careful planning. In the discussion on sampling, Krathwohl observes that a distinguishing feature of this technique is the care that must be taken when selecting survey respondents. A typical sample survey plan is illustrated by an eight-step procedure (chapter 8 provides a lengthy discussion of the topic). Interviewing is briefly addressed, with full consideration in chapter 13. Computer-assisted telephone interviewing is regarded as the preferred method when time constraints accompany the project. The author offers suggestions for questionnaire construction, for example, what questions to ask, how to ask them, and what format options are available. Comments are made on a two-way communication medium—e-mail questionnaires. Several other topics are discussed: the problem of nonresponse, the challenges posed when sensitive items are asked, and the difficulties encountered with response sets. A three-page table displays the advantages and disadvantages of four data collection modes with respect to a variety of considerations that arise when conducting sample surveys. The book has a glossary, references, and an index.

26. McQuarrie, Edward F. "Survey Research." Chap. 6 in *The Market Research Toolbox: A Concise Guide for Beginners*, 77-100. Thousand Oaks, CA: Sage Publications, 1996. 154p.

Six traditional market research techniques are covered: secondary research, customer visits, focus groups, surveys, choice modeling and experimentation. The

author offers a pragmatic approach. The intended audiences are students and business managers. The survey is described as “the most familiar of all market research methodologies,” applicable to face-to-face, telephone, and mail data collection approaches. Steps are outlined for conducting a survey with a vendor's assistance—from preparing a request for proposals, to analyzing and reporting the results. Suggestions are offered for conducting one's own survey, but managers would be better off retaining an outside specialist if major decisions rest on the data obtained, if the survey is lengthy, if a high-quality sample is needed, and if elaborate data analysis must be undertaken. McQuarrie describes the most common applications of market research surveys: customer satisfaction; segmentation studies (in which a large and inclusive sample of customers for some product or service will be asked a variety of questions); product usage and ownership; purchase intentions; brand image and perceptions; tracking studies (reinterviews with a new sample following a baseline sample); media usage; and readership studies. The strengths and weaknesses of survey research are reviewed, with the author observing that the most significant weakness of surveys is their inability to tell “why” as well as “what.” A list of “dos” and “don'ts” completes the chapter. There are seven suggested readings.

27. Schuman, Howard. “Survey Research.” In *Encyclopedia of Sociology*, vol. 4, edited by Edgar F. Borgatta and Marie L. Borgatta, 2119-27. New York, NY: Macmillan Publishing Company, 1992.

Schuman provides an overview of survey methodology, emphasizing such fundamental components as sampling, questioning, and data analysis. The theory of sampling, viewed as part of mathematics rather than sociology, allows the researcher to generalize about a larger population from which the sample has been drawn, and to estimate error. Probability sampling, in which a random procedure is used to select respondents, is distinguished from nonprobability sampling, for example, “convenience” samples and “person-in-the-street” interviews. Careful attention is required when developing a questionnaire for general population administration. Pretesting both the questions and the survey instrument is advocated. When interpreting answers, one needs to be skeptical of simple distributions of results that are often expressed in percentage form. The advantages and disadvantages of the commonly used data collection modes—face-to-face, telephone, and self-administered—are reviewed. The process of analyzing the data is important for gaining insight into the meaning of answers, which are frequently used to make comparisons across time, social categories, and other classifications. In the discussion of modifications and extensions of the survey method, the author notes the use of longitudinal surveys, that is, those that examine change over time, repeating the same question at some predetermined interval. The panel study, described as an important variant of longitudinal research, involves interviewing the same respondents at two or more points in time. Despite criticisms, the survey method is characterized as the “best-developed and most systematic” method sociologists currently have to collect data. (19 references)

28. Sudman, Seymour, and Edward Blair. "Conducting Surveys." Chap. 7 in *Marketing Research: A Problem-Solving Approach*, 153-82. The Irwin/McGraw-Hill Series in Marketing. Boston, MA: McGraw-Hill, 1998. 737p.

Written as a practical guide for market research projects, this textbook provides examples, instructions, and case studies. Chapter 7 covers the design and implementation phases of research. Sudman and Blair address the primary forms of survey administration, namely, face-to-face, intercept (that is, face-to-face interviewing by intercepting visitors in a public place such as a mall or on the street), telephone, and mail. Within each section, the issues of sample and response quality and cost are considered. A table of the various survey approaches provides comparisons across such issues as questionnaire length, complexity of questions, and question order, as well as sampling and cost concerns. Suggestions are offered for gaining access to respondents, and means of encouraging participation are outlined. The issue of what constitutes an appropriate level of response receives consideration. The training and supervision of interviewers are reviewed in terms of the needed educational and energy levels. A "Suggested Additional Readings" section has ten entries, including Walden's 1990 bibliography [Item No. 17]. Six discussion questions, a challenge question, and Internet exercises follow. (2 references)

29. Yeric, Jerry L., and John R. Todd. "Tools of Public Opinion Polling." Chap. 2 in *Public Opinion: The Visible Politics*, edited by Janet Tilden, 24-47. 3^d ed. Itasca, IL: F. E. Peacock Publishers, 1996. 280p.

The basic steps in conducting a public opinion poll are identified as establishing objectives; determining the sampling frame and sample size; selecting the survey design; choosing a method for collecting the data; analyzing the data; and presenting the results. Yeric and Todd distinguish between academic surveys (those "likely to emphasize goals that involve theoretical explanation and testing of hypotheses"), and commercial polls (those "likely to draw their goals from the interests of their clients, such as newspapers, television networks, or interest groups") (p. 25). Attention is directed to sampling, with discussion of the two basic types—probability and nonprobability—and the categories contained within each. Survey design involves writing the questions and formatting the questionnaire. Different types of questions (such as closed, open-ended, filter, and probe) are explained, and suggestions are given for conducting face-to-face, telephone, and mail surveys. Basic data analysis techniques are briefly discussed. Tabular and graphic displays are considered as means to present poll data. (13 endnotes)

HANDBOOKS AND MANUALS

30. Alreck, Pamela L., and Robert B. Settle. *The Survey Research Handbook: Guidelines and Strategies for Conducting a Survey*. 2^d ed. The Irwin Series in Marketing. Burr Ridge, IL: Irwin Professional Publishing, 1995. 470p.

Alreck and Settle are research consultants who maintain that survey research is an activity that cuts across many boundaries, such as business and public administration; the social and behavioral sciences; professional and family studies; journalism and communications; education and health services; politics and law; governments; and the military. The second edition (1st edition, 1985) has been expanded by approximately forty pages. The authors aspire to comprehensive coverage of a wide variety of issues, approaching the topic from a practical and technical standpoint, rather than from a conceptual and theoretical perspective. Complex material is presented with nontechnical terminology (avoiding “buzzwords” and technical “jargon”) appropriate for varying levels of knowledge. The book is divided into four parts (these are further subdivided into twelve chapters) covering design and planning; instrumentation; data collection, processing, and analysis; and reporting the results. A prominent feature of the handbook is the inclusion within the text of eighteen checklists, ninety-five guidelists, ninety-one examples, and eighty-seven figures. In addition, summaries and tabular data are found in many of the chapters. The first appendix covers focus groups, described as a popular method of inquiry whose intent is to provide qualitative rather than quantitative data. Discussed are the agenda, the participants, the moderator, and the format. Appendix B presents a random numbers table, cross tabulations and the significance of chi-square, ANOVA (analysis of variance, a statistical measurement), the F and T distributions, areas under the normal curve, and so forth. The last appendix contains suggestions on how to prepare and present both oral and written reports of survey results. An eighteen-page glossary and a twelve-page index are included.

31. *Best Practices for Survey and Public Opinion Research, and Survey Practices AAPOR Condemns*. Ann Arbor, MI: American Association for Public Opinion Research, May 1997. 12p.

The American Association for Public Opinion Research (AAPOR) offers twelve suggestions for upgrading current survey practices, noting that the list is a “work in progress” requiring periodic and systematic revision. The best practices are as follows: (1) outline specific, clear-cut, and unambiguous goals; (2) evaluate other methods of collecting information; (3) draw representative samples; (4) select designs that balance cost with error; (5) write good questions with clearly defined concepts and wording; (6) pretest the survey instrument; (7) train interviewers thoroughly; (8) perform quality checks for each stage of the survey process; (9) encourage respondent participation to reduce nonresponse bias; (10) apply statistical analytic and reporting techniques appropriate for the data collected;

(11) assure confidentiality to participants; and (12) disclose all survey methodologies used, such as who sponsored and conducted the survey; its purpose; the full wording of all questions asked; the population studied; the sampling design, selection procedures, and sample size; the findings; and methods, locations, and dates of interviews, fieldwork, and data collection. One page is devoted to five practices that fail to meet AAPOR standards. Professionally conducted research cannot require payment or contributions from the public, offer products or services for sale, or reveal the identity of respondents without their permission. In addition, the results of 900-numbers or other self-selected "polls" should not be presented as legitimate research, and "push polls," a form of political telemarketing, should be avoided. (12 references)

32. Fink, Arlene. *The Survey Handbook*. Vol. 1 of *The Survey Kit*, edited by Arlene Fink. Thousand Oaks, CA: Sage Publications, 1995. 129p.

Through the use of many examples, checklists, and exercises, the first volume of *The Survey Kit* [Item No. 24] covers the panorama of survey research. The goal is to introduce the reader to the skills and resources needed to conduct a survey. Twelve objectives are identified. Fink defines a survey as "a system for collecting information to describe, compare, or explain knowledge, attitudes, and behavior" (p. 1). Suggestions are offered on how to design effective surveys, discussing the various sampling types and what constitutes a "standard" response rate. Four data collection approaches are explained—the self-administered questionnaire, the interview, the structured record review, and structured observation. The concepts of reliability and validity, independent and dependent variables, and methods of analyzing data from responses to open-ended questions are covered. Fink also addresses the problem of what types of questions should be asked in pilot tests, the techniques required to relate survey costs to needs in terms of personnel and time, and issues regarding survey size, timing, scope, and quality. Thirty-one suggested readings complete the volume.

33. Rea, Louis M., and Richard A. Parker. *Designing and Conducting Survey Research: A Comprehensive Guide*. 2^d ed. San Francisco, CA: Jossey-Bass Publishers, 1997. 254p.

Distinguishing features of this edition include (1) additional exercises and examples; (2) a greater emphasis on statistical analysis; (3) a list of major computer software programs applicable to the survey process; and (4) material on focus group interviewing. The book is intended for undergraduate and graduate students, teachers of the social and behavioral sciences, professionals in government and private enterprise, and research agencies. Twelve chapters, organized into three main parts, guide the reader through each step of the survey research process: developing and administering the questionnaire, ensuring scientific accuracy, and analyzing the data and presenting the results. The initial chapters present an overview that covers the composition of questions, the construction of the questionnaire, and the key components in administering the

survey instrument in face-to-face, telephone, and mail options. Chapters 6, 7, and 8 deal with the technical aspects of sampling, including extensive equations and tables. In the rest of the volume, information is provided on how to incorporate survey results into the final report (with emphasis on tabular formats); the techniques appropriate for testing the statistical significance of survey data; measures of association; and rules and guidelines for table, text, and statistical information integration. There are four appendixes: a table of areas for a standard normal distribution, measures of central tendency and dispersion, a glossary, and answers to selected exercises. There is a 46-item bibliography. (9 references)

34. Salant, Priscilla, and Don A. Dillman. *How to Conduct Your Own Survey*. New York, NY: John Wiley & Sons, 1994. 232p.

With a pragmatic approach, Salant and Dillman trace the steps required for conducting a survey from the initial planning stages to reporting the results. The guide is appropriate for a variety of audiences: those without formal survey training, graduate students and faculty members in the physical and social sciences, and nonprofessionals. An attempt has been made to use nontechnical language, avoiding jargon-filled terminology. In the early chapters the authors present an overview of the survey process, covering such topics as the types of surveys, who conducts them, and how to select the most suitable data collection technique: mail, face-to-face, or telephone. The reader is reminded that “no single method can be judged superior to the others *in the abstract*. Instead, each should be evaluated in terms of a specific study topic and population, as well as budget, staff, and time constraints” (p. 33). The following three chapters cover sample selection, question composition and order, and questionnaire design, the latter focusing on how to reduce nonresponse and measurement error. Simple designs are emphasized throughout. The authors believe that people will be more likely to respond to surveys if they feel the benefits outweigh the costs. Some of the questions respondents ask include the following: Who is sponsoring the survey? What is its purpose? Who is responsible? How many people are participating? Is the survey authentic and the results confidential? How was my name selected? How can a copy be obtained? and What will the results be used for? In the final chapters Salant and Dillman discuss editing and coding, analysis, and reporting results. (45 references)

35. Schwarz, Norbert, Robert M. Groves, and Howard Schuman. “Survey Methods.” Chap. 4 in *The Handbook of Social Psychology*, vol. 1, edited by Daniel T. Gilbert, Susan T. Fiske, and Gardner Lindzey, 143-79. 4th ed. Boston, MA: McGraw-Hill, 1998. 865p.

This chapter provides an overview to the logic of survey research and reviews current developments in survey methodology. The primary components of a survey are discussed, with the authors emphasizing that a sample survey “is the result of a host of individual decisions that affect coverage, nonresponse,

sampling, the cognitive tasks presented to respondents, as well as respondents' opportunity to solve these tasks in a meaningful way" (p. 171). Sampling is discussed in terms of the commonly used designs, frame selection, and size. The representativeness of a probability sample can be threatened when individuals refuse to be interviewed, resulting in nonresponse error in survey statistics. Techniques to reduce this type of error include various kinds of weighting, imputation, and selection bias modeling. Some of the cognitive and communicative processes used by respondents to form their answers to behavioral and attitudinal questions are discussed, as are response alternatives and question context issues. The application of cognitive research methodology, such as verbal protocols and behavioral coding, to questionnaire pretesting is viewed as an important development in this area of survey practice. The effects of the various data collection approaches on data quality are summarized. The authors acknowledge the contributions from other disciplines—namely, statistics, computer science, sociology, psychology, and psycholinguistics. The increasing use of computers in survey data collection and the impact on validity and reliability is noted. Throughout, attention is directed to the concept of a *total survey error* framework which includes coverage, sampling, nonresponse, and measurement errors. Due to the trade-offs of costs and errors, all surveys are compromise tools. (236 references)

36. Sproull, Natalie L. *Handbook of Research Methods: A Guide for Practitioners and Students in the Social Sciences*. 2^d ed. Metuchen, NJ: Scarecrow Press, 1995. 430p.

Sampling methods and procedures, discussed in chapter 7 (pp. 107-30), and designing questionnaires or interview schedules, discussed in chapter 12 (pp. 189-213), are of particular relevance for the survey researcher. Sproull guides the reader through the steps of defining the target population, determining the sampling unit and frame, and identifying the optimal sampling methodology. Random sampling (simple, stratified, and cluster) and nonrandom sampling (systematic, convenience, purposive, and quota) are explained, as are point estimates and interval estimates for calculating population characteristics. Sproull believes that questionnaire preparation should not commence until the population for whom the results are directed has been identified. The primary approaches to data collection—mail, telephone, and face-to-face—are examined, with the author noting that on-line computers and interactive television are options. Various response formats, such as multiple choice, dichotomous, and open-ended, are covered with the advantages and disadvantages observed. Suggestions are offered for conducting a pilot test. Designed for practitioners, managers and administrators, and students, the book has five appendixes: a glossary of definitions, a glossary of abbreviations and symbols, the Greek alphabet, statistical tables, and a proposal checklist. There are 75 cumulated references at the end of the book.

37. Traugott, Michael W., and Paul J. Lavrakas. *The Voter's Guide to Election Polls*. Chatham, NJ: Chatham House Publishers, 1996. 208p.

Using the question-and-answer format, Traugott and Lavrakas organize the material into ten chapters, each of which is headed by a question such as “How Do Interviews Take Place?” (chapter 6). Other major areas addressed include the characteristics of polls and surveys; election polls; how polls are used by political candidates; sampling; questionnaire preparation; media analysis of polls; citizen evaluation of polls; problematic areas; and criticisms of poll and survey methodology. Each chapter has an average of four references, with a total of forty-three for the book. Each reference is annotated, ranging from a third to half a page. They primarily cover the literature from the 1990s (17) and the 1980s (18), with a few from the 1970s (6), and one each from 1965 and 1948. The guide is designed for students and the general reader. With these users in mind, the authors have included a thirty-one-page glossary containing 155 entries. Appendixes include the Standards for Disclosing Information about the Methodology of Public Polls, and a means for determining sample tolerances.

TEXTBOOKS

38. Babbie, Earl. *The Basics of Social Research*. Rev. ed. of *The Practice of Social Research*, 8th ed., 1998. Belmont, CA: Wadsworth Publishing Company, 1999. 474p.

This textbook (first edition, 1975) is intended for students in social research methods courses, but is also appropriate for sociologists, political scientists, social workers, and market researchers. Three chapters are of particular interest to the survey researcher. Chapter 6, “Operationalization” (pp. 117-43), deals with the construction of measurement instruments. Topics covered include guidelines for designing different types of questions to avoid biasing the results, and instructions for preparing effective questionnaires. In chapter 8, “The Logic of Sampling” (pp. 169-207), Babbie distinguishes between probability and nonprobability sampling methodologies and explains the various designs, such as quota, purposive, snowball, simple random, systematic, and stratified. Examples from the polling literature document several major sampling failures. In chapter 10, “Survey Research” (pp. 232-56), the field is described as “perhaps the most frequently used mode of observation in the social sciences” (p. 234), and by far the most common method reported in recent articles of the *American Sociological Review*. The various options available for administering a questionnaire—self-administered, telephone, and face-to-face—are discussed in terms of applicability, response rates, and advantages and disadvantages. Babbie comments on the strengths and weaknesses of survey research and on the advantages of secondary analysis. The book contains eight appendixes, a bibliography, a glossary, and an index. A student study guide and workbook, data discs, and an instructor’s manual are available.

39. Babbie, Earl R. *Survey Research Methods*. 2^d ed. Belmont, CA: Wadsworth Publishing Company, 1990. 395p.

The second edition of Babbie's textbook (first edition, 1973), expanded by twelve pages, is similarly intended for undergraduate students taking their first course in research methods, for researchers new to the field, and for consumers of survey research. Babbie notes in the preface that the focus of the book is on logic and skills, with relatively little attention paid to the statistical aspects of the field. The volume is divided into five parts that are subdivided into twenty chapters. In part 1, survey research is placed within the broader context of the physical and social sciences, emphasizing in particular the possibility of applying the methods of scientific inquiry to social behavior. The five chapters of part 2 cover survey design, including discussions on the development of the instrument, and index and scale construction. The standard methods of sampling are outlined and explained. The third part of the text is concerned with data collection: four chapters deal with self-administered questionnaires, face-to-face and telephone interview surveys, data processing, and the use and evaluation of pretests and pilot studies (areas the author believes have received little or no attention in the survey research literature). Part 4, analysis, addresses several topics: the logic of measurement, contingency tables, multivariate techniques, and reporting results. The book concludes with two chapters—one on ethical issues as they relate to survey methodology, and the other on guidelines to help the consumer evaluate survey data. Four appendixes are supplied: a table of random numbers, estimated sampling error for a binomial, distribution of chi square, and normal curve areas. A fifteen-page glossary, a bibliography of 124 entries, and an eight-page index are included. Recommendations for additional reading are found at the end of most chapters.

40. Bailey, Kenneth D. *Methods of Social Research*. 4th ed. New York, NY: Free Press, 1994. 588p.

A broad overview of the social research process from theory to application is presented. Part 2, "Survey Research Methods," has three chapters of particular interest to the survey researcher. In chapter 5, "Survey Sampling" (pp. 81-104), Bailey distinguishes between a population and a sample, and defines key terms associated with the selection of respondents. The strengths and weaknesses of sampling methodology are reviewed, and examples of notable sampling failures and successes are provided. The primary types of sampling—probability and nonprobability—are explained, including a number of commonly used designs within each type. Chapter 6, "Questionnaire Construction" (pp. 105-46), covers both mail and face-to-face formats. The author suggests that the major goal of questionnaire construction is the production of a survey instrument capable of collecting complete, valid, and reliable information. Topics addressed include question wording, order, and pretesting, and a variety of question types: double-barreled, ambiguous, abstract, leading, and filter. Answer categories are classified into open (in which no choices are provided), and closed or fixed choice (in which the respondent must select from the options presented). In chapter 8, "Interview Studies" (pp. 173-213), Bailey discusses the following: the advantages and disadvantages of this type of inquiry; the interview as social interaction; how

to conduct the interview; and the merits of telephone, electronic, and fax surveys. Attention is paid to the numerous factors influencing the interviewer-respondent relationship, such as age, race, gender, ethnicity, and social status. Projective interviewing techniques and panel studies are also considered. The backmatter contains a glossary, three appendixes, cumulated references (pp. 547-72), and name and subject indexes.

41. Fowler, Floyd J., Jr. *Survey Research Methods*. 2^d ed. Applied Social Research Methods Series, vol. 1. Newbury Park, CA: Sage Publications, 1993. 156p.

As a revision of the 1984 edition (159 pages), this volume was written to include new methodological knowledge and updated literature. Fowler cites three changes which have occurred in the last decade necessitating revision: the increasing role of the computer, recent research on interviewer training and supervision, and developments in the area of question design and evaluation. Due to the publication of several new books on survey research, Fowler seeks to provide the reader with information on where to locate the most current and detailed information on various aspects of the topic. The book is both a text and a reference source appropriate for students, professionals, and designers and consumers of survey research. In the introduction, some of the major applications of surveys are outlined. The combination of three different methodological elements—sampling, question design, and interviewing—are essential for preparing and conducting effective surveys. The chapter on sampling covers the sampling frame, the various designs, appropriate sample size, and other issues. In chapter 3 the author describes the implementation of sample design, discussing bias and the reduction of nonresponse. Subsequent chapters offer suggestions for selecting a data collection mode (with mail, telephone, face-to-face, and group administration options discussed) and for designing and evaluating survey questions. The author makes the point that the contribution of interviewer error to survey data is generally unappreciated, and that the impact of the interviewer on survey estimates has yet to be realized. Also discussed are the methods for transferring survey answers into data files for computer analysis, the procedures for the ethical management of surveys, and the deviations from good survey design and practice. Throughout, Fowler advocates the use of the *total design method* (or *total survey error method*) to assist the reader in understanding the cost and quality trade-offs faced by survey researchers when allocating resources. (92 references)

42. Longmore, Monica A., Dana Dunn, and Glen R. Jarboe. *The Survey Research Project Manual*. Minneapolis/St. Paul, MN: West Publishing Company, 1996. 199p. plus 1 computer disk.

The manual was designed as a textbook supplement to be used by students, primarily in groups, to conduct a survey research project. The authors offer a step-by-step approach to solving a research problem from problem definition

through the final report. The early chapters serve as an orientation to the field of survey research, with the authors introducing and comparing the salient features of the different research methodologies (self-administered questionnaires, and face-to-face and telephone interviews are most often used by social science researchers). The authors present a sample project which focuses on work satisfaction among hospital employees. Advice is given for selecting a project, searching the literature, and developing a proposal. At this step, a sampling plan and data-gathering approach must be determined, and a timeline established for completing each phase of the assignment. Instrument design is described as being quite difficult. Attitude scales and various question formats are reviewed. Suggestions are made for selecting a sampling frame and determining the appropriate sample size, with the authors noting that "other things being equal, larger samples provide more accurate estimates of the population values of interest" (p. 97). Subsequent chapters cover data entry, tabulation procedures, and how to analyze results and translate them into findings, conclusions, and recommendations. Sixteen appendixes are located throughout the text.

43. Monette, Duane R., Thomas J. Sullivan, and Cornell R. DeJong. "Survey Research." Chap. 7 in *Applied Social Research: Tool for the Human Services*, 155-92. 4th ed. Fort Worth, TX: Harcourt Brace College Publishers, 1998. 527p.

The methods of social science research are presented "within the context of human service practice." The flexibility and versatility of the survey approach is observed. Surveys can be used for many types of studies—exploratory, descriptive, explanatory, and evaluative. The authors discuss the distinctions between closed-ended versus open-ended questions, noting that the choice of one over the other can be complex. Data collection is generally carried out in two basic ways—with self-administered questionnaires or with face-to-face or telephone interviews. Telephone surveys offer a lower cost and faster means of gathering data. The discussion covers the structure and design of the survey instrument, response rates, bias due to nonresponse, the advantages and disadvantages of the various collection modes, and the necessity to pretest. Interviews are classified according to their degree of structure: unstandardized, nonschedule-standardized, or schedule-standardized. With the interview approach, respondents must be contacted, the interview conducted, and responses recorded, generally by placing them into predetermined categories. Interviewers may also take verbatim notes or tape-record the exchange. The role of computers in survey research is considered, especially the impact of computer-assisted telephone interviewing. References are cumulated on pages 497-513.

44. Newman, Isadore, and Keith McNeil. *Conducting Survey Research in the Social Sciences*. Lanham, MD: University Press of America, 1998. 103p.

The volume was written to present basic concepts and general guidelines for assisting the reader who wishes to initiate and develop a survey. The eight chapters are organized around the steps for conducting a survey research project. Newman and McNeil begin with a discussion of the intent of the survey, observing that “the usefulness of the information collected is contingent upon how clearly the objectives are stated” (p. 3). To obtain maximum value from the results, “stakeholders,” or those needing the information, should be involved in deciding the purpose(s) of the survey. Considerations of time and cost need to be addressed, the population of interest defined, and the relevant literature identified. A major decision involves selecting the most appropriate data collection approach. Face-to-face and telephone interviews, and self-administered and mail questionnaires are evaluated. Although readers can develop their own survey instrument, the authors strongly suggest adopting, or adapting, an existing questionnaire. Chapter 6 covers item format, psychometrics, pretesting, and interviewer selection and training. Sample size, sample design, data analysis, and reporting the results are also discussed. Questions and summaries of answers are provided, along with additional briefly annotated reading sections. Nearly one-third of the book consists of eleven appendixes ranging from a list of electronic search engines to issues related to sample size. (48 references)

45. Neuman, W. Lawrence. “Survey Research.” Chap. 10 in *Social Research Methods: Qualitative and Quantitative Approaches*, 227-69. 3^d ed. Boston, MA: Allyn and Bacon, 1997. 560p.

Following a review of the origins of the modern survey, Neuman states that “the explosion of survey applications has outpaced developments in the survey technique as a method to quantitatively measure human social life” (p. 231). The point of departure for conducting a survey consists of two basic steps—design and planning. The author distinguishes between a self-administered questionnaire that entails respondents’ reading the questions themselves and marking her/his answers, and an interview schedule in which an interviewer reads a set of questions to the respondent by telephone or face-to-face, and then records the answers. When writing questions, the survey preparer is urged to avoid jargon, double negatives, emotional language, ambiguous and leading questions, questions that are too difficult for the intended audience, those built on false premises, questions about future intentions, and overlapping response categories. Various types of questions are described, with a chart indicating the advantages and disadvantages of the open and closed formats. Issues of question sequence, physical layout, and length of the instrument or schedule are addressed. Computer-assisted telephone interviewing is discussed within a broader consideration of interviewing, including the stages of the interview, the role of the interviewer, the training required, and the impact of interviewer bias on data quality. The intended users for this textbook are upper-level undergraduate students and beginning graduate students in the social sciences and associated areas. A cumulative bibliography is included. (40 endnotes)

46. Rubenstein, Sondra Miller. *Surveying Public Opinion*. Belmont, CA: Wadsworth Publishing Company, 1995. 425p.

Rubenstein presents an overview of a field that seeks to monitor the opinions of the public on important issues. The author reviews the subject with a thirty-page history of surveys. Subsequent chapters cover polling in the international context, the types of opinion research, and some significant applications of surveys—such as in the courtroom setting, the National Opinion Research Center (NORC) studies, and what the author refers to as the “Mother of Many Surveys”—the U.S. Census. A variety of topics are addressed: how to conduct a survey; sample framing and size; question wording and context; the interviewer; the respondent; data preparation; and the presentation of the results. The background of focus group interviewing is reviewed, along with the use of market research and “marketing” with respect to political candidates. Poll use by the media and by politicians is covered. A discussion of survey regulation, improvements, and future directions completes the volume. Three appendixes include an introduction to basic statistics, a review of professional career opportunities in survey research, and a summary of NORC’s Permanent Community Survey. An eight-page glossary and a four-page index are provided.

47. Singleton, Royce A., Jr., Bruce C. Straits, and Margaret Miller Straits. *Approaches to Social Research*. 2^d ed. New York, NY: Oxford University Press, 1993. 572p.

Two chapters are of special interest to the survey researcher. In chapter 9, the general features of survey research are reviewed, with discussions on large-scale probability sampling, interviews and questionnaires, quantitative data analysis, and secondary analysis. Surveys are divided into descriptive, explanatory, or a combination of the two. Although this methodology has many strengths, a serious weakness is their susceptibility to reactivity, thereby introducing measurement error. Two broad survey design categories, cross-sectional and longitudinal, are discussed. Recommendations are offered on how to construct the survey instrument (structured versus unstructured) and develop the sampling plan. The authors cover the major data collection approaches, questionnaire pretesting, quality control, and interviewer training and supervision. In chapter 10, instrumentation, survey design is described as “partly art and partly science.” The instrument should ensure effective two-way communication, assist respondents in recalling their experiences, attitudes, and thoughts, and maintain their interest and motivation. Options available to the survey designer include the choice of question types (open-ended and closed-ended, and direct and indirect), response formats (for example, “yes” or “no” answers and rating scales), visual aids, and question context. Additional topics considered are the importance of effective language, the *frame of reference* problem, the *funnel sequence* (that is, questions arranged from general to progressively more specific), and memory and response bias difficulties. Each chapter contains review questions and problems. There are 495 cumulated references at the end of the book.

48. Stark, Rodney, and Lynne Roberts. "Survey Research." Chap. 7 in *Contemporary Social Research Methods*, 139-73. Bellevue, WA: MicroCase Corporation, 1996. 306p.

The full instructional package includes this textbook, a workbook of exercises (many computer-based), a student version of the MicroCase Analysis System, and two major data files. Stark and Roberts concentrate on the fundamentals of survey research, beginning with the major sources of data unreliability, such as asking questions that respondents can't answer, won't answer, or won't answer honestly. Another source of faulty data results from not how individuals respond, but rather the number of people who refuse to participate. The most frequently used techniques for collecting data are face-to-face and telephone interviews, and self-administered questionnaires, the latter usually sent by mail. The advantages and disadvantages of each of the collection approaches are discussed in terms of costs and response rates. Open- and closed-ended question formats have strengths and weaknesses as well. Effective survey items must be clearly written and have mutually exclusive and exhaustive categories. The problem of nonresponse and its impact on findings are considered. Two survey designs for monitoring change over time, panel and longitudinal, are defined, and comments provided as to their appropriateness for collecting certain types of data. These designs, especially the latter, are prone to mortality as a result of lost cases over time. There is a brief glossary, cumulated references on pages 289-99, and an index. (5 footnotes)

49. Weisberg, Herbert F., Jon A. Krosnick, and Bruce D. Bowen. *An Introduction to Survey Research, Polling, and Data Analysis*. 3^d ed. Thousand Oaks, CA: Sage Publications, 1996. 394p.

Previous editions of the textbook were published in 1977 (243p.) and 1989 (332p.). The third edition was written to reflect the growth and shift of emphasis that have occurred for numerous topics during the twenty years since the first edition. The authors believe these changes are of significance in several areas: the growing prevalence of telephone interviewing over face-to-face interviewing; changes in the conventional wisdom about question wording; the use of statistical inference procedures and regression analysis in survey analysis; and attention to ethical issues. The first part of the volume introduces survey design—the objectives of the survey process, the various sampling designs, the steps involved in writing the items and formatting the instrument, the options available for collecting data, and coding practices. In the second part the authors explain how to analyze survey data. The text progresses from simpler procedures (for example, frequency distributions and cross-tabulations) to more sophisticated techniques (for example, control tables, correlation, and regression). The final part offers directives on how to read, write, and evaluate survey results. A discussion of ethical issues provides comments on the rights of respondents, such as informed consent, confidentiality of interviews, and the handling of sensitive topics. Also covered are the American Association for Public Opinion Research Code of Professional

Ethics and Practices, disclosure rules, sponsored research, fraudulent polls, and who should be the recipients of survey results. Throughout, the authors use examples from current, large-scale national surveys and polls, as well as some conducted by the media. Questions are posed in each chapter, with answers provided at the end of the volume. The chapters are summarized, and most contain citations for further reading. The book is appropriate for upper-level undergraduate or introductory graduate courses on survey research, statistical data analysis, and research design. (77 references)

Cognitive Aspects of Survey Methodology (CASM)

50. Aborn, Murray. "CASM Revisited." Chap. 3 in *Cognition and Survey Research*, edited by Monroe G. Sirken, Douglas J. Herrmann, Susan Schechter, Norbert Schwarz, Judith M. Tanur, and Roger Tourangeau, 21-38. Wiley Series in Probability and Statistics, Survey Methodology Section, edited by Robert M. Groves, Graham Kalton, J.N.K. Rao, Norbert Schwarz, and Christopher Skinner. A Wiley-Interscience Publication. New York, NY: John Wiley & Sons, 1999. 395p.

Aborn, an early participant in the cognitive aspects of survey methodology (CASM) movement, reviews the origin of CASM and considers its impact on the field. Throughout the 1980s, Aborn was the program officer for the Measurement Methods and Data Improvement Program at the National Science Foundation, the group responsible for funding the initial CASM seminar and much of the early research. Although CASM I officially dates to 1983, there were historical predecessors such as The Social Indicators Movement of 1970-82. [CASM II was held in June 1997.] In evaluating the influence of the movement on survey research, Aborn concentrates on the past eight-year publication record: ninety-four CASM-relevant research studies appearing in thirty-two different journals, and forty-eight CASM-related books. Two additional important developments were the establishment of experimental laboratories within major federal statistical agencies and the creation of "The Science of Self Report," a two-day symposium held in 1996. However, in Aborn's view there is little evidence of cross-disciplinary collaboration or feedback from survey research to cognitive theory. (38 references)

51. Martin, Elizabeth A., and Clyde Tucker. "Toward a Research Agenda: Future Development and Applications of Cognitive Sciences to Surveys."

Chap. 22 in *Cognition and Survey Research*, edited by Monroe G. Sirken, Douglas J. Herrmann, Susan Schechter, Norbert Schwarz, Judith M. Tanur, and Roger Tourangeau, 363-81. Wiley Series in Probability and Statistics, Survey Methodology Section, edited by Robert M. Groves, Graham Kalton, J.N.K. Rao, Norbert Schwarz, and Christopher Skinner. A Wiley-Interscience Publication. New York, NY: John Wiley & Sons, 1999. 395p.

As part of the Second Advanced Seminar on the Cognitive Aspects of Survey Methodology (CASM II), held in June 1997, eight working groups were formed to consider new areas of interdisciplinary work with relevance to surveys; to propose new ways that cognitive methods could be applied to survey measurement; and to prepare proposals for future research. Martin and Tucker summarize the deliberations of the working groups, beginning with proposals related to household surveys to improve measures of income and disability. To date, questionnaire design has received the most attention from the cognitive sciences. Developments include the use of intensive interviews, focus groups, behavioral coding, expert appraisals, vignettes, sorting and rating tasks, and small-scale laboratory experiments. Examples are provided of the research needs arising when cognitive and interdisciplinary approaches are applied to establishment surveys. The authors discuss a number of unresolved issues which could benefit from additional research and consider two major, related developments: the radically changing technology for collecting survey data and the recent application of cognitive methods to other steps in the survey process, rather than focusing exclusively on questionnaire design. (2 footnotes, 27 references)

52. O'Muircheartaigh, Colm. "CASM: Successes, Failures, and Potential." Chap. 4 in *Cognition and Survey Research*, edited by Monroe G. Sirken, Douglas J. Herrmann, Susan Schechter, Norbert Schwarz, Judith M. Tanur, and Roger Tourangeau, 39-62. Wiley Series in Probability and Statistics, Survey Methodology Section, edited by Robert M. Groves, Graham Kalton, J.N.K. Rao, Norbert Schwarz, and Christopher Skinner. A Wiley-Interscience Publication. New York, NY: John Wiley & Sons, 1999. 395p.

The author reviews some of the historical roots of survey research and presents a framework within which both operational and developmental work on surveys can be assessed. Also considered is how the cognitive aspects of survey methodology (CASM) movement can be integrated into this framework. Three different sectors—government, academe, and business—contributed to the development of survey research, with disciplinary bases in statistics, sociology, and experimental psychology. O'Muircheartaigh discusses the components and applications of two models of the survey process, mathematical and conceptual, and provides examples of each. The CASM initiative brought about the application of the methods and theories of cognitive psychology to survey research (especially in the areas of question wording and questionnaire design) and the establishment of cognitive laboratories, whose primary activity has been the expanded interview. Some of the omissions in CASM-related research are that (1) the majority of studies have

been of an applied nature, with insufficient attention directed to theoretical formulations; (2) there has been little feedback from survey research to cognitive theory; and (3) most government laboratories function in an applied mode (primarily pretesting questionnaires) and operate in a production-line manner. (1 footnote, 51 references)

53. Schwarz, Norbert. "Cognitive Research into Survey Measurement: Its Influence on Survey Methodology and Cognitive Theory." Chap. 5 in *Cognition and Survey Research*, edited by Monroe G. Sirken, Douglas J. Herrmann, Susan Schechter, Norbert Schwarz, Judith M. Tanur, and Roger Tourangeau, 65-75. Wiley Series in Probability and Statistics, Survey Methodology Section, edited by Robert M. Groves, Graham Kalton, J.N.K. Rao, Norbert Schwarz, and Christopher Skinner. A Wiley-Interscience Publication. New York, NY: John Wiley & Sons, 1999. 395p.

Schwarz's chapter serves as both a commentary on the cognitive aspects of survey methodology (CASM) movement, and as an introduction to the five chapters in section B (Schwarz is editor of this section). Brief summaries are provided for the theoretical and methodological discussions that follow. To place these discussions in a broader context, Schwarz reviews the challenges that respondents encounter in the question-answering process, such as understanding the question, retrieving the correct information from memory, and communicating the answer to the researcher. Several positive contributions of CASM are acknowledged: increased interdisciplinary research, the establishment of cognitive laboratories in major government and academic survey centers, and the offering of courses in cognitive psychology in the curricula of graduate programs in survey methodology. One negative aspect of CASM is seen to be the failure of survey research to return information to cognitive psychology—other than "providing a number of puzzling phenomena that were new to psychologists." The author observes the differences between basic research conducted in academic settings, and applied research emanating from the cognitive laboratories of government agencies. For example, there are differences in discipline approach: survey research offers a methodology, "not a substantive body of theorizing about human cognition and behavior." (32 references)

54. Sirken, Monroe G., and Susan Schechter. "Interdisciplinary Survey Methods Research." Chap. 1 in *Cognition and Survey Research*, edited by Monroe G. Sirken, Douglas J. Herrmann, Susan Schechter, Norbert Schwarz, Judith M. Tanur, and Roger Tourangeau, 1-10. Wiley Series in Probability and Statistics, Survey Methodology Section, edited by Robert M. Groves, Graham Kalton, J.N.K. Rao, Norbert Schwarz, and Christopher Skinner. A Wiley-Interscience Publication. New York, NY: John Wiley & Sons, 1999. 395p.

The authors highlight the importance of research on the cognitive aspects of survey methodology (CASM), a relatively new area of interdisciplinary inquiry.

The application of the cognitive and social sciences to survey research was an outgrowth of the CASM I seminar held in June 1983. This volume is based on papers from the June 1997 CASM II seminar. Sirken and Schechter review two “interwoven” types of CASM research: applied and basic. Applied research seeks to improve questionnaire design by employing cognitive methods to “detect and repair” flawed questions through laboratory based interview methods and by establishing cognitive research laboratories in statistical agencies and survey research centers. Those engaged in basic research investigate the causes of cognitive difficulties in survey response, with the primary focus on error-prone “heuristics” [that is, trial and error methods] of survey respondents and survey questions. The authors comment on future CASM research needs and encourage interdisciplinary networking beyond cognitive psychology, especially in the statistical and computer sciences. (2 footnotes, 24 references)

55. Sirken, Monroe G., Douglas J. Herrmann, Susan Schechter, Norbert Schwarz, Judith M. Tanur, and Roger Tourangeau, eds. *Cognition and Survey Research*. Wiley Series in Probability and Statistics, Survey Methodology Section, edited by Robert M. Groves, Graham Kalton, J.N.K. Rao, Norbert Schwarz, and Christopher Skinner. A Wiley-Interscience Publication. New York, NY: John Wiley & Sons, 1999. 395p.

According to the editors, the goal of the volume is to “capture, describe, and reinvigorate” the movement known as the cognitive aspects of survey methodology (CASM), an effort to apply theories and methods drawn from cognitive psychology and other social sciences to the reduction of survey measurement error. The volume is an outgrowth of the Second Advanced Research Seminar on the Cognitive Aspects of Survey Methodology (CASM II), a meeting convened in June 1997 to enhance communication, disseminate research findings, and secure financial support for future projects. [See Tanur - Item No. 59 for the first conference.] The chapters contained within follow the same organization as the plenary sessions of the seminar. Section A, edited by Judith Tanur, provides an overview of CASM. The chapters in section B, edited by Norbert Schwarz, contain discussions of the effects of CASM on cognitive theory and survey measurement. Section C, edited by Roger Tourangeau, covers the potential roles of various disciplines. In section D, edited by Douglas J. Herrmann, new areas of CASM research are explored. The following entries have been selected from the volume, with individual annotations found at the indicated item numbers:

Chapter 1: “Interdisciplinary Survey Methods Research.” [Sirken and Schechter - Item No. 54].

Section A, Chapter 2: “Looking Backwards and Forwards at the CASM Movement.” [Tanur - Item No. 58].

Chapter 3: “CASM Revisited.” [Aborn - Item No. 50].

- Chapter 4: "CASM: Successes, Failures, and Potential." [O'Muirheartaigh - Item No. 52].
- Section B, Chapter 5: "Cognitive Research into Survey Measurement: Its Influence on Survey Methodology and Cognitive Theory." [Schwarz - Item No. 53].
- Chapter 6: "Making Sense of Questions: An Interactional Approach." [Schober - Item No. 203].
- Chapter 7: "The Respondent's Confession: Autobiographical Memory in the Context of Surveys." [Shum and Rips - Item No. 341].
- Chapter 8: "Context Effects on Answers to Attitude Questions." [Tourangeau - Item No. 115].
- Chapter 9: "Is the Bandwagon Headed to the Methodological Promised Land? Evaluating the Validity of Cognitive Interviewing Techniques." [Willis, DeMaio, and Harris-Kojetin - Item No. 200].
- Chapter 10: "Income Reporting in Surveys: Cognitive Issues and Measurement Error." [Moore, Stinson, and Welniak - Item No. 378].
- Section C, Chapter 11: "Casting a Wider Net: Contributions from New Disciplines." [Tourangeau - Item No. 60].
- Chapter 12: "A Linguistic Look at Survey Research." [Fillmore - Item No. 130].
- Chapter 13: "The Use of Computational Cognitive Models to Improve Questions on Surveys and Questionnaires." [Graesser, Kennedy, Wiemer-Hastings, and Ottati - Item No. 122].
- Chapter 14: "The View from Anthropology: Ethnography and the Cognitive Interview." [Gerber - Item No. 208].
- Chapter 15: "Survey Error Models and Cognitive Theories of Response Behavior." [Groves - Item No. 419].
- Chapter 16: "New Connectionist Models of Mental Representation: Implications for Survey Research." [Smith - Item No. 331].

- Section D, Chapter 17: "Potential Contributions of the CASM Movement beyond Questionnaire Design: Cognitive Technology and Survey Methodology." [Herrmann - Item No. 78].
- Chapter 18: "The Application of Cognitive Science to Computer Assisted Interviewing." [Couper - Item No. 243].
- Chapter 19: "Customizing Survey Procedures to Reduce Measurement Error." [Conrad - Item No. 61].
- Chapter 22: "Toward a Research Agenda: Future Development and Applications of Cognitive Sciences to Surveys." [Martin and Tucker - Item No. 51].
56. Sudman, Seymour, Norman M. Bradburn, and Norbert Schwarz. *Thinking about Answers: The Application of Cognitive Processes to Survey Methodology*. San Francisco, CA: Jossey-Bass Publishers, 1996. 304p.

The authors present a theoretical framework, drawn from the disciplines of psycholinguistics and social psychology, for conceptualizing the survey interview and improving questionnaire design. The introduction provides a brief background of how the principles of cognitive psychology came to be applied to the study of survey measurement error. This collaborative effort is traced to the late 1970s when the British Social Science Research Council and the Royal Statistical Society held a seminar to examine recall data in social surveys. In the early 1980s several developments took place in the United States: a workshop sponsored by the Bureau of Social Science Research; a panel on the measurement of subjective phenomena sponsored by the Committee on National Statistics of the National Research Council/National Academy of Sciences; and a six-day seminar, "Cognitive Aspects of Survey Methodology," sponsored by the Committee on National Statistics. Interest has grown rapidly as evidenced by the establishment of cognitive laboratories in the United States and Europe. In the first three chapters, the authors (1) review the techniques developed to determine the cognitive processes involved when respondents answer survey questions; (2) highlight the difficulties presented by the research instrument; and (3) provide an outline of the theoretical models which form the discussion of subsequent chapters. The following three chapters deal with various aspects of context effects, such as inconsistency, assimilation and contrast, response alternatives, and primacy and recency. Chapters 7 through 10 cover reports of behavior, or autobiographical memory. Topics discussed include the storage and retrieval of autobiographical memories, models and theories of memory for time, the role of estimation, and proxy reporting. (322 references)

57. Tanur, Judith M. "Cognitive Aspects of Surveys and This Volume." Chap. 1 in *Questions about Questions: Inquiries into the Cognitive*

Bases of Surveys, edited by Judith M. Tanur, 3-12. New York, NY: Russell Sage Foundation, 1992. 306p.

The history of the effort to apply the tenets of cognitive psychology to the reduction of measurement error in surveys is briefly reviewed. (The preface to the volume [Item No. 59] provides a more detailed account of the events leading to the development of the cognitive aspects of survey methodology [CASM] movement.) The first CASM Advanced Research Seminar was held in 1983. This volume is an attempt by the Committee on Cognition and Survey Research of the Social Science Research Council to “weave together some strands of research and theory” that have developed from the CASM movement—the “tying together of theorizing and empirical research on the interface between the cognitive sciences and survey research” (p. 6). Tanur’s introduction provides detailed summaries of the twelve chapters contained within. Concluding comments are made concerning the types of research envisioned by the participants in the seminar. (15 references)

58. Tanur, Judith M. “Looking Backwards and Forwards at the CASM Movement.” Chap. 2 in *Cognition and Survey Research*, edited by Monroe G. Sirken, Douglas J. Herrmann, Susan Schechter, Norbert Schwarz, Judith M. Tanur, and Roger Tourangeau, 13-19. Wiley Series in Probability and Statistics, Survey Methodology Section, edited by Robert M. Groves, Graham Kalton, J.N.K. Rao, Norbert Schwarz, and Christopher Skinner. A Wiley-Interscience Publication. New York, NY: John Wiley & Sons, 1999. 395p.

The origins of the cognitive aspects of survey methodology (CASM) movement in the United States are traced to the 1970s, when concerns about rising nonresponse rates and the validity of survey data came to the forefront. One milestone in the development of CASM occurred in 1980 when survey researchers, cognitive scientists, and statisticians convened to examine cognitive issues in the National Crime Survey. In June 1983, members from a wide variety of disciplines attended the Advanced Research Seminar on Cognitive Aspects of Survey Methodology. [See Tanur - Item No. 59 for the first conference.] Some of the achievements of CASM I were the establishment of government laboratories for cognitive research, the funding and publication of many cross-discipline research projects, and the establishment of the Committee on Cognition and Survey Research of the Social Science Research Council. This compilation, based on CASM II of June 1997, considers the contributions of such fields as anthropology, linguistics, and computer science to the movement, and applies knowledge from other disciplines to all phases of the survey research process, rather than solely to questionnaire construction and interviewing procedures. Tanur, as editor of section A, provides brief summaries of the following two chapters. (15 references)

59. Tanur, Judith M., ed. *Questions about Questions: Inquiries into the Cognitive Bases of Surveys*. New York, NY: Russell Sage Foundation, 1992. 306p.

Sponsored by the Committee on Cognition and Survey Research of the Social Science Research Council (SSRC), this volume is an outgrowth of various workshops, seminars, and conferences held by SSRC members. (Pages xvi through xxi list members and meetings held by the committee from 1986 through 1990.) The committee was cochaired by Judith Tanur and Robert Abelson. Tanur was one of the founders and foremost advocates of the cognitive aspects of survey methodology (CASM) movement, an effort to apply concepts and methods drawn from the cognitive sciences to the understanding and reduction of survey measurement error. In the preface the editor provides a brief history of CASM, observing that the movement had its roots in a 1980 conference organized by Albert Biderman for the Bureau of Social Science Research. The conference brought together representatives from the disciplines of psychology, anthropology, and sociology, as well as individuals from federal statistical agencies and major survey research firms. In 1983, the committee on National Statistics of the National Research Council organized an Advanced Research Seminar on Cognitive Aspects of Survey Methodology. As a result, several government laboratories for cognitive research were established (such as those in the National Center for Health Statistics, the Bureau of the Census, and the Bureau of Labor Statistics) as the necessity for these types of facilities was recognized. Most of the chapter authors were associated with the committee. (21 references) The following entries have been selected from the volume, with individual annotations found at the indicated item numbers:

- Part 1, Chapter 1: "Cognitive Aspects of Surveys and This Volume." [Tanur - Item No. 57].
- Part 2, Chapter 2: "Asking Questions and Influencing Answers." [Clark and Schober - Item No. 367].
- Chapter 3: "Direct Questioning about Comprehension in a Survey Setting." [Groves, Fultz, and Martin - Item No. 133].
- Part 3, Chapter 4: "Personal Recall and the Limits of Retrospective Questions in Surveys." [Pearson, Ross, and Dawes - Item No. 330].
- Chapter 5: "Improving Episodic Memory Performance of Survey Respondents." [Croyle and Loftus - Item No. 324].
- Chapter 6: "Memory and Mismemory for Health Events." [Loftus, Smith, Klinger, and Fiedler - Item No. 328].

- Chapter 7: "Attempts to Improve the Accuracy of Self-Reports of Voting." [Abelson, Loftus, and Greenwald - Item No. 396].
- Part 4, Chapter 9: "Opportunities in Survey Measurement of Attitudes." [Abelson - Item No. 383].
- Chapter 10: "The Case for Measuring Attitude Strength in Surveys." [Krosnick and Abelson - Item No. 384].
- Chapter 11: "New Technologies for the Direct and Indirect Assessment of Attitudes." [Dovidio and Fazio - Item No. 311].
- Part 5, Chapter 12: "Validity and the Collaborative Construction of Meaning in Face-to-Face Surveys." [Suchman and Jordan - Item No. 206].
- Part 6, Chapter 13: "A Review of Research at the Bureau of Labor Statistics." [Dippo and Norwood - Item No. 76].
60. Tourangeau, Roger. "Casting a Wider Net: Contributions from New Disciplines." Chap. 11 in *Cognition and Survey Research*, edited by Monroe G. Sirken, Douglas J. Herrmann, Susan Schechter, Norbert Schwarz, Judith M. Tanur, and Roger Tourangeau, 177-81. Wiley Series in Probability and Statistics, Survey Methodology Section, edited by Robert M. Groves, Graham Kalton, J.N.K. Rao, Norbert Schwarz, and Christopher Skinner. A Wiley-Interscience Publication. New York, NY: John Wiley & Sons, 1999. 395p.

Tourangeau, as editor of section C of the volume, provides introductory comments for the following five chapters. Collectively, they represent an attempt to document the contributions of various disciplines (for example, linguistics, artificial intelligence, connectionism, ethnography, and statistics) to the cognitive aspects of survey methodology (CASM) movement. (Prior survey research has drawn primarily from cognitive psychology—especially the psychology of memory and judgment, with the goal of identifying and reducing survey measurement error.) Both the accomplishments and the negatives brought about by the first CASM seminar are reviewed. The author believes there has been a "fundamental change in the way we view survey research," with new vocabulary, new tools, and new theoretical ideas. However, he questions whether there has been real change in survey practice. The new approach is seen to lack explicitness, is incompatible with "certain key survey realities," and does not effectively address the issues of cultural and linguistic diversity. (8 references)

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Design

INSTRUCTIONAL MATERIALS

61. Conrad, Frederick G. "Customizing Survey Procedures to Reduce Measurement Error." Chap. 19 in *Cognition and Survey Research*, edited by Monroe G. Sirken, Douglas J. Herrmann, Susan Schechter, Norbert Schwarz, Judith M. Tanur, and Roger Tourangeau, 301-17. Wiley Series in Probability and Statistics, Survey Methodology Section, edited by Robert M. Groves, Graham Kalton, J.N.K. Rao, Norbert Schwarz, and Christopher Skinner. A Wiley-Interscience Publication. New York, NY: John Wiley & Sons, 1999. 395p.

Survey respondents, despite their good intentions, "make errors and behave in unexpected ways" with respect to the plans of survey designers and their organizations. Conrad attributes these errors to several factors: designers not having an official plan; respondents' misinterpretation of the plan; a defective plan that does not produce the expected results; and respondents' "mental slips," occurring when there is memory overload, forgotten facts, and so forth. The last is an area in which the author suggests that cognitive aspects of survey methodology (CASM)-related research has made the most progress. Some user modeling techniques "designed to tailor human-computer interaction (HCI) to the preferences and abilities of the user" are discussed. Computers can assist respondents in following procedures, ultimately helping the researcher to devise procedures that can be followed. The author considers three research activities, based on user modeling, that can narrow the gap between designers' plans and survey participants' actual performance. (5 footnotes, 28 references)

62. Czaja, Ronald, and Johnny Blair. *Designing Surveys: A Guide to Decisions and Procedures*. The Pine Forge Press Series in Research Methods and

Statistics. Thousand Oaks, CA: Pine Forge Press, A Sage Publications Company, 1996. 269p.

The manual is intended for both the nonspecialist designing a survey research project for the first time and for the experienced survey researcher. Czaja and Blair describe the design and conduct of a survey as “a process of closely related decision points whose goal is to make optimum use of resources that are typically very limited” (p. xvi). The authors focus on the decisions that need to be made at various stages in the survey process, as well as the trade-offs in terms of the scientific standards, time constraints, and resources that result from these decisions. The five stages of a survey are discussed, including the pros and cons of mail, telephone, and face-to-face data collection modes; the characteristics of effectively written questions; the importance of question sequence (including treatment of the introductory statement and background questions); and the attributes of good questionnaires, with emphasis on pretesting the instrument. The following aspects of sampling are reviewed: design, sample size, implementation, and error reduction. A discussion of the components that comprise the final report concludes the volume. There are two pages of suggested readings for further study. Three appendixes are provided: the University of Maryland Undergraduate Student Survey (a self-administered survey); the Maryland Crime Survey (a telephone survey); and the Code of Professional Ethics and Practices of the American Association for Public Opinion Research. (80 references)

63. Fink, Arlene. *How to Design Surveys*. Vol. 5 of *The Survey Kit*, edited by Arlene Fink. Thousand Oaks, CA: Sage Publications, 1995. 73p.

Through the use of examples, checklists, and graphics, Fink offers practical guidelines for experimental survey design. The book is part of *The Survey Kit* [Item No. 24]. The purposes of the guide are to (1) describe the salient features of effective surveys; (2) determine the appropriate questions to ask in selecting a design; (3) distinguish between experimental and descriptive designs; (4) explain the characteristics, benefits, and risks of seven designs; (5) identify the risks to a design’s internal validity; and (6) identify the risks to a design’s external validity. Chapter 1 covers the components of good survey design, sampling, and reliable and valid survey instruments. In chapter 2 Fink focuses on two types of designs: experimental and descriptive, or observational. The first category includes concurrent controls in which participants are either randomly or nonrandomly assigned to groups, and self-controls, historical controls, and combinations thereof. Descriptive designs, that is, those producing information on existing groups and phenomena, consist of cross sections, cohorts, and case controls. A three-page table presents the benefits, risks, and potential for bias or invalidity of eight commonly used study designs. There are five suggested readings accompanied by one- to two-line annotations.

64. Goddard, Robert D., III, and Peter Villanova. “Designing Surveys and Questionnaires for Research.” Chap. 7 in *The Psychology Research*

Handbook: A Guide for Graduate Students and Research Assistants, edited by Frederick T. L. Leong and James T. Austin, 85-97. Thousand Oaks, CA: Sage Publications, 1996. 388p.

The authors present an overview of survey methods, providing comments on the reasons for surveys, the types, and the importance of confidentiality assurances. The survey development process includes forming clearly stated goals and hypotheses; identifying the characteristics of respondents who may become the sample population for the study; writing the questions (open and closed, filter, and middle response) and selecting response formats; and preparing and pretesting the survey instrument. Two other design issues considered are item context and response scale format (nominal, ordinal, and interval). Goddard and Villanova conclude with a review of the alternatives to the mail questionnaire method of data collection—namely, face-to-face and telephone interviews. The advantages and disadvantages of each are evaluated. (23 references)

65. Hessler, Richard M. "The Experiment, Survey, and Case Study Designs." Chap. 8 in *Social Research Methods*, 161-200. St. Paul, MN: West Publishing Company, 1992. 379p.

Several research designs frequently utilized in social science methodology are reviewed. The survey approach is discussed as one type of experimental design. Hessler comments on the utility and appropriateness of this methodology as a data-gathering technique for the study and analysis of an industrial society's problems. The author discusses how massive amounts of data can be analyzed by obtaining a random sample; how to prepare an effective data collection instrument; and the importance of having a clearly stated analytical plan. The disadvantages of survey research include high costs in terms of time and resources, imprecise control over independent and extraneous variables, and the "words versus deeds" problem (that is, can or will people really say what they feel, and will those feelings correspond to their actual behavior). The advantages and disadvantages of panel and trend designs are explored. A three-page glossary is provided, and five titles are suggested for further reading. The volume contains other chapters of interest to the survey researcher, including those on questionnaire construction, indices and scales, sampling, and interviewing. There are 96 cumulated references at the end of the text.

INSTRUMENT DESIGN

General

66. Bachman, Ronet, and Bruce M. Taylor. "The Measurement of Family Violence and Rape by the Redesigned National Crime Victimization Survey." *Justice Quarterly* 11, no. 3 (September 1994): 499-512.

The difficulties involved in estimating incidence and prevalence of domestic violence and rape, due primarily to the historical stigma associated with these crimes, are reviewed. Also problematic is that prior research has been based on “diverse methodologies and operational definitions,” sometimes yielding different and inaccurate estimates. In response to these problems, the Bureau of Justice Statistics (BJS) redesigned the National Crime Victimization Survey (NCVS), an ongoing survey that collects data on personal and household victimizations such as rape, robbery, assault, larceny, burglary, and motor vehicle theft. (The NCVS was known as the National Crime Survey until 1991.) Beginning in 1979, the BJS undertook an extensive ten-year redesign of the NCVS. Pretesting was conducted from 1981 to 1985. In July 1993, the redesigned instrument was incorporated into the entire sample, with new data available in fall 1994. The sampling frame consists of housing units selected from a stratified, multistage cluster sample. There are about 50,000 housing units and 101,000 individuals in the current sample. These households are interviewed every six months over a three-year period by Census Bureau interviewers who conduct face-to-face interviews for the first and fifth interviews, and telephone interviews for the remaining sessions. The average response rate exceeds 96 percent. The redesigned questions assess the incidence of violence committed by relatives or other persons known to the victim (no specific questions addressed this crime in earlier versions of the questionnaire). Other changes include clarifying the term “series crimes,” asking direct questions about unwanted sexual contact, improving the operational definition of the term “rape,” and specifying the type of rape (for example, attempted, completed, and verbal threat). Interviewers are given extensive retraining which emphasizes how to address questions that respondents might perceive as sensitive. Whenever possible, interviewers and respondents are matched as to gender and ethnicity. Bachman and Taylor believe the redesigned NCVS is “only one step in the evolution of our thinking about issues of rape and family violence” (p. 511). It is suggested that societal awareness needs to be increased regarding these types of victimizations. (8 footnotes, 31 references)

67. Bowie, Chester E., Lawrence S. Cahoon, and Elizabeth A. Martin. “Overhauling the Current Population Survey: Evaluating Changes in the Estimates.” *Monthly Labor Review* 116, no. 9 (September 1993): 29-33.

The Current Population Survey (CPS), for decades considered “the worldwide standard for household surveys,” is the primary source for U.S. labor force information, with its unemployment statistics regarded as a barometer of the health of the economy. The CPS questionnaire experienced substantial changes in 1945 and 1967, and, since 1986, has been in the process of redesign. In addition to the new questionnaire, this revision to is intended to (1) eliminate paper-and-pencil data collection through the use of computer-assisted telephone interviewing and computer-assisted personal interviewing; (2) cover additional sample areas and housing units; (3) improve the measurement and definition of

the concepts presented; and (4) reduce respondent burden and respondents' tendency to volunteer information. The authors report on a national one-and-one-half-year overlap sample selected to compare the former and revised survey instruments. The new version of the CPS will be fully implemented January 1994.

68. Bregger John E., and Cathryn S. Dippo. "Overhauling the Current Population Survey: Why Is It Necessary to Change?" *Monthly Labor Review* 116, no. 9 (September 1993): 3-9.

The origin of the Current Population Survey (CPS), a monthly national survey of the U.S. labor force, is traced to 1940. The survey's original sampling frame of 8,000 households has been expanded to the present 60,000 households, with the questionnaire changing significantly in terms of length and complexity. Bregger and Dippo review the reasons for redesigning the survey and report on the accomplishments of the Levitan Commission, which began revision in 1986. Topics receiving attention include revising the questionnaire; incorporating cognitive techniques into interviewing protocols; administering the survey with computer-assisted technology exclusively, rather than by paper and pencil; and developing a state-of-the-art data processing system. The goals of the redesigned CPS are to collect additional data on a wider range of topics, acquire better longitudinal statistics, improve the accuracy of earnings data, and clarify terms and concepts for both interviewers and respondents. The new version of the CPS will be implemented January 1994. (27 references)

69. Cohany, Sharon R., Anne E. Polivka, and Jennifer M. Rothgeb. "Revisions in the Current Population Survey Effective January 1994." *Employment and Earnings* 41, no. 2 (February 1994): 13-37.

The Current Population Survey (CPS), conducted since 1940 by the Bureau of the Census for the Bureau of Labor Statistics, has been the primary source of information on employed persons, unemployed persons, and those not in the labor force. Currently, approximately 60,000 households are surveyed on a monthly basis. The authors review the labor market developments necessitating revision of the questionnaire (the last major revision was in 1967). The four primary objectives for redesigning the CPS were to more precisely measure official labor force concepts, expand the amount of data available, implement several terminology changes, and apply technological advances to data collection, namely, computer-assisted telephone interviewing (CATI) and computer-assisted personal interviewing (CAPI). Beginning in 1988, several new questionnaire versions were developed and evaluated, with the new "parallel" version then tested extensively in a national sample survey conducted simultaneously with the CPS from July 1992 to December 1993. The final revised instrument was implemented in January 1994. The authors compare data from the parallel survey with CPS results using 1993 annual averages to evaluate not only the effectiveness of the new instrument, but also CATI and CAPI methodologies. A comparison of the

official CPS with the parallel survey indicates that the national unemployment rate and labor force participation rate were higher in the parallel survey, with overall estimates of employment about the same. The authors describe the introduction of new population controls based on the 1990 decennial census adjusted for the estimated population undercount. (8 footnotes)

70. Lynch, James P. "Clarifying Divergent Estimates of Rape from Two National Surveys." *Public Opinion Quarterly* 60, no. 3 (Fall 1996): 410-30.

In an attempt to determine why similarly designed surveys produced widely varying estimates of rape, Lynch compares the methodology of the National Crime Victimization Survey (NCVS), the National Crime Survey (NCS), and the National Women's Study (NWS). The NCS and NCVS are products of the Bureau of Justice Statistics (BJS). (The post-1991 NCS is referred to as the NCVS.) The NWS was conducted by Dean Kilpatrick and colleagues at the University of South Carolina for the National Victim Center and the National Institute of Drug Abuse. The NWS contains the most frequently cited estimates of rape not produced by the BJS and the Census Bureau. The 1992 *incidence* rate (a figure that includes multiple victimizations) was 140,000 for the NCS and 355,000 for the NCVS. The 1991 *prevalence* rate (in which a victim is counted only once no matter the number of victimizations) was 680,000. In 1991, a "radically" changed design was implemented into the NCS to reduce underreporting. The revised survey utilizes a rotating panel design of housing units; a bounding procedure in which a prior interview is used to mark the far end of the respondent's reporting period; a six-month reference period; a cuing strategy; rape and sexual assault questions; and computer-assisted telephone interviewing (CATI). These changes produced a 250 percent increase in the reporting of rape. The NWS employed a panel survey; a bounding procedure for the second and third interviews; two reference periods; a cuing strategy; screening questions; and CATI. Lynch compares the NCVS and the NWS in terms of the samples, target populations, bounding techniques, longitudinal components, reference periods, cuing strategies, CATI, context effects, interviewer effects, and how multiple victimizations are counted. The author concludes that the designs of the surveys have important differences which could influence the level of rape reported. What appeared to be similar surveys on the surface, were, in fact, "quite different," with the study reaffirming the complexities of measuring and validating victimization—in particular, the act of rape in self-report surveys. An appendix displays excerpts from the screener and incident forms of the two surveys. (16 footnotes, 43 references)

71. Martin, Elizabeth, and Anne E. Polivka. "Diagnostics for Redesigning Survey Questionnaires: Measuring Work in the Current Population Survey." *Public Opinion Quarterly* 59, no. 4 (Winter 1995): 547-67.

Between 1986 and 1993 the Census Bureau and the Bureau of Labor Statistics undertook the task of redesigning the questionnaire used in the Current Population Survey (CPS). This monthly survey, conducted with 60,000 households per year, produces national and state estimates of employment, unemployment, and other economic indicators. The difficulties with the former questionnaire centered around how respondents and interviewers interpreted key concepts, such as “work,” “looking for work,” “job,” and “business.” Martin and Polivka report the results of applying two cognitive techniques to the measurement of work in the CPS: (1) *hypothetical vignettes*, in which types of marginal work situations are described in order to measure respondents’ interpretations of work in the context of prior CPS work questions; and (2) *follow-up probes*, in which an additional question is posed in a debriefing interview to inquire about the work activities of the first person over age fifteen listed on the household roster for whom no work activities had been reported at the primary interview. The vignette technique provided direct, indirect, consistent, and useful information for identifying problems of respondent comprehension and reporting error. Although the probing technique produced no statistically significant evidence of questionnaire effects on overall reporting, improvement was exhibited for one question: work in connection with a family business or farm. The probe items yielded largely valid data and provided a potential measure of underreporting bias. (8 footnotes, 13 references)

72. Polivka, Anne E., and Jennifer M. Rothgeb. “Overhauling the Current Population Survey: Redesigning the CPS Questionnaire.” *Monthly Labor Review* 116, no. 9 (September 1993): 10-28.

The Current Population Survey (CPS), conducted since 1940, collects data on a number of measures on the U.S. labor force, including employment, unemployment, earnings, and the number of hours worked. The CPS questionnaire underwent substantial changes in 1945, 1967, and, most recently, in 1992 (with full field implementation in January 1994). Polivka and Rothgeb review the historical development of the CPS questionnaire, provide arguments for the necessity to redesign the instrument, and discuss the preparation and implementation of the new design. The revisions are described for three categories: employment (for example, the “at work” hours and multiple jobholder categories); unemployment (people searching for work, unemployed on layoff, and duration); and individuals not in the labor force (for example, retired and disabled individuals, and “discouraged” workers). The latter classification refers to “someone who is not employed, wants a job, but is not looking for work because of perceived job market factors” (p. 24). A section of the article addresses one of the major redesign issues: how to reduce labor force misclassifications. A computer-assisted telephone interview (CATI)/random-digit-dialed (RDD) test was conducted to evaluate the success of the revised items, and the entire instrument was administered via CATI and computer-assisted personal interview (CAPI) to a national overlap sample survey of 13,000 eligible households per month. Results

of the CATI/RDD/CAPI test of the CPS revisions will be issued in subsequent reports. (43 endnotes)

73. Raghunathan, Trivellore E., and James E. Grizzle. "A Split Questionnaire Survey Design." *Journal of the American Statistical Association* 90, no. 429 (March 1995): 54-63.

Several studies are reviewed which suggest that long questionnaires tend to increase respondent burden, perhaps resulting in higher nonresponse rates. In addition, instrument length can negatively impact the quality of the responses obtained. Raghunathan and Grizzle propose a design in which a long questionnaire is divided into several components, with the respondent then administered a subset of these components. The goals of the research were to (1) develop a multiple imputation method for analyzing data from a split design; (2) compare the inferences obtained in this manner with the complete questionnaire; (3) compare the loss of efficiency between the two formats; and (4) examine the robustness of the multiple imputation method. The authors developed the technique for analyzing data from the split design "in which the imputations are created by random draws from the posterior predictive distribution of the missing parts, given the observed parts by using Gibbs sampling under a general location scale model" (p. 54). The Cancer Risk Behavior Survey, consisting of 182 items in nine sections, provided the questions for the research. The results from two simulation studies are presented. The first showed that "little is lost" when only parts of the questionnaire are administered. In the second study, the loss of efficiency of the experimental design decreased as the correlation among the variables that are within different parts increased. An appendix provides the steps in Gibbs' sampling approach for creating imputations. (32 references)

74. Rockwood, Todd H., Roberta L. Sangster, and Don A. Dillman. "The Effect of Response Categories on Questionnaire Answers: Context and Mode Effects." *Sociological Methods & Research* 26, no. 1 (August 1997): 118-40.

The authors explore the impact of presenting a variety of answer categories using both telephone and mail data collection methods. The research serves as a partial replication of a study by Norbert Schwarz, Hans-J. Hippler, B. Deutsch, and Fritz Strack ["Response Scales: Effects of Category Range on Reported Behavior and Comparative Judgments." *Public Opinion Quarterly* 49, no. 3 (Fall 1985): 388-95.], but "expands the empirical content to which the theoretical models have been applied" (p. 119). In some prior studies respondents were asked to select from either a low or a high set of response categories, with the response scale manipulated between ballots. The present authors utilized additional questions with a different population to examine mode-of-interview administration effects, interviewer presence/absence effects on socially desirable responses, and respondents' locus of control (that is, "the degree to which the respondent controls the speed of the interview"). Using a systematic random

sample of 1,200 undergraduate students at Washington State University (Pullman, Washington), response categories were manipulated in a split-ballot survey. Half of the students were randomly assigned to receive telephone interviews; the other half were sent mail questionnaires. These subsamples of 600 were divided again to receive either Form A or Form B of the instrument, thereby dividing the original sample into four groups of 300 respondents each. The response rates ranged from 60 to 65 percent, resulting in 739 students in the final sample. Four questions were asked: two concerned frequent and mundane events, and two asked about rare and salient occurrences. The response categories overlapped in only one area; the others were unique to each ballot. The results indicate that the response categories had a significant impact on the responses to frequent and mundane questions, with one question showing significant mode-of-administration effects. For this question, a response scale presenting only a few socially desirable alternatives produced a social desirability bias in the telephone sample. However, when the scale offered more alternatives, the telephone mode demonstrated an extremeness effect. The mail questionnaire showed the most accurate reporting. The role of "satisficing," estimation, and context on mode effects is discussed. (6 endnotes, 32 references)

75. Sanchez, Maria Elena. "Effects of Questionnaire Design on the Quality of Survey Data." *Public Opinion Quarterly* 56, no. 2 (Summer 1992): 206-17.

The components of questionnaire design include question formatting options, graphic layout, integration of interviewer recording tasks for difficult question series, and question routing instructions. Sanchez selected two surveys—the 1987 Detroit Area Study (DAS) and the Religion in Detroit (RID)—to highlight the special design problems associated with interviewer-administered questionnaires. The DAS, an annual survey conducted by the Department of Sociology at the University of Michigan, produced 554 face-to-face interviews administered by DAS students and Survey Research Center (SRC) interviewers. RID, the SRC's replicated study of the DAS, produced 494 interviews, all completed by both newly trained interviewers and those with field experience. Population, sample size, field procedures, mode of administration, and question content, wording, and context were the same for both studies. The DAS and RID questionnaires were compared on two points: the placement in a grid of two questions dealing with the religious affiliation of the respondent's children, and the format used to probe for the names of specific Protestant denominations. The DAS grid design was found to produce a significantly higher number of "not ascertained" answers and was misleading in the probing of some responses. Interviewers in the RID study produced more error-free interviews. Sanchez believes that layout and other graphic cues displayed in survey questionnaire formats play an important role in conveying question objectives to interviewers, often yielding noticeable effects. Further, interviewer experience does not compensate for poor format. (5 footnotes, 7 references)

Cognitive Applications

76. Dippo, Cathryn S., and Janet L. Norwood. "A Review of Research at the Bureau of Labor Statistics." Chap. 13 in *Questions about Questions: Inquiries into the Cognitive Bases of Surveys*, edited by Judith M. Tanur, 271-90. New York, NY: Russell Sage Foundation, 1992. 306p.

The recent methodological work undertaken at the Bureau of Labor Statistics (BLS) is the focus of the chapter. Dippo and Norwood provide a brief historical background of the federal government's attempts to reduce nonsampling error in government surveys. Until about 1980, most investigations relied on field studies as the basic data collection method. These studies were designed to determine the effect of alternative questions/procedures on response. A radical departure for the federal statistical system occurred with Albert Bideman's 1980 workshop on the application of cognitive psychology to recall problems with the National Crime Survey. A further development in integrating the cognitive sciences and survey methodology took place in 1983 when the National Science Foundation funded a Committee on National Statistics-sponsored Seminar on the Cognitive Aspects of Survey Methodology. Soon after, the BLS established the Collection Procedures Research Laboratory, whose focus has been to improve the questionnaires used for the Current Population Survey and the Consumer Expenditures Surveys. In a final section, some of the findings emanating from the laboratory are documented. The review is organized within the existing framework of Tourangeau's information-processing model consisting of comprehension, retrieval, judgment, and communication. (1 footnote, 41 references)

77. Forsyth, Barbara H., Judith T. Lessler, and Michael L. Hubbard. "Cognitive Evaluation of the Questionnaire." Chap. 2 in *Survey Measurement of Drug Use: Methodological Studies*, edited by Charles F. Turner, Judith T. Lessler, and Joseph C. Gfroerer, 13-52. DHHS Publication no. (ADM) 92-1929. Washington, DC: U.S. Department of Health and Human Services, Public Health Service, Alcohol, Drug Abuse, and Mental Health Administration, 1992. 413p. [SuDocHE20.8002:S7/2]

The research goal was to develop and validate ways of identifying difficult-to-answer questions in the National Household Survey on Drug Abuse (NHSDA) in order to reduce error and bias arising from nonsampling aspects of the survey process. A cognitive coding scheme for questionnaire characteristics was developed and applied to the 1988 NHSDA survey instrument. The purpose of the scheme was to identify items presenting difficulties for respondents, such as those containing vague terminology, unclear time-frame periods, and ambiguous response categories. Cognitive interviewing techniques were used with six respondents to validate the appraisal. The respondents were administered face-to-face interviews and asked to "think aloud" their answers as they were formulated. Three sources of potential measurement error were identified.

Problematic areas were found in interpreting and understanding ambiguous terminology, in defining and using reference periods correctly, and in providing consistent answers to repeated questions. Also impacting error components were “hidden” questions (that is, those implied by the answer categories but not actually stated), long complex interviews, and unfixed anchoring periods. The authors present a model for determining overall error in NHSDA estimates. (13 footnotes, 10 references)

78. Herrmann, Douglas J. “Potential Contributions of the CASM Movement beyond Questionnaire Design: Cognitive Technology and Survey Methodology.” Chap. 17 in *Cognition and Survey Research*, edited by Monroe G. Sirken, Douglas J. Herrmann, Susan Schechter, Norbert Schwarz, Judith M. Tanur, and Roger Tourangeau, 267-75. Wiley Series in Probability and Statistics, Survey Methodology Section, edited by Robert M. Groves, Graham Kalton, J.N.K. Rao, Norbert Schwarz, and Christopher Skinner. A Wiley-Interscience Publication. New York, NY: John Wiley & Sons, 1999. 395p.

For five decades questionnaire design had been guided by behaviorist theories in which question-answering was viewed primarily as a stimulus-response process. In the early 1960s and 1970s, however, a new way of thinking—the cognitive approach—became popular in the field of psychology. With this method, respondents’ answers were believed to be derived from mental processes “which resembled computer operations that shaped the content of experience.” In the early 1980s [June 1983], cognitive psychologists and survey methodologists held a seminar on the cognitive aspects of survey methodology (CASM) to determine if cognitive techniques (including perception, encoding, comprehension, memory retrieval, thought, the editing of potential answers, and expression of the answer) could help ascertain how respondents form their answers to survey questions. As a result of CASM, there have been dramatic developments in survey questionnaire design and pretesting, although Herrmann acknowledges that there are additional phases of the survey research process in need of cognitive applications. (31 references)

Longitudinal

79. Menard, Scott. *Longitudinal Research*. Sage University Paper Series on Quantitative Applications in the Social Sciences, 07-075. Newbury Park, CA: Sage Publications, 1991. 81p.

The phrase *longitudinal research* refers to a “family of methods” in which data are collected for two or more distinct time periods; the individuals or cases studied are the same or comparable from one time period to the next; and some comparison of data is made between or among the time periods involved. Menard distinguishes this type of design from *cross-sectional research* in which

measurement occurs only once. Other forms of research may be considered longitudinal, such as *prospective panel designs*, *retrospective panel designs*, and *repeated cross-sectional designs*. Longitudinal data collection at the national level dates to 1665 with the periodic censuses in Canada. In the United States, longitudinal data has been collected by the Census Bureau from 1790 to the present. As early as 1759, longitudinal data has been gathered at the individual level (primarily case study and biographical data). The author discusses the purposes, the various designs, possible applications, and the difficulties involved when studying change over time. Some of the factors impacting data quality are reviewed, such as panel attrition, respondent recall, and cost. Longitudinal research is viewed as having the same problems with data quality and adequacy of sampling as cross-sectional research. Menard summarizes with this comment: "For the description and analysis of dynamic change processes, longitudinal research is ultimately indispensable" (p. 68). (176 references)

80. Veroff, Joseph, Shirley Hatchett, and Elizabeth Douvan. "Consequences of Participating in a Longitudinal Study of Marriage." *Public Opinion Quarterly* 56, no. 3 (Fall 1992): 315-27.

The research addresses two questions: Are there any positive or negative consequences on the marriages of respondents who participated in an intensive longitudinal study, and can such studies of social behavior, in general, effect short- or long-term attitudinal or behavioral changes in respondents' lives? The data analyzed came from a four-year study which used two randomly selected samples of white and African-American couples in which the wife was age thirty-five or younger, and the marriage was the first for both individuals. The newlyweds were assigned to either a large main study group or to a smaller control group. In the first and third years of the experiment, both spouses in the main study group received face-to-face interviews. The standard structured questionnaire contained both open and fixed response items. On another day these couples were interviewed together using two "novel" techniques that involved a story-telling narrative of their relationship, as well as a "revealed differences task" in which husbands and wives separately rated the importance of a number of marital ideals. In the second and fourth years, structured questionnaires with closed format items were administered to the spouses, separately, by telephone. The control group was interviewed minimally during the four-year period. The authors found some evidence to support the view that panel participation has consequences for "the experience of marital well-being." A greater number of main study group members, as compared to controls, reported low satisfaction in the second year of marriage. These negative effects are attributed to the focusing of feelings on the marriage and one's spouse. However, in the final year of the experiment, main study group couples seemed more adjusted on several measures of marital quality than their control counterparts. Survey researchers should be aware that "the topics they probe may linger as issues in their respondents' lives" (p. 326), and that respondents may be more "reactive" than is generally thought. (4 footnotes, 9 references)

Pretesting

81. Bercini, Deborah H. "Pretesting Questionnaires in the Laboratory: An Alternative Approach." *Journal of Exposure Analysis and Environmental Epidemiology* 2, no. 2 (1992): 241-48.

In the mid 1980s, several studies funded by the National Science Foundation challenged traditional field pretest procedures by demonstrating that questionnaire testing methods that evaluated the entire response process, rather than just the responses themselves, could reduce questionnaire-related response error. This cognitively oriented approach was applied to the present research to improve the questionnaire used by the National Center for Health Statistics. In 1984, the center established the Questionnaire Design Research Laboratory (QDRL), whose goal is to evaluate questionnaires from the respondent's perspective. The response process was analyzed in terms of Tourangeau's four cognitive stages: comprehension, retrieval, estimation and judgment, and response. The QDRL pretest involves three interview techniques. The first, the *concurrent think-aloud interview*, consists of encouraging respondents to think aloud as they formulate their answers. This protocol is accompanied by extensive interviewer probing. The *retrospective think-aloud interview* is administered when it is deemed valuable for respondents to answer the draft questions in a normal manner prior to being questioned about the response process. The last technique, the *focus interview*, involves a somewhat unstructured discussion of a specific topic with a small group of individuals. The strengths of the laboratory approach are reviewed, with Bercini observing that cognitive interviewing can provide insight into the response process itself, and allows for flexibility. The weakness of the approach is that it cannot duplicate field conditions and therefore is not a satisfactory substitute for the field pretest. (8 references)

82. Bolton, Ruth N. "Pretesting Questionnaires: Content Analyses of Respondents' Concurrent Verbal Protocols." *Marketing Science* 12, no. 3 (Summer 1993): 280-303.

Concurrent verbal protocols (or reports), a research technique borrowed from cognitive psychology, are used to acquire information about how respondents form their answers to survey questions. Central to Bolton's questionnaire pretesting method is an automatic coding scheme of verbal and nonverbal cues designed to record respondents' speech bursts, or utterances, rather than their complete responses to a question. This speech becomes the unit of analysis with an automatic, as opposed to a subjective, coding scheme. Two pilot studies, based on Tourangeau's information-processing model (comprehension, retrieval, judgment, and response), were carried out by GTE Laboratories, Incorporated, which then conducted two pretests to evaluate the different versions of the questionnaire. Both pretests involved face-to-face interviews with telecommunications decision makers in small businesses in Dallas and Los Angeles (for a total of fifty-eight customers). The responses were transcribed into electronic format. The transcripts were segmented

(using short pauses, intonation, and syntactical markers) for content analysis. The *Systematic Analysis of Language Transcripts* was employed to determine whether each segment had any cues corresponding to each of nine intensity variables. The results from automatic coding were then compared with those of observational monitoring by managers, and validated with company records. The findings are used to demonstrate how the coding scheme provides diagnostic information about questionnaire problems previously not detected or revealed by monitoring. Bolton concludes that a pretesting method that quantifies respondents' cognitive difficulties is a beneficial development for identifying and correcting poorly written questions. (11 footnotes, 37 references)

83. Lessler, Judith T., and Barbara H. Forsyth. "A Coding System for Appraising Questionnaires." Chap. 11 in *Answering Questions: Methodology for Determining Cognitive and Communicative Processes in Survey Research*, edited by Norbert Schwarz and Seymour Sudman, 259-91. San Francisco, CA: Jossey-Bass Publishers, 1996. 469p.

Lessler and Forsyth present a detailed description of a laboratory-developed questionnaire appraisal coding system designed to assist researchers in characterizing, identifying, and evaluating problematic questions. The authors provide background discussion concerning their reasons for developing the coding system and explore its potential for increasing response accuracy and reducing measurement error prior to field test conditions. The scheme is based on a four-stage model of the question-answering process [Tourangeau]: comprehension, retrieval, judgment, and response. Available codes are used to assess the questions' cognitive demands on respondents and to isolate difficult items. Appraisal results from three questionnaire evaluation projects demonstrate the application of the system. The questionnaires examined came from the National Household Survey on Drug Abuse, the National Endowment for the Arts, and the Centers for Disease Control and Prevention (an injury surveillance questionnaire). Numerous types of difficult questions were identified. Current research is being undertaken by the authors to "clarify, refine, and trim" the coding categories and to investigate the relationships between the codes. There are 534 cumulated references on pages 403-41.

84. Presser, Stanley, and Johnny Blair. "Survey Pretesting: Do Different Methods Produce Different Results?" Chap. 2 in *Sociological Methodology*, vol. 24, edited by Peter V. Marsden, 73-104. Washington, DC: American Sociological Association, 1992. 401p.

The same questionnaire served as the basis for evaluating four different types of pretests: conventional, behavioral coding, cognitive interviews, and expert panel. Presser and Blair discuss pretests within the context of prior research, their distinguishing features, the preparation of summary reports, and problem identification by means of a coding scheme. Two or three trials were conducted for each method. Results were analyzed in terms of overall productivity, problem

type, overlap between trials, and costs. Behavioral coding was the only method that had a clearly specified set of objective rules, and as such, proved to be the most reliable. Conventional pretests were found to be the least reliable. The expert panel method was not only the most cost-effective, but also the most productive. The authors recommend “routinely subjecting questionnaire drafts to a peer review process....” The results might have been different if varying scales had been tested—such as hundreds of interviews for the conventional pretests. A lack of specified goals for conventional pretests also may be a source for some of the limitations noted. The authors suggest that combinations of the pretests evaluated may provide researchers with better techniques. A six-page appendix provides a detailed coding frame and includes examples of the questions asked and associated problematic responses, the latter categorized by the nature of the challenge (for example, redundant, impossible, or difficult). (13 footnotes, 27 references)

Translation

85. Ferketich, Sandra, Linda Phillips, and Joyce Verran. “Development and Administration of a Survey Instrument for Cross-Cultural Research.” *Research in Nursing & Health* 16, no. 3 (June 1993): 227-30.

The administration of an inappropriate questionnaire when attempting to measure a phenomenon for diverse groups or for groups for which the instrument was not designed, significantly increases the likelihood of obtaining flawed data. Three guidelines are offered for developing a culturally appropriate measuring instrument: (1) become familiar with the language and cultural point of view of the target population; (2) determine whether the research goals are operational or comparative; and (3) match the translation method to the goals of the study, utilizing simple language, briefly written items, and clear terminology, with *back translation*, *double-back translation*, and *decentering* employed if necessary. [Back translation and double-back translation are techniques for translating survey questions from one language to another, with the goal of locating words in a second language having the linguistic equivalency of the original language. Decentering involves repeating the translations until all forms are culturally appropriate.] An example illustrates the applicability of these principles to the development of a cross-cultural survey instrument for assessing whether some components of community health nursing influenced respondents’ perceptions of need, access, availability, and acceptability of healthcare in four rural communities. The ethnic composition of the samples consisted of 31 to 77 percent Hispanics (nearly all were of Mexican descent) and 23 to 69 percent Anglos. Interviewers from outside the community conducted the face-to-face interviews, achieving a response rate of 75 percent across all community sites. Various administrative issues are discussed. (7 references)

86. McKay, Ruth B., Martha J. Breslow, Roberta L. Sangster, Susan M. Gabbard, Robert W. Reynolds, Jorge M. Nakamoto, and John Tarnai. "Translating Survey Questionnaires: Lessons Learned." Chap. 7 in *Advances in Survey Research*, no.70, edited by Marc T. Braverman and Jana Kay Slater, 93-104. New Directions for Evaluation, A Publication of the American Evaluation Association, edited by Lois-ellin G. Datta. The Jossey-Bass Education Series. San Francisco, CA: Jossey-Bass Publishers, 1996. 110p.

Due to the increasing numbers of non-English-speaking populations in the United States, the need has increased for well-translated survey instruments that can reduce survey nonresponse and measurement errors. The authors point out that in the last decade the disciplines of sociolinguistics, ethnography, cognitive psychology, and survey research have contributed to translation theory and practice. Two methods—*direct translation* and *back-translation*—are normally used to achieve a specifically stated translation purpose: literal, conceptual, or culturally equivalent. Through three case studies, information is provided on how to (1) select the most appropriate translation option; (2) identify the study goal(s); (3) hire and train translators and interviewers; and (4) pretest the questionnaire. Case Study 1 was based on the 1992 Health and Retirement Study, with the objective of producing a conceptual translation into Spanish utilizing the direct translation process. The method was effective when attention was paid to the range of characteristics of the target language population. Case Study 2 involved two instruments: the Spanish Redesigned Current Population Survey (CPS) and the Spanish CPS Supplement on Race and Ethnicity. No formal objectives were specified. The back-translated model produced a number of "convoluted" questions. In the CPS supplement the translators achieved a successful conceptual, rather than literal, translation. A *decentering* strategy, in which the source language instrument is not considered complete pending the entire translation process, was also employed with success. Case Study 3 was based on the Washington State Substance Abuse Prevalence Project Survey, whose objective was to produce literal translations in six languages through the back-translation method. Optimal results were not obtained. The authors highly recommend the conceptual translation as an objective, no matter whether direct or back-translation is used. (10 references)

QUESTION DESIGN

General

87. Alwin, Duane F. "Information Transmission in the Survey Interview: Number of Response Categories and the Reliability of Attitude Measurement." Chap. 3 in *Sociological Methodology*, vol. 24, edited by Peter V. Marsden, 73-104. Washington, DC: American Sociological Association, 1994. 399p.

The hypothesis that suggests that “the reliability of measuring subjective phenomena is in part a function of the number of response categories provided” is examined. Data from five, three-wave panel surveys from the General Social Survey (GSS), and three, three-wave panel studies from the National Election Studies (NES), were used to test the hypothesis. Alwin found evidence to support the hypothesis, with the one major exception being the two-category response scale which exhibited a higher reliability than expected. Additional response categories were found to yield greater reliability. However, the two-category response scale exceeded the three-category scale. The longer response scale was observed to measure intensity as well as direction. Information theory is considered in relation to the number of scale points. The statistical design and estimation procedures are presented, along with a table of results comparing studies with category options ranging from two to nine. The analysis provided is for responses to single questions, with the response scales read to the respondent. Alwin comments on a number of caveats with respect to the findings, one of which is that while they apply to attitude measurement, they may not necessarily be appropriate for other areas of subjective measurement. The answer option of “don’t know” is considered, but since the GSS and NES use the format infrequently, it is doubtful that this choice impacted the results. (25 footnotes, 98 references)

88. Bradburn, Norman M., and Seymour Sudman. “The Current Status of Questionnaire Research.” Chap. 2 in *Measurement Errors in Surveys*, edited by Paul P. Biemer, Robert M. Groves, Lars E. Lyberg, Nancy A. Mathiowetz, and Seymour Sudman, 29-40. Wiley Series in Probability and Mathematical Statistics, Applied Probability and Statistics. A Wiley-Interscience Publication. New York, NY: John Wiley & Sons, 1991. 760p.

Almost from the beginning of scientific opinion polling in 1935, researchers have recognized the significant effects of question wording on response. The authors cite a number of noteworthy contributors to the field, including George Gallup, Hadley Cantril, Donald Rugg, Howard Schuman, Stanley Presser, the Bureau of the Census, and the National Center for Health Statistics. Bradburn and Sudman identify some of the many factors that can impact response, one of which is the choice of words selected for the survey items. Respondents may not ask for clarification of ambiguous terms; rather, they may interpret the question as best they can and then offer a reply. The length and specificity of questions are also influential factors. In an effort to reduce misunderstandings, some investigators write very detailed questions. Simply written questions provide interviewers with “more freedom to probe and work with respondents.” Discussion continues on the importance of order or context effects—that is, the consequences of item placement within the survey instrument. The complexity of the English language is seen as the primary problem in questionnaire design. There are 822 cumulated references on pages 687-733.

89. Cook, Elizabeth Adell, Ted G. Jelen, and Clyde Wilcox. "Measuring Public Attitudes on Abortion: Methodological and Substantive Considerations." *Family Planning Perspectives* 25, no. 3 (May-June 1993): 118-21, 145.

Most current polls ask a single, general question that presents three or four policy options with respect to the abortion issue. One exception is the General Social Survey (GSS) which includes a series of six specific questions as well as a general item relative to whether abortion should always be legal. The authors use data from one national poll and six state polls (all were conducted in 1989 by CBS News and the *New York Times*) to examine how responses to specific and general items correlate, and if other types of questions might expand our understanding of abortion attitudes. A total of 1,347 respondents in the national survey, and 4,502 respondents in the state surveys (747 in California, 630 in Florida, 760 in Illinois, 744 in Ohio, 879 in Pennsylvania, and 742 in Texas), were asked a wide range of abortion-related questions. It was found that general questions, accompanied by only two or three response categories, produced higher estimates on either end of the abortion debate. Respondents tended to move out of extreme positions when queried about specific circumstances or when asked if they support restrictions proposed in a number of states. The authors advocate the use of two middle categories when only a single abortion question can be included. Although GSS-type questions provided a more "nuanced" measurement, they also allowed respondents to take politically nonrelevant positions. (3 footnotes, 9 references)

90. Eigenberg, Helen M. "The National Crime Survey and Rape: The Case of the Missing Question." *Justice Quarterly* 7, no. 4 (December 1990): 655-71.

The "missing" question referred to in the title is a *direct* query asking respondents whether they have been victims of attempted or completed rape. Eigenberg views this omission as a "critical flaw" in the design of the National Crime Survey (NCS), with resulting data on rape being of questionable value. The NCS asks respondents thirteen initial screening questions, specifically "whether someone has tried to take something from them, rob them, beat them up, attack them with a weapon, or steal things from them" (p. 657). A following question asks, "Did anyone TRY to attack you in some other way?" Consequently, respondents are expected to make the connection between a vague reference to attacks, and rape—that is, to guess what crime is being targeted. In addition, respondents may not answer the vague question, instead waiting for a specific one on rape. Two additional items ask whether respondents called the police and whether anything else happened to them which they perceived as a crime. It is unclear to Eigenberg what the NCS is attempting to measure, and whether its data indicate an over- or underreporting of rape. Several studies are cited that compare data from the NCS with data obtained from the *Uniform Crime Report* (UCR). All report low correlations between the two sources, leading the author

to conclude that the NCS and the UCR are not measuring similar phenomena. The findings of several other studies suggest that the NCS underestimates the occurrence of rape: the 1971 San Jose recall study; Russell's 1978 San Francisco study of 930 women; Koss's 1988 nationwide survey of 3,187 female college students; and other research based on convenience samples. Further, the NCS was found to be the only source which indicates that victims are more likely to be raped by strangers than by acquaintances. Discussion continues on problems of terminology, difficulties in comparing prevalence rates and incidence rates, the political and social implications of low estimates of rape, and the redesigning efforts of the NCS. (14 footnotes, 73 references)

91. Fink, Arlene. *How to Ask Survey Questions*. Vol. 2 of *The Survey Kit*, edited by Arlene Fink. Thousand Oaks, CA: Sage Publications, 1995. 105p.

In the second volume of the nine-volume set of *The Survey Kit* [Item No. 24], Fink guides the reader through the steps necessary for preparing reliable and valid survey questions. Three of the four chapters were designed to assist the user in determining a suitable number of questions, constructing clearly worded questions, and selecting appropriate response options. Considerable attention is paid to question context, the advantages and disadvantages of open- and closed-question formats, and the three most frequently used response choices—categorical (or nominal), ordinal, and numerical. Some of the issues covered in the final chapter include how to comprehend the cultural, psychological, economic, and political context of surveys; how to ask questions concerning knowledge, attitudes, and behaviors; and how to determine who constitutes the survey respondents. Numerous tables, examples, and checklists accompany the text, including a ten-page set of exercises at the end of the book. Fink provides a list of fifteen briefly annotated suggested readings.

92. Fowler, Floyd J., Jr. "Design and Evaluation of Survey Questions." Chap. 12 in *Handbook of Applied Social Research Methods*, edited by Leonard Bickman and Debra J. Rog, 343-74. Thousand Oaks, CA: Sage Publications, 1998. 580p.

Fowler concentrates on how to design effective survey questions, noting that the quality of the data produced will be no better than the quality of the questions asked, and that survey preparers frequently underestimate the importance of this step in the survey process. Question design is placed within a *total survey design* framework which encompasses sampling, questionnaire construction, data collection, and interviewer training. The basic features of well-written questions are outlined. Questions are divided into two basic types: those that measure factual data and those that measure subjective states. The author provides numerous examples for each type and discusses how the challenges associated with each can be addressed. Twenty-one general principles for designing good survey instruments are reviewed. Empirical approaches to conducting better surveys include the use of

focus groups, cognitive techniques, and field pretesting. The author discusses four standards for well-written questions: Do they measure what the researcher intends, and do they meet cognitive, psychometric, and interactional standards? The goal is to design questions that meet all of the standards. (49 references)

93. Fowler, Floyd J., Jr. *Improving Survey Questions: Design and Evaluation*. Applied Social Research Methods Series, vol. 38. Thousand Oaks, CA: Sage Publications, 1995. 191p.

Issues concerning survey questions—especially their content, format, and context—have been the subject of continuing research in this country since the 1940s. Although a number of early researchers were interested in question design, Fowler singles out Stanley L. Payne’s *The Art of Asking Questions* (1951) for comment. Fowler disagrees with Payne’s title, maintaining that question design should be viewed more as a science where there are “consistent standards for goodness,” than as an art where “goodness” is in the eye of the beholder. The author directs the text to students, researchers, and practitioners—anyone who wishes to formulate well-written survey questions and effectively evaluate survey data. Fowler suggests that poor question design is “pervasive,” and that improving design is one of the simplest and most cost-effective ways to enhance data quality. An overview chapter delineates two question types: those designed to measure factual or objective data, and those designed to measure subjective states (that is, respondents’ perceptions, feelings, and judgments). In the following chapter the author offers guidelines for designing questions capable of obtaining valid factual data. There is discussion on how to make the transition from question objective to question wording; how to approach ambiguous terms; how to stimulate respondents’ recall abilities; and the effect of social desirability on responses. Chapter 3 covers the measurement of subjective states. The issues of rating versus ranking, magnitude estimation, and open-ended versus closed-ended questions are considered. In the fourth chapter the general principles for writing effective questions are outlined. The following chapter, which Fowler describes as the most important in the book, addresses the protocols for pretesting and evaluating questions prior to their use in a survey. Topics covered include focus group interviewing, intensive individual interviews, the standard field pretest, coding, interviewer rating forms, respondent debriefing, and answer tabulation. Chapter 6 covers the techniques for evaluating the validity of survey questions, with the author noting that each approach is limited and imperfect. The final section serves as a summary of the salient points previously presented. Four appendixes cover commonly used measurement dimensions, measures of common covariates, open-ended questions, and standardized interviews. (89 references)

94. Hubbard, Michael L., Janella Pantula, and Judith T. Lessler. “Effects of Decomposition of Complex Concepts.” Chap. 9 in *Survey Measurement of Drug Use: Methodological Studies*, edited by Charles F. Turner, Judith T. Lessler, and Joseph C. Gfroerer, 245-64. DHHS Publication no. (ADM) 92-1929. Washington, DC: U.S. Department of Health and Human

Services, Public Health Service, Alcohol, Drug Abuse, and Mental Health Administration, 1992. 413p. [SuDocHE20.8002.S7/2]

As one of three studies in the volume based on a large-scale field experiment designed to test a new version of the National Household Survey on Drug Abuse (NHSDA) questionnaire, this investigation examines how to improve some portions of the survey instrument. Four versions of the questionnaire (two current NHSDA and two experimental) and two modes of administration (interviewer- and self-administered formats) were compared. The authors applied a *decomposition* strategy to several of the most difficult concepts (for example, the nonmedical use of psychotherapeutic drugs, and problems induced by drug usage) by dividing the question into a number of simpler components for which more straightforward wording could be presented (for example, drug usage without a prescription and use in larger quantities than prescribed). There was a significant increase in the reporting of the nonmedical use of psychotherapeutic drugs (particularly painkillers) with the decomposition of the current NHSDA item. However, respondents were often found to substitute their own definitions for nonmedical use instead of selecting from those provided. Self-administered and interviewer-administered forms of the new wordings likewise produced higher estimates than either version of the current questionnaire. (6 footnotes)

95. Krysan, Maria. "White Racial Attitudes: Does It Matter How We Ask?" Ph.D. diss., University of Michigan, 1995. 227 leaves. [*Dissertation Abstracts International* Order No. A9610170; *DAI* 56A, no. 12 (June 1996): 4958.]

The foci of the dissertation are the methodological and substantive issues surrounding the understanding of white racial attitudes. At the center of the research is the question, "Does it matter how we ask?" The question refers to the specific kinds of survey questions being posed, as well as to how data should be gathered on the racial attitudes of white Americans. Krysan believes that the social pressure to appear unprejudiced is a factor inherent in surveys of racial attitudes, thereby calling into question the validity of the data. The paradox is that while white people may support the principles of racial equality, they fail to support these principles through the implementation of laws, government policies, or federal programs. The author reviews the explanations for the paradox; cites literature from the field of survey methodology; and evaluates the various data collection options. Data for the analysis came from the 1992 and 1994 administrations of the Detroit Area Study, a multistage area probability sample of three counties constituting the Detroit metropolitan area. There were 1,796 household addresses in the final sample. Four collection methods were tested: face-to-face interviews, face-to-face interviews with a self-administered component, mail surveys, and semistructured follow-up depth interviews. Respondents were asked about racial, social, and political issues. The findings of mode-of-administration effects on measures of racial attitudes are summarized, focusing on the role of social desirability. The author also investigated whether certain

population groups and respondents' level of education were more susceptible to such effects. The research results indicate that (1) respondents from older cohorts expressed more negativity in their racial attitudes; (2) the more educated respondents were more positive; (3) women reported significantly lower levels of traditional racial prejudice as well as less opposition to racial policies; (4) white respondents' private attitudes toward African Americans differed from their public attitudes; and (5) mode effects were "mixed." An appendix provides the depth interview protocol. Each chapter has endnotes. (98 references)

Context Effects

96. Alspach, Steven E., and George F. Bishop. "Question-Order Effects of Presidential Approval Ratings on Gubernatorial Approval Ratings: A Research Note." *Social Forces* 69, no. 4 (June 1991): 1241-48.

The data analyzed were collected through the Ohio Poll, a random-digit-dialed telephone survey conducted by the Institute for Policy Research at the University of Cincinnati. Four surveys were carried out during 1983 and 1984, with 1,002, 809, 809, and 822 respondents, respectively. The first question asked in each of the surveys read as follows: "There are many problems facing the United States, both here and abroad. In general, what do you think is the most important problem facing the United States today?" (p. 1242). Respondents then received one of two questionnaire formats that varied the order of a presidential approval question (President Ronald Reagan) and a gubernatorial approval question (Governor Richard Celeste). (Two additional items asked for approval or disapproval ratings concerning Reagan's handling of the economy and foreign affairs.) A subsequent open-ended question asked why the respondent felt as s/he did. The analysis indicates significant order effects for Governor Celeste's approval ratings in that he received higher ratings in three of the four surveys when the gubernatorial approval question was asked just before the presidential question rather than immediately after. Alspach and Bishop attribute this finding to the degree of respondent familiarity with the two men, the greater popularity of Reagan, and a tendency for strong Reagan supporters to contrast Celeste's job performance with that of the president when the presidential approval question was asked first. The authors suggest that questions vulnerable to order effects be placed in multiple locations in the survey instrument, with the responses then averaged. An appendix provides the wording for the questions presented. (5 endnotes, 9 references)

97. Begley, Sharon, Howard Fineman, and Vernon Church. "The Science of Polling: The Order and Wording of Questions Can Skew Results. And, Oh Yes—People Lie." *Newsweek* 120, no. 13 (28 September 1992): 38-39.

A number of reasons why polls sometimes produce contradictory results are explored in terms of the Bush/Clinton/Perot presidential campaign. These include

the polls' margin of error, the size and representativeness of the sample, the weighting procedures used, the impact of refusals, and how the questions are written and arranged. The authors state that the margin of error varies inversely with sample size, with about 500 responses producing possible error of 5 percent in either direction; 2,500 responses reduce the margin to 1 percent. In addition to polling sufficient numbers of individuals, pollsters must select a sample that is representative of November's registered voters (difficulties arise because some people claim they are registered when they are not, and others refuse to participate). Even subtle differences in question wording and context, such as using only the candidates' last names or placing the candidate preference question following a question on the state of the economy, can skew results. In another example, Perot's standing varied depending on whether he was considered in a two-way or three-way race. It is speculated that by asking a question about Bush or Clinton first encouraged voters to focus on their dissatisfaction with the choice, thus making them more likely to choose Perot when his name was added.

98. Bickart, Barbara A. "Question-Order Effects and Brand Evaluation: The Moderating Role of Consumer Knowledge." Chap. 6 in *Context Effects in Social and Psychological Research*, edited by Norbert Schwarz and Seymour Sudman, 63-79. New York, NY: Springer-Verlag, 1992. 353p.

A consumer survey was conducted to examine (1) the influence of consumer knowledge on question order effects; (2) the impact of rating brand attributes before an overall brand evaluation (that is, asking a specific question prior to a general one); and (3) the role of product-category knowledge in adjusting these effects. Bickart believes that computed judgments (that is, attitudes formed on the spot in a memory-based fashion) may be more prevalent for brand evaluation than for evaluations in other areas (such as social values), since consumers often have comparative brand information before they are asked to make a judgment. The samples consisted of 81 members of a running club and 100 individuals listed in the Champaign-Urbana, Illinois, telephone directory who had purchased a pair of running shoes in the previous year. All respondents were interviewed by telephone, with random assignment to one of four versions of the survey instrument. The author found that when specific questions were asked prior to overall evaluations (that is, an "inverted-funnel" question order), significantly higher correlations resulted. These increased correlations could be misleading to a market manager, given the relatively low importance of the attributes rated in the "low-diagnostics condition." (*Diagnostics* refers to the degree to which information assists the respondent in evaluating a brand or the usefulness of the information.) Expert and novice respondents' judgments were influenced in a different manner by prior questions. Experts' judgments were usually unaffected by question order, and therefore were more immune to order effects. There are 540 cumulated references on pages 325-53.

99. Bradburn, Norman M. "What Have We Learned?" Chap. 21 in *Context Effects in Social and Psychological Research*, edited by Norbert Schwarz and Seymour Sudman, 315-23. New York, NY: Springer-Verlag, 1992. 353p.

Summary comments are provided for the twenty preceding chapters in the compilation. Bradburn offers his views concerning the role of context effects in survey methodology, stating that it seems quite likely that question order has a significant impact on the answers respondents provide, and that there are probably significant order effects in the questions researchers design. In the concluding comments, Bradburn identifies three stages in the development of our understanding of context effects. In the first, beginning in the 1930s and extending to the 1950s, researchers demonstrated the existence of question-order effects and their impact on results. In the second stage, a move toward the classification of the types of effects that could result from question order took place. At present, the research emphasis is on explaining the mechanisms through which various types of order effects are produced, and identifying the cognitive processes respondents' employ when answering questions. Recently developed theoretical frameworks will assist in the progress. There are 540 cumulated references on pages 325-53.

100. Bumpass, Larry L. "The Measurement of Public Opinion on Abortion: The Effects of Survey Design." *Family Planning Perspectives* 29, no. 4 (July-August 1997): 177-80.

The General Social Survey (GSS), conducted annually (with a few exceptions) since 1972 by the National Opinion Research Center at the University of Chicago, is a primary source of data on, among many other topics, attitudes toward abortion. GSS questions ask respondents whether a woman should be able to obtain a legal abortion for a variety of reasons, beginning with "if there is a strong chance of defect in the baby" and ending with "if the woman wants it for any reason." Bumpass analyzed the questions for possible design effects on measured levels of approval. The author is of the opinion that both the language and the sequencing of the questions may have "affected estimated levels of public support for abortion" (p. 177). A telephone survey was conducted with a factorial experimental design of 1,216 U.S. households. Respondents were randomly assigned to one of five question manipulations, the first being the standard GSS item. The remaining four sets of questions specified the duration of pregnancy or varied the position of the question which asked whether abortion should be legal for any reason. Among the findings are the following: (1) the level of approval for abortion was closely linked to pregnancy duration, with a sharp decline in approval after the first trimester; (2) no evidence was found that the measurement of attitudes toward abortion was biased when gestational length is unspecified (a finding contrary to expectations); and (3) when the GSS question on whether a woman should be able to obtain a legal abortion was asked before,

rather than following a series of specific reasons, a majority of Americans were in agreement. The role of context effects on the outcome is discussed. (15 references)

101. Lorenz, Frederick O., and Don A. Dillman. "Four Papers on Order Effects in Surveys: Introduction." *Rural Sociology* 60, no. 4 (Winter 1995): 639-40.

Lorenz and Dillman provide an introduction to the four articles [Item Nos. 102, 274, and 366] that follow. [An additional article involves a mail questionnaire and was excluded from this bibliography.] Four sources of survey error are identified: sampling, coverage, nonresponse, and measurement, the last resulting from respondents who fail to accurately answer survey questions. The causes, complexities, and consequences of measurement error were the topics of a meeting of rural sociologists from agricultural experiment stations located in nine states. The attendees sought to replicate experiments across states and to examine populations, with the goal of better understanding the impact of measurement error on surveys conducted by rural sociologists. (7 references)

102. Lorenz, Frederick O., John Saltiel, and Danny R. Hoyt. "Question Order and Fair Play: Evidence of Even-Handedness in Rural Surveys." *Rural Sociology* 60, no. 4 (Winter 1995): 641-53.

Writing from the perspective of rural sociologists, the authors investigate the concept of "even-handedness" as it is evidenced in two surveys: the 1992 Montana Farm and Ranch Survey (administered by mail questionnaires) and the 1992 Iowa Health Poll (administered by telephone interviews). The "norm of even-handedness" is defined as "a question-order effect known to occur in face-to-face interviews when respondents favor one of two complementary or competing opinion questions, both written at the same level of specificity" (p. 642). The concept is believed to occur when responses to a second question are influenced by answers to a first question, thereby increasing the risk of response effects or context effects. (Survey researchers frequently use split ballots, which vary the order of the questions, to reduce such effects.) The goals of the research were to determine the presence of even-handedness in self-administered surveys and to extend previous findings to telephone interviews in which respondents were asked to recall recent behaviors. To test four hypotheses concerning the effects and strength of the norm of even-handedness, data were analyzed from 1,038 mail questionnaires (the Montana survey) and 2,038 telephone responses (the Iowa poll). Question order was varied in the two studies. Context effects were found in both the self-administered opinion survey (to a lesser extent) and in the recall telephone interview. The findings are said to "complement and extend" previous research in the area. (2 footnotes, 15 references)

103. Mason, Robert, John E. Carlson, and Roger Tourangeau. "Contrast Effects and Subtraction in Part-Whole Questions." *Public Opinion Quarterly* 58, no. 4 (Winter 1994): 569-78.

Reviewed are the contradictory results produced by several prior studies which varied the order of specific and general questions on the same topic in order to demonstrate how responses to one opinion question can or cannot affect the responses to a later question. The authors describe a split-ballot experiment that varied not only the order of general and specific questions but also the position of an open-ended item. A total of 1,685 respondents residing in two states, Oregon (913) and Idaho (772), were selected, with random digit dialing used for the Oregon study and a random directory sample for the second. Two closed-ended questions were asked in a forty-minute telephone interview. The first question dealt with a specific, or part item, about the economic well-being of the respondents' local community. Question two, the general or whole item, focused on the state economy. The open-ended question, "Why do you say that?" was randomly assigned after the first question for half the group and after the second question for the other half. The results indicate that item order affected the overall distribution of the answers to the general item, as well as the correlation between the two closed items. The authors are of the opinion that their findings are consistent with a "subtraction" process, in that respondents appear to exclude from consideration specific aspects of a general issue when a question about the general issue follows a question about the specific aspect of it. The factors influencing subtraction effects, the wording of the closed questions, and the placement of the items in the interview schedule are discussed. (5 footnotes, 13 references)

104. Panter, Abigail T., Jeffrey S. Tanaka, and Tracy R. Wellens. "The Psychometrics of Order Effects." Chap. 17 in *Context Effects in Social and Psychological Research*, edited by Norbert Schwarz and Seymour Sudman, 249-64. New York, NY: Springer-Verlag, 1992. 353p.

Some of the basic principles of contemporary psychometric theory relating to the understanding of item-level response processes are reviewed. The authors are of the opinion that the psychometric component is often missing in research projects, and that its importance for evaluating order effects has been overlooked. The conditions under which item-order effects can be interpreted are discussed, and some preconditions that must be valid in order to interpret such effects are outlined. Under the heading "Items and Their Relations to Underlying Constructs" [that is, a theoretical entity or an assumption], two item-order effects models are discussed: the *intraconstruct* and the *interconstruct*. In the *intraconstruct* model all items are thought to have the same underlying construct. Three testable models of increasing stringency are presented. In the *interconstruct* model item-order effects can be conceptualized as occurring across different constructs. It is suggested that researchers concentrate on item clusters or testlets (subsets of items) to identify order effects. Abortion questions from the General Social Survey serve to illustrate the main points. There are 540 cumulated references on pages 325-53.

105. Rockwood, Todd H. "Measurement Error in Survey Research: Explorations in Context and Process." Ph.D. diss., Washington State University, 1994. 176 leaves. [*Dissertation Abstracts International* Order No. AAT 9512779; *DAI* 55, no. 12 (June 1995): 4012.]

Rockwood's goals were to assess the extent to which measurement error occurs in survey research as a result of context and process effects, and to determine the implications of errors in particular, as well as overall measurement properties in survey research in general. Context effects are associated with how the respondent's cognitive responses are affected by such factors as the question and the response categories. Process effects occur in the mode of administration (face-to-face and telephone interviews, and self-administered questionnaires), and how the response categories are presented (written or verbal). A split-ballot student survey was conducted in the spring of 1991 at Washington State University. A second survey, conducted with a sample of households in the state of Washington, included questions on self-reported voting behavior. The author found that questions dealing with frequently occurring events that require estimation produced significant differences in response due to both context and process effects. The comparative ranking task, when presented before the individual rating, had a "diagnostic effect" on response to the individual ratings in the mail and telephone data collection approaches. No differences by collection mode were evident for the social desirability hypothesis with respect to overreport of voting. (80 references)

106. Salancik, Gerald R., and Julianne F. Brand. "Context Influences on the Meaning of Work." Chap. 16 in *Context Effects in Social and Psychological Research*, edited by Norbert Schwarz and Seymour Sudman, 237-47. New York, NY: Springer-Verlag, 1992. 353p.

Several theoretical frameworks for context effects are reviewed. Salancik and Brand investigate and evaluate how respondents' opinions about their jobs are affected by both content and context. Forty graduate teaching assistants (TAs) at the University of Illinois served as the study participants. All were interviewed face-to-face from one to three hours by a female graduate student. Each TA was given a list of ninety-five activities from which s/he was to select those that were regularly a part of her/his position, and then asked a question that manipulated context. Following this task, respondents were asked to describe their work according to the Job Diagnostic Survey (JDS) and to evaluate their level of satisfaction. The data suggest that context had a strong effect on how TAs derived meaning about their teaching activities from their experiences. The TAs' knowledge about their job content was insufficient as a basis for their interpretation of its features. Although TA-selected tasks were found to be related to JDS descriptions, the relationships were dependent on the context primed for the respondents. TAs primed to think of their jobs in terms of their students tended to derive positive meanings from their teaching tasks and negative meanings from administrative activities. Negative feelings toward each area

were evident when TAs were primed to think of their work in terms of themselves. There are 540 cumulated references on pages 325-53.

107. Sangster, Roberta Lynn. "Question Order Effects: Are They Really Less Prevalent in Self-Administered Surveys?" Ph.D. diss., Washington State University, 1993. 121 leaves. [*Dissertation Abstracts International* Order No. AAI9430079; *DAI* 55A, no. 11 (May 1993): 2175.]

Question-order effects are described as situations in which a prior question influences the responses to subsequent questions. Sangster focuses on some of the major issues surrounding such effects in survey research, especially whether the mode of administration has an impact. The author believes that if responses depend on the order in which questions are asked, it is important to determine why merely changing the order of two questions may produce varying responses. The current belief is that self-administered surveys are less vulnerable to such effects. This perspective is based on the supposition that the respondent has time to provide more thoughtful answers than with face-to-face and/or telephone interviews. (The latter were used for this mixed-mode comparison.) Sangster challenges this assumption by analyzing data from a split-ballot, experimental research design study conducted with a random sample of 1,200 undergraduate students. The outcome of the study supports the view that question-order effects occur similarly between the self-administered and telephone options, with the experiments yielding different distributions of responses based on the order in which the questions appeared in the survey instrument. (46 references)

108. Schuman, Howard. "Context Effects: State of the Past/State of the Art." Chap. 2 in *Context Effects in Social and Psychological Research*, edited by Norbert Schwarz and Seymour Sudman, 5-20. New York, NY: Springer-Verlag, 1992. 353p.

The survey methodology literature on context effects is traced to the 1940s with the appearance of a few "isolated examples of uncertain reliability." Even in the mid 1970s, numerous leading survey researchers reported few effects from question order manipulation (including this chapter author). However, by the end of the decade it became clear that context can produce effects of both practical importance and theoretical interest in standard surveys. Since then, discussions of the role of context have become prominent in the literature, with Schuman commenting, "by late 1980, when our chapter on context was completed [Schuman, Howard, and Stanley Presser. *Questions and Answers in Attitude Surveys: Experiments in Question Form, Wording, and Context*. New York, NY: Academic Press, 1981. 370p.], it was possible to cite about two dozen studies, in addition to our own, showing that context produces reliable differences, although we also cite in that chapter more than a dozen studies reporting equally clear negative evidence" (p. 11). The most challenging aspect of context effects for survey researchers occurs in trend studies—that is, the replication of the same questions at regular intervals. Difficulties can arise in three areas: in maintaining

context constant over time, in cases where the meaning of the question changes, and because different contexts do not necessarily lead to the same conclusions. In addition, effects can change univariate or marginal results and interact with other analytic variables. There are 504 cumulated references on pages 325-53.

109. Schwarz, Norbert, and Seymour Sudman. "Introduction." Chap. 1 in *Context Effects in Social and Psychological Research*, edited by Norbert Schwarz and Seymour Sudman, 3-4. New York, NY: Springer-Verlag, 1992. 353p.

This volume, directed to cognitive psychologists and survey researchers, is an outgrowth of a 1989 conference held in North Carolina. The organizing theme of both the conference and the book is the concept of context effects, described as an important but troublesome issue in survey and social judgment research as well as in psychological testing. An attempt has been made to bring to the reader the most current perspectives on the topic. Schwarz and Sudman believe the contents represent a "blending" of cognitive science and survey insights, an area experiencing rapid growth in the last decade.

110. Schwarz, Norbert, and Seymour Sudman, eds. *Context Effects in Social and Psychological Research*. New York, NY: Springer-Verlag, 1992. 353p.

Conference papers on cognition and survey research, presented at Kill Devil Hills, North Carolina, 28 September through 1 October, 1989 are the basis for this work. The meeting was sponsored by the Zentrum für Umfragen, Methoden und Analysen in Mannheim, Germany, and the Survey Research Laboratory and the Department of Business Administration at the University of Illinois in Urbana-Champaign. The twenty-one chapters are organized into six parts: (1) "Introduction and Historical Overview"; (2) "Question-Order Effects in Surveys"; (3) "Response-Order Effects in Surveys"; (4) "Order Effects in Psychological Testing"; (5) "Social Judgment"; and (6) "Summary." There are 540 cumulated references on pages 325-53. The following entries have been selected from the volume, with individual annotations found at the indicated item numbers.

- Part 1, Chapter 1: "Introduction." [Schwarz and Sudman - Item no. 109].
- Chapter 2: "Context Effects: State of the Past/State of the Art." [Schuman - Item No. 108].
- Part 2, Chapter 4: "Context Effects on Responses to Attitude Questions: Attitudes as Memory Structures." [Tourangeau - Item No. 116].

- Chapter 6: "Question-Order Effects and Brand Evaluations: The Moderating Role of Consumer Knowledge." (Bickart - Item No. 98).
- Chapter 9: "Questionnaire Context as a Source of Response Differences in Mail and Telephone Surveys." [Tarnai and Dillman - Item No. 278].
- Chapter 11: "Qualitative Analysis of Question-Order and Context Effects: The Use of Think-Aloud Responses." [Bishop - Item No. 308].
- Chapter 12: "Thoughts on the Nature of Context Effects." [Smith - Item No. 114].
- Part 3, Chapter 14: "The Impact of Cognitive Sophistication and Attitude Importance on Response-Order and Question-Order Effects." [Krosnick - Item No. 370].
- Part 4, Chapter 16: "Context Influences on the Meaning of Work." [Salancik and Brand - Item No. 106].
- Chapter 17: "The Psychometrics of Order Effects." [Panter, Tanaka, and Wellens - Item No. 104].
- Part 5, Chapter 18: "Information-Processing Functions of Generic Knowledge Structures and Their Role in Context Effects in Social Judgment." [Bodenhausen - Item No. 321].
- Part 6, Chapter 21: "What Have We Learned?" [Bradburn - Item No. 99].
111. Simmons, Carolyn J., Barbara A. Bickart, and John G. Lynch, Jr. "Capturing and Creating Public Opinion in Survey Research." *Journal of Consumer Research* 20, no. 2 (September 1993): 316-29.

Recent studies on the cognitive processes that underlie responses to survey questions suggest that respondents formulate answers based on their responses to earlier items in the instrument, and that those answers are likely to be *constructed*, that is, determined, at that moment. This practice does not necessarily reflect true beliefs, attitudes, and intentions, a problem perceived as substantive rather than methodological. The authors discuss a framework proposed by Jack M. Feldman and John G. Lynch, Jr. ["Self-Generated Validity: Effects of Measurement on Belief, Attitude, Intention and Behavior." *Journal of Applied Psychology* 73 (August 1988): 421-35.]. Two field experiments were carried out to determine if respondents' answers reflect the effects of thoughts prompted by earlier questions, and whether there are specific to general or general to specific

carryover effects. The first experiment, conducted in the context of the 1988 presidential election (Bush/Dukakis), used a final sample of 306 randomly selected registered voters in the state of Florida. The telephone surveys took place in June and again in October. Issue questions and voting intention items, in which the order was manipulated, were asked of all respondents. The results indicate that when a respondent had voted for one of the candidates in the primary, voting intention was not based on prior survey responses; if the respondent had not voted for these candidates in the primary, voting intention in the election appeared to be constructed. Regardless of how they voted in the primary, all respondents appeared to construct opinions on the issue questions. The effect of prior answers on opinion issues decreased as the election approached, thereby supporting the view that knowledge about the issues increased with time. In the second experiment which dealt with the 1992 presidential race (Bush/Clinton/Perot), the placement of the primary voting questions was manipulated with a random sample of 339 registered voters. When questions involving primary voting behavior were asked first, responses to the issue questions were affected, "with resulting carryover to a later measure of voting intention." In general, both experiments produced results supportive of the Feldman and Lynch framework. Implications for survey research on consumer behavior are discussed. (10 footnotes, 31 references)

112. Smith, Andrew E. "Survey Questions and American Public Opinion: Question and Response-Order Effects in the Gallup Poll." Ph.D. diss., University of Cincinnati, 1997. 182 leaves plus appendixes. [*Dissertation Abstracts International* Order No. AAT9732672; *DAI* 58A, no. 5 (November 1997): 1900.]

The Gallup Organization, as part of the American Institute of Public Opinion (AIPO), has conducted extensive research into question-order (Q-O) and response-order (R-O) effects of items appearing in the Gallup Poll. The data analyzed came from a series of more than 3,000 split-ballot experiments, of which 280 were on the order of questions and 250 were on the order of responses. Although there were drawbacks, this dataset was selected because of the large number of original and replicated experiments, as well as the extensive number of observations (between 2,000 and 3,000). Smith chose 104 Q-O experiments and 213 R-O experiments, conducted from 1938 to 1988, to test the various theoretical approaches and models that have been proposed to explain and predict Q-O and R-O effects and to determine how well they account for Gallup results. Emphasis is placed on (1) Howard Schuman and Stanley Presser's question constraint and response persuasion model; (2) cognitive models such as those proposed by Jon Krosnick, Norbert Schwarz, and Roger Tourangeau; (3) an alternative explanation based on George Bishop's ambiguity model; and (4) Knauper's age-related hypothesis. Smith concludes that Q-O and R-O effects are common and appear to be strongly influenced by a social desirability factor. The Gallup data examined did not fit the predictions made by the major theoretical models. Appendix A (143 pages) lists the Gallup response-

order experiments; Appendix B (122 pages) lists the Gallup question-order experiments. (60 references)

113. Smith, Tom W. "Context Effects in the General Social Survey." Chap. 4 in *Measurement Errors in Surveys*, edited by Paul P. Biemer, Robert M. Groves, Lars E. Lyberg, Nancy A. Mathiowetz, and Seymour Sudman, 57-71. Wiley Series in Probability and Mathematical Statistics, Applied Probability and Statistics. A Wiley-Interscience Publication. New York, NY: John Wiley & Sons, 1991. 760p.

The General Social Survey (GSS) has been conducted nearly annually since 1972 by the National Opinion Research Center (NORC). The center uses face-to-face interviews to collect data on a wide variety of social and political attitudes of adults residing in the United States. In 1988, NORC switched the GSS from a rotation-across-time design to a split-ballot design, a change that allowed researchers to test for possible context effects by comparing response distributions across ballots. Using data from the 1988 and 1989 surveys, Smith cross-tabulated the 502 variables in the 1988 GSS and the 442 variables in the 1989 GSS with ballot. The results of the comparison indicate that (1) very few significant differences appeared among the context-similar groups; (2) more significant differences were found among the context-different variables; (3) overall, the context effects created by the pre-1988 rotation design were "minuscule," with only 11 to 12 of the total 502 variables indicating effects; (4) the effects noted were restricted to a few topics: anomie, misanthropy, satisfaction, and institutional confidence; and (5) unanticipated context effects might occur once in every forty to sixty questions. In addition, Smith found that certain characteristics of the survey items made them more susceptible to context effects, such as those of a general nature and those containing ambiguous terms. The questions dealing with demographics were found to be "relatively immune" to context effects, due primarily to their factual content; that they were well understood by respondents; and that extensive memory searches were not required. Difficult factual questions, however, may be as prone to context effects as other questions. There are 822 cumulated references on pages 687-733.

114. Smith, Tom W. "Thoughts on the Nature of Context Effects." Chap. 12 in *Context Effects in Social and Psychological Research*, edited by Norbert Schwarz and Seymour Sudman, 163-84. New York, NY: Springer-Verlag, 1992. 353p.

Question order research is described as undeveloped and rife with problems—in spite of having received over forty years of attention from investigators. Smith discusses the characteristics and pervasiveness of context effects, evaluates two concepts of question arrangement, and reviews various methods for classifying context. *Conditional order effects* are defined as the interaction between question order and response to the preceding question; that is, the relationship between

antecedent and subsequent responses. Prior research indicates that unanticipated context effects might occur once in forty to sixty questions, a figure thought to underestimate the extent of the problem. The terms *buffering* and *scattering* refer to varying the placement of the trigger question(s) and/or inserting intervening items. In order to advance our understanding of context effects, a classification system needs to be developed according to their cause and effect. In addition, the cognitive steps involved in answering questions should be restricted, with attention paid to how effects might operate within each step. Smith advocates the use of theoretical models, “think-aloud” protocols, follow-up questions, test/retest designs, and probes. There are 540 cumulated references on pages 325-53.

115. Tourangeau, Roger. “Context Effects on Answers to Attitude Questions.” Chap. 8 in *Cognition and Survey Research*, edited by Monroe G. Sirken, Douglas J. Herrmann, Susan Schechter, Norbert Schwarz, Judith M. Tanur, and Roger Tourangeau, 111-31. Wiley Series in Probability and Statistics, Survey Methodology Section, edited by Robert M. Groves, Graham Kalton, J.N.K. Rao, Norbert Schwarz, and Christopher Skinner. A Wiley-Interscience Publication. New York, NY: John Wiley & Sons, 1999. 395p.

Tourangeau reviews current assumptions concerning how respondents answer attitude questions and identifies the variables that determine if preceding questions result in *assimilation effects* or *contrast effects* on the responses given to subsequent questions. Assimilation and contrast refer to the directional shift of a response, with the former being largely the product of automatic processes that occur without effort and outside awareness, and the latter resulting from controlled processes in which “respondents consciously detect some bias in the considerations that come to mind and try to compensate for it” (p. 121). Context effects are discussed in terms of Tourangeau’s four-component information-processing model: comprehension, retrieval, judgment, and reporting. Variables impacting the direction of such effects include respondents’ degree of distraction, her/his level of motivation, interruption(s) during the context task, vividness of recall, and item ordering. From an examination of two general models of context effects—the *inclusion/exclusion model* and the *belief-sampling model*—the author concludes that if the models are correct, “context effects are not so much a measurement artifact but an essential by-product of the process of asking and answering attitude questions” (p. 127). (65 references)

116. Tourangeau, Roger. “Context Effects on Responses to Attitude Questions: Attitudes as Memory Structures.” Chap. 4 in *Context Effects in Social and Psychological Research*, edited by Norbert Schwarz and Seymour Sudman, 35-47. New York, NY: Springer-Verlag, 1992. 353p.

Attitudes are viewed as “enduring structures,” stored in long-term memory. This concept has important implications concerning attitude organization and the

processes used by respondents to answer attitude questions. An information-processing model, consisting of comprehension, retrieval, judgment, and reporting, is discussed. (The model was developed by the author some years earlier.) Item context, especially prior items, can affect each of the components. The reporting stage is susceptible to “carryover” effects (that is, respondents’ attempts to edit their answers to maintain logical or psychological consistency), and to “backfire” effects (that is, respondents’ fear of taking an extreme or unreasonable position to avoid being perceived as too partisan). Tourangeau reports on two experiments undertaken to test retrieval-based carryover effects. Both studies were conducted by telephone and focused on social issues. Prior items and target questions were manipulated. In seven of ten comparisons, groups who had answered different context questions varied greatly in their target responses. A scaling study also was undertaken to more directly examine attitude structure. Open-ended interviews concerning respondents’ attitudes about abortion and welfare were administered. The scaling studies reveal “a general evaluative (or pro-con) dimension, apparent in both the sorting and agreement data...the sorting data indicate that beliefs about abortion and welfare are organized around distinct topical clusters” (p. 43). A reaction-time study is reported. There are 540 cumulated references on pages 325-53.

117. Tourangeau, Roger, Kenneth A. Rasinski, and Norman Bradburn. “Measuring Happiness in Surveys: A Test of the Subtraction Hypothesis.” *Public Opinion Quarterly* 55, no. 2 (Summer 1991): 255-66.

The results of prior studies indicate that reported levels of overall happiness can change when a general question about happiness follows one about marital happiness, sometimes reducing the reported levels of overall happiness. This reduction can result from a change in interpretation of the general happiness item. In this scenario respondents “subtract” their (mostly happy) marriages when replying to the general item. For the present study the authors tested this “subtraction” hypothesis by asking versions of the general happiness item that correspond to the different interpretations. For the initial interview, ten experienced interviewers contacted 1,481 Chicago households by telephone, eventually obtaining 599 completed interviews. Three weeks later these interviewers reinterviewed, by telephone, 499 of the original respondents. Respondents were randomly assigned to one of four experimental groups. The first two groups received the standard wording of the general happiness item, one of which varied the context. The remaining two groups received variant wordings for the general happiness item. All groups received the standard wording of the marital happiness item. The revised question that asked respondents about their general level of happiness “aside from your marriage” produced responses quite similar to the responses given to the standard general happiness item when it followed the item on marital happiness. Responses to the revised item that asked respondents about their lives “including your marriage” were quite similar to responses produced by the standard item when it preceded the marital happiness question. The correlations for the two revised groups were

found to closely parallel those for the two standard wording groups. The authors conclude that their research “casts doubt” on the subtraction hypothesis as an explanation for the contrast effects involving the happiness items. (20 references)

Filter

118. McClendon, McKee J., and Duane F. Alwin. “No-Opinion Filters and Attitude Measurement Reliability.” *Sociological Methods & Research* 21, no. 4 (May 1993): 438-64.

Two perspectives on the use of no-opinion filters are explored: the *random-response hypothesis* and the *generalized-response hypothesis*. The first (the conventional view) maintains that respondents’ nonattitudes are due to random variance, with reliability improving with the addition of no-opinion filter questions (that is, questions used to remove responses not based on true opinion). With the generalized-response hypothesis “floaters can have global opinions on an issue, but these are not based on much specific expertise” (p. 442). The term “floaters” refers to a category of respondents who express an opinion on the standard form of a question but who would select the “don’t know” (DK) option if offered the filtered form. McClendon and Alwin investigate whether reliability is greater for filtered questions. The data analyzed were collected as part of the 1984 and 1986 Akron Area Surveys, a random-digit-dialed telephone survey yielding, in total, 1,558 partially or fully completed interviews. Questionnaire items were taken from Srole’s Anomia Scale, Rosenberg’s self-esteem scale, and a scale of attitudes toward lawyers. Respondents were randomly assigned to either a standard or a filtered version of the agree-disagree or forced-choice question formats. The authors found that the filtered form caused an increase in the percentage of no-opinion responses for each question in each of the three sets of questions. DK responses were highest for the lawyer-related questions and lowest for the self-esteem questions on both the standard and filtered versions. Although no support was found for the random-response hypothesis, some support was evident for the generalized response hypothesis. (4 endnotes, 22 references)

119. Sterngold, Arthur, Rex H. Warland, and Robert O. Herrmann. “Do Surveys Overstate Public Concerns?” *Public Opinion Quarterly* 58, no. 2 (Summer 1994): 255-63.

The wording of some questions may suggest that they are based on presuppositions “that are not necessarily implied by the linguistic structure of the items themselves” (p. 256). The authors use the question, “How concerned are you about...?” to highlight the possibility that some respondents are given the impression that the question assumes they are concerned, or perhaps should be concerned, about a particular issue. This type of question presupposes interest on the part of some respondents, some of whom may “accommodate” this expectation by overstating their actual concerns. To test the hypothesis that more

“not concerned” responses would result if respondents could choose that option first, rather than the degree-of-concern question, a filter question was devised. A split-ballot experiment was embedded in a 1991 national random-digit-dialed telephone survey concerning dairy product consumption, and other food-related attitudes and behaviors. The telephone interviews resulted in 1,206 completions, yielding a response rate of 43.3 percent. During the interviews, four items were asked of four experimental groups: no filter, and three filter groups in which three differently worded questions had been included. For all four issues the addition of the “not concerned” filtered options approximately doubled the percentages of these responses. Further, filters were found to strongly affect the distribution of answers between the “not concerned” and “a little concerned” categories. The authors observe that while filter questions may reduce respondents’ overstatement of their concerns, their repeated use is a rather time-consuming approach which may encourage respondents to provide answers in order to bypass the follow-up, degree-of-concern questions. Alternatives to the latter challenge are to use filters intermittently during the survey, ask the filter questions for an entire list of items, and then return to those items about which respondents expressed concern and ask the follow-up questions. (4 footnotes, 13 references)

Models

120. Graesser, Arthur C., Richard M. Roberts, and Catherine Hackett-Renner. “Question Answering in the Context of Telephone Surveys, Business Interactions, and Interviews.” *Discourse Processes* 13, no. 3 (July-September 1990): 327-48.

The authors report on the application of QUEST, a cognitively based psychological model developed in the laboratory setting to simulate the answers respondents produce when they answer different types of questions. Although appropriate for closed-class questions, QUEST is especially applicable to open-class formats—those that feature “why,” “how,” “where,” and “consequence” questions. Three different pragmatic environments were used to test the model: (1) a telephone survey of 336 citizens residing in the Memphis, Tennessee, area concerning forty-eight historical or current events (“How did the Titanic sink?”); (2) a business interaction in which twenty-four college students pretending to be customers asked 144 salespeople a question (“How does a person get a credit card?”) and tape-recorded the answers; and (3) twelve hours of face-to-face interviews between the host of a television program or educational film and an expert (The MacNeil/Lehrer Newshour). The results indicate that the QUEST question-answering model could explain the vast majority of responses across the three studies. The authors discuss the answers that were outside the scope of the model, such as counterquestions, directives, requests, expressive evaluations, and other speech acts. (17 references)

121. Graesser, Arthur C., Sailaja Bommareddy, Shane Swamer, and Jonathan M. Golding. "Integrating Questionnaire Design with a Cognitive Computational Model of Human Question Answering." Chap. 7 in *Answering Questions: Methodology for Determining Cognitive and Communicative Processes in Survey Research*, edited by Norbert Schwarz and Seymour Sudman, 143-74. San Francisco, CA: Jossey-Bass Publishers, 1996. 469p.

The development and utilization of QUEST, a computational model of human question answering, is reported. The model, designed by the authors over a fifteen-year period, is based on research from the fields of artificial intelligence and computational linguistics. QUEST is intended to specify the cognitive strategies individuals apply when they respond to questions in different question categories. The primary components of the model are (1) question interpretation—includes the *parsing of questions* [that is, breaking them down into component parts of speech], identifying referents of nouns, interpreting predicates and presuppositions, and identifying question focus and category; (2) access to relevant information sources—includes specific and generic knowledge structures; (3) pragmatics—includes the goals of, and common ground between, questioner and respondent and the "informativeness" of the answer; and (4) convergence to relative answers—includes the intersection of information from multiple sources, search procedures, and constraint satisfaction. Examples of the categories and subcategories illustrate how the model can assist not only in identifying problem questions but also in correcting poorly written items. Two studies are reported that apply QUEST principles to questionnaire design. In the first study the incidence of problem questions on forms and psychological tests was measured; the intent of the second study was to assess whether the revision of problem questions improved response reliability. There are 534 cumulated references on pages 403-41.

122. Graesser, Arthur C., Tina Kennedy, Peter Wiemer-Hastings, and Victor Ottati. "The Use of Computational Cognitive Models to Improve Questions on Surveys and Questionnaires." Chap. 13 in *Cognition and Survey Research*, edited by Monroe G. Sirken, Douglas J. Herrmann, Susan Schechter, Norbert Schwarz, Judith M. Tanur, and Roger Tourangeau, 199-216. Wiley Series in Probability and Statistics, Survey Methodology Section, edited by Robert M. Groves, Graham Kalton, J.N.K. Rao, Norbert Schwarz, and Christopher Skinner. A Wiley-Interscience Publication. New York, NY: John Wiley & Sons, 1999. 395p.

The goals of the research were twofold: to defend the objective of devising a computer aid to assist designers of questionnaires, and to describe a variety of current systems that have the potential to correct some of the problems associated with poorly written questions. One such computational model described is QUEST, a psychological model emanating from the laboratory setting to identify the cognitive strategies used by respondents when answering

different categories of questions. QUEST is discussed in terms of its development and major components, noting the differences in depth of analysis of questions (nineteen items are used) as compared to that of an expert in questionnaire design. Some other recent models not yet implemented for survey question design are reviewed. These include lexicons; *syntactic parsers* (that is, techniques which “translate a surface string of words into a structured meaning representation”); working memory management (such as the CAPS/READER model); and *latent semantic analysis* (that is, a statistical representation of a large body of world knowledge). The authors note that even a less-than-perfect computer aid can be useful for questionnaire design. (47 references)

Pretesting

123. Fowler, Floyd Jackson, Jr., and Charles F. Cannell. “Using Behavioral Coding to Identify Cognitive Problems with Survey Questions.” Chap. 2 in *Answering Questions: Methodology for Determining Cognitive and Communicative Processes in Survey Research*, edited by Norbert Schwarz and Seymour Sudman, 15-36. San Francisco, CA: Jossey-Bass Publishers, 1996. 469p.

Survey researchers currently use three procedures to assist in the design and evaluation of questions: focus groups, cognitive interviews, and field pretests. The authors investigate the use of systematic coding of interviewer and respondent behavior for (1) identifying problem questions in field pretests; (2) replicating survey conditions; (3) evaluating questionnaire items; and (4) determining the cognitive problems involved. Fowler and Cannell review the history and development of the method, citing examples of predecessors dating to 1904. In the 1940s and 1950s, the coding of behaviors became more frequent and systematic. Behavioral coding applications to survey research evolved in the early 1960s, when its first practical use was to monitor interviewer behavior. Initially, interviewer performance was thought to be the culprit in poor survey results, but more careful analysis indicated shortcomings in the survey questions. Eight pages of existing pretesting methods and coding schemes are provided, concluding with five generalizations that highlight the potential of behavioral coding to serve as a basis for question wording principles. The roles of the tape recorder, coders, and automatic coding are examined. Behavioral coding is appropriate for both face-to-face and telephone interviewing. The authors outline a protocol for the technique and comment on its relationship to other question evaluation methods. Behavioral coding offers the potential for improving question design and for measuring the contribution of the data collection process to total survey error. However, the method requires further refinement, as evidence suggests that many survey questions are “seriously underevaluated.” There are 534 cumulated references on pages 403-41.

124. Hubbard, Michael L. "Laboratory Experiments Testing New Questioning Strategies." Chap. 3 in *Survey Measurement of Drug Use: Methodological Studies*, edited by Charles F. Turner, Judith T. Lessler, and Joseph C. Gfroerer, 53-81. DHHS Publication no. (ADM) 92-1929. Washington, DC: Department of Health and Human Services, Public Health Service, Alcohol, Drug Abuse, and Mental Health Administration, 1992. 413p. [SuDocHE20.8002:S7/2]

Two laboratory experiments were conducted to test methods for improving questionnaire items found in the National Household Survey on Drug Abuse (NHSDA), with the goal of helping respondents to more accurately recall and report their use of drugs. The intent of the first experiment was to better define *reference periods* (that is, time periods) by providing concrete anchor events to assist recollection. The respondents were 143 adults from the Raleigh-Durham-Chapel Hill area of North Carolina. Few "definitive" results were produced. In the second experiment Hubbard sought to improve the manipulation of reference period anchoring and to clarify the terms used in the NHSDA to define different types of drugs. The respondents, recruited by means of newspaper ads offering a \$25 incentive for participation, were assigned to one of eight experimental conditions. The results of the second experiment indicate that the number of changes in answers between the self-administered questions and the interviewer-administered in-depth interviews was minimal. Although interviewers were usually successful at anchoring respondents, the effect was not particularly strong. Enhanced definitions of drug terms and the presentation of Pillcards [that is, cards with colored pictures of pills to assist respondents in identifying their medications] had little impact on response errors. (7 footnotes, 10 references)

Wording

125. Abramson, Paul R. "The Decline of Over-Time Comparability in the National Election Studies." *Public Opinion Quarterly* 54, no. 2 (Summer 1990): 177-90.

The National Election Studies (NES), conducted by the Survey Research Center and the Center for Political Studies (CPS) at the University of Michigan, is described as "the best data set for studying the political attitudes and behavior of the American electorate" (p. 177). The results of thirteen NES surveys are cumulated in the *American National Election Studies Data Sourcebook, 1952-1978*, compiled by Warren E. Miller, Arthur H. Miller, and Edward J. Schneider [Cambridge, MA: Harvard University Press, 1980. 388p.]. Abramson used the *Sourcebook* as a baseline to assess change over time in NES surveys. In addition, data provided by the Inter-University Consortium for Political and Social Research and the CPS were analyzed (five surveys conducted from 1980 to 1988). In analyzing *Sourcebook* items, the author comments on the effect of question wording changes on comparability. Abramson believes there has been more change than continuity,

as well as a surprising decline during the 1980s of items that can be compared—especially those in the areas of public policy preferences and political attitudes. The article concludes with five recommendations concerning the trade-offs between retaining continuity or introducing new items in NES surveys: (1) a committee should be established to monitor over-time comparability; (2) split-half question designs should be utilized to a greater degree; (3) a set of core items should be designated for future surveys; (4) some discontinued items should be reintroduced to provide historical comparison; and (5) future research based on newly introduced items should examine both theoretical and methodological issues. Warren E. Miller responds to this article on pp. 191-94 of *POQ*. (11 footnotes, 9 references)

126. Adamek, Raymond J. "Abortion Perspectives and Pollsters' Questions." *Sociological Focus* 31, no. 3 (August 1998): 303-12.

Adamek observes that although the major pollsters in this country strive for balanced and comprehensive coverage of controversial issues, their efforts can be undermined "if the views of proponents of one side of the controversy tend to predominate" (p. 303) in society. In such an environment, this element will define what issues are controversial, with pollsters' questions tending to reflect the dominant perspective (for example, the pro-choice position). With minority views then missing or underrepresented, resulting data are incomplete or faulty. To support this position, a content analysis was made of 1,225 abortion questions which appeared in 312 polls conducted by thirteen major pollsters during the eight-year period from 1986 through 1993. The results suggest that when assessing public opinion about abortion issues, when describing legal and empirical realities of the abortion issue, and when seeking the public's reaction to abortion politics and policy, pollsters tend to reflect societies' dominant pro-choice position—a position which emphasizes the legality of abortion in the first trimester for physical reasons and presents abortion as a medical decision made between the woman and her physician. The author states that most of the questions asked by pollsters do not reflect the facts that abortion is legal beyond the first trimester; that over 90 percent of abortions are performed primarily for social reasons; and that the vast majority of women do not involve a physician in the decision-making process. (4 endnotes, 26 references)

127. Adamek, Raymond J. "Public Opinion and *Roe v. Wade*: Measurement Difficulties." *Public Opinion Quarterly* 58, no. 3 (Fall 1994): 409-18.

In addition to the usual challenges inherent in measuring public opinion on complex topics having moral and religious overtones, sociolegal issues that evolve over time, and analyzing opinion trends about these issues, are "fraught with difficulty." Adamek believes that, as events unfold over time, the originally asked questions that yielded accurate data may become less adequate by changing circumstances. This is particularly true if court decisions, laws, or policy decisions are involved—elements that could not be anticipated when the question was initially framed. The issue for longitudinal research and trend analysis is whether to

retain the original questions for comparability purposes, or to change them to increase validity. This quandary is discussed in the context of polls on the *Roe v. Wade* abortion decision and *Doe v. Bolton*, its companion case, both of 1973. In *Roe v. Wade*, the U.S. Supreme Court divided the term of pregnancy into three trimesters, ruling that abortion may not be prohibited prior to viability, that is, within the first six to seven months. *Doe v. Bolton* deals with definitions of health of the mother. Adamek analyzed questions from several polling organizations—Harris, Gallup, Roper, the National Opinion Research Center, Public Opinion Strategies, and others—to highlight the difficulties of framing items based on a seventy-five-page Court decision. The author focuses on the wording variations pollsters use in attempting to incorporate Court-imposed timing variables (the first trimester, and so forth) in a way that can be comprehended by the average respondent. The dangers of relying on single-item measures of opinion are addressed. (7 footnotes, 32 references)

128. Atanda, Robert Tunde. "Race Categories: Its Place on Surveys and Questionnaires." Ph.D. diss., University of Virginia, 1996. 124 leaves. [*Dissertation Abstracts International* Order No. DA9708561; *DAI* 57A, no. 10 (April 1997): 4562.]

Reviewed are the options available for race categories for surveys and questionnaires. Atanda seeks to explain why race categories have become controversial and to raise points that should be considered before such categories are used in survey research. Directive No. 15 of the Office of Management and Budget provides four race groups: "Black"; "White"; "Asian and Pacific Islander"; "American Indian and Alaska Native"; and "Hispanic" as the "lone ethnic group." The major criticism of these categories is that there is no place for people of mixed heritage. The term *multiracial* is a proposed alternative. A multiracial person is defined as one "whose biological parents are not of the same race." The author notes that while the phrase "African American" has become "more politically appropriate" than the term "black," some members of the "black community" reject the phrase. The history of race categories as implemented by the Census Bureau is reviewed, along with implications and applications of the data. Atanda, using "naturalistic" inquiry, interviewed six individuals who are major figures in the race category area. The conclusions reached concern the consequences of the multiracial category, the steps which would be taken in changing the categories (public comment, committee and research activity), and the substantial disagreements about the categories. Extensive pilot testing is recommended to ensure that the race categories selected are valid for the particular population being studied. An appendix provides a copy of the consent form. (25 references)

129. Catania, Joseph A., Diane Binson, John Peterson, and Jesse Canchola. "The Effects of Question Wording, Interviewer Gender, and Control on Item Response by African American Respondents." In *Researching Sexual Behavior: Methodological Issues*, edited by John Bancroft, 110-

13. The Kinsey Institute Series, vol. 5, edited by John Bancroft. Bloomington, [IN]: Indiana University Press, 1997. 461p.

The analysis is based on data from the National AIDS Behavioral Methodology Surveys which consist of two distinct telephone surveys: the general population survey of 2,000-plus respondents between 18 and 49 years of age, and the African-American survey of approximately 1,300 respondents in the same age group. The survey questions concerned a variety of sensitive sexual topics, such as condom use, age at first intercourse, and sexual orientation. With the goals of increasing response rates and eliciting more honest disclosure, several methods were tested: respondents were permitted to select the gender of their interviewer in order to feel more in control and relaxed in the research environment, item context was manipulated to provide respondents with additional emotional support, and enhanced or supportive items were included in the survey instrument. The purpose of the last technique is to give respondents a sense that there is more than one acceptable answer to a question. The authors found almost no differences related to ethnicity. Overall, the largest number of significant effects were due to the enhanced item or to interviewer gender. Allowing respondents more control was important for some of the highly sensitive sexual topics such as rape, sexual dysfunction, and extramarital sex. (1 reference)

130. Fillmore, Charles J. "A Linguistic Look at Survey Research." Chap. 12 in *Cognition and Survey Research*, edited by Monroe G. Sirken, Douglas J. Herrmann, Susan Schechter, Norbert Schwarz, Judith M. Tanur, and Roger Tourangeau, 183-98. Wiley Series in Probability and Statistics, Survey Methodology Section, edited by Robert M. Groves, Graham Kalton, J.N.K. Rao, Norbert Schwarz, and Christopher Skinner. A Wiley-Interscience Publication. New York, NY: John Wiley & Sons, 1999. 395p.

Fillmore, a linguist and an attendee at the Second Advanced Research Seminar on the Cognitive Aspects of Survey Methodology (CASM II), provides insights into the comprehension problems faced by survey respondents. He questions the reliability of survey results when respondents fail to understand what is being asked. To illustrate the prevalence of unclear, contradictory, and ambiguous questions, the author examines the language and context of twenty-one questions from two sources: the General Social Survey conducted by the National Opinion Research Center and a draft form of the National Health Interview Survey. The examples cited identify a wide range of problems which fall into four general categories: (1) vague or ambiguous wording and poor grammatical construction; (2) contexts which create confusion between the ordinary meanings of words and assumptions about the purpose of the survey encounter; (3) conflicts between ordinary meanings of words and the surrounding text; and (4) contextual or linguistic presuppositions "which respondents cannot always escape." Fillmore maintains that designers of survey questions should be sensitive to linguistic issues before turning to cognitive interviewing techniques. (5 footnotes, 14 references)

131. Fowler, Floyd Jackson, Jr. "How Unclear Terms Affect Survey Data." *Public Opinion Quarterly* 56, no. 2 (Summer 1992): 218-31.

Although it is taken for granted that clearly written questions should be the intent of well-conducted surveys, Fowler believes that, in practice, this goal is difficult to achieve. For example, pretests can be subjective and unsystematic even though survey researchers commonly use this methodology for question evaluation. Further, ambiguous and unclear terms are frequently encountered, potentially affecting the quality of the data produced. In an effort to develop better pretesting methods for identifying problem terminology, a study was undertaken using a sixty-item questionnaire based on health survey instruments from a variety of government agencies and academic health organizations. The study participants were drawn from telephone subscribers in southeastern Michigan. In total, 110 pretest interviews were conducted and tape-recorded, and the results coded. Seven of the sixty questions appeared to be problematic primarily because a key term or concept was poorly defined. After the addition of clarifying words, the revised items were asked in a second round of pretesting with 150 respondents. Significantly different estimates were produced between the original and the revised interview schedules. For at least six of the seven questions "there was a clear a priori reason for predicting that the observed change reflected improved measurement" (p. 225). Respondents made fewer requests for question clarification, and the number of inadequate answers declined with the revised items. However, one of the revised questions generated more inadequate answers than its original counterpart. The author concludes that unclear terminology is likely to produce biased survey estimates, and that systematic error can be reduced if survey researchers identify and adjust ambiguous and unclear words and phrases when pretesting survey questions. (20 references)

132. Geer, John G. "Do Open-Ended Questions Measure 'Salient' Issues?" *Public Opinion Quarterly* 55, no. 3 (Fall 1991): 360-70.

The relative merits of closed- versus open-ended questions are briefly reviewed. Geer focuses on the ability of the latter type to measure public opinion—specifically whether responses to open-ended questions tap salient or superficial concerns of respondents. A group of 106 undergraduate students in a statistics class participated in the study. Three articles, two about George Bush and one which had nothing to do with Bush, were used in a detailed experimental design manipulated by the researcher. One of the articles was embedded with salient issues, the second with nonsalient issues, and a third was presented for control purposes. Other parts of the survey contained closed-ended items about state politics and open-ended items about the president. Geer found that the students exposed to the embedded salient issues made more comments about the topic than either of the other two groups. The students exposed to the nonsalient information made almost no comments about any of the ten issues. The author concludes that the open-ended questions did indeed measure the important concerns of the respondents. Further, the nonsalient information provided had little effect on the

responses. The answers to both formats were “susceptible” to the addition of recent information. Geer believes the results bring into question critics’ claims that the open-ended format reflects only superficial concerns, and suggests that pollsters ought to utilize this type of question in future surveys of public opinion. An appendix reprints the articles presented to the students. (8 footnotes, 13 references)

133. Groves, Robert M., Nancy H. Fultz, and Elizabeth Martin. “Direct Questioning about Comprehension in a Survey Setting.” Chap. 3 in *Questions about Questions: Inquiries into the Cognitive Bases of Surveys*, edited by Judith M. Tanur, 49-61. New York, NY: Russell Sage Foundation, 1992. 306p.

Respondents’ interpretation of questions and researchers’ intended meanings frequently do not correspond. In this study the authors examine the use of follow-up questions to probe the perceived intent of a question (in this case, respondents’ health status). Respondents were asked to describe the meanings they attributed to words in the question and how they arrived at their answers. The data analyzed were collected as part of a pretest for the 1986 General Social Survey. Approximately one hundred pretest interviews were conducted by field interviewers from the National Opinion Research Center. At the end of the interview, a series of open and closed questions asked respondents their thoughts when they answered the health-status question. Among the findings are the following: (1) respondents were found to perceive the intent of the health-status question in different ways; (2) responses to open and closed questions provided different kinds of information about how well the question was understood; (3) males rated their health status higher than females, a finding consistent with prior research; (4) most respondents were able to provide useful information to a follow-up open question on meaning; (5) the closed-question format failed to capture the same dimensions of meaning; (6) responses on meaning were related to respondents’ health-status ratings; and (7) the gender difference reflected in the findings disappeared among respondents who considered the distant past. (11 references)

134. Kinder, Donald R., and Lynn M. Sanders. “Mimicking Political Debate with Survey Questions: The Case of White Opinion on Affirmative Action for Blacks.” *Social Cognition* 8, no. 1 (Spring 1990): 73-103.

In contrast to the traditional psychological perspective that attitudes are “fixed, well-defined, internal predispositions,” Kinder and Sanders believe that public opinion is not permanent and unvarying; that beliefs do not “stand in permanent readiness, informing opinions that may readily be reported to survey investigators” (p. 99); and that the nature of opinion is conditioned in many ways by how an issue is framed. The authors claim that elites (that is, those who hold and wield real power in society—such as public officials, editors and journalists, and newsmakers) can alter question wording, thereby influencing citizens’ understanding of a public issue and, ultimately, “what opinion turns out to be.” Evidence is

presented in support of this claim by including alternative versions of an affirmative action question in the 1985 National Election Pilot Study, a survey carried out to test new instrumentation for future national election studies. A subsample of 380 respondents to the 1984 National Election Study was interviewed by telephone in December 1985 and reinterviewed three weeks later. Respondents were asked to think about affirmative action either as unfair advantage or as reverse discrimination. If the question was framed as the former, white respondents produced opinions that were more consistent with their views on other racial issues as well as with their overall political views. In addition, respondents' opinions were more closely associated with their views on policies implicating race, more closely linked to negative emotions, and more closely associated with prejudice and misgivings over equal opportunity. When participants were encouraged to think of affirmative action as reverse discrimination, their responses were comparatively free of the "stain of racial prejudice." (13 endnotes, 48 references)

135. Loftus, Elizabeth F., Mark R. Klinger, Kyle D. Smith, and Judith Fiedler. "A Tale of Two Questions: Benefits of Asking More Than One Question." *Public Opinion Quarterly* 54, no. 3 (Fall 1990): 330-45.

The authors review the types of errors that respondents make when attempting to remember a specific occurrence. These mistakes include forgetting, *backward telescoping* (the recalling of an event as having occurred further in the past than was actually the case), and *forward telescoping* (the recalling of an event as having occurred more frequently than was actually the case). Researchers currently use several techniques to reduce forward telescoping: *bounded interviews*, *bounded recall*, and the *two-time frame question*, in which a question is asked first about a happening in the past six months and then in the past two months. The findings of Crespi and Swinehart's 1982 study [a conference paper] indicate that in the two-time frame procedure respondents reported fewer activities within a two-month period if first asked about their activities within a six-month reference [that is, time] period. In the present research the authors investigate both the accuracy and the completeness of the two-time frame procedure and why underreporting occurs with the presentation of two time frames. Several experiments were conducted which utilized the membership rolls of a large health-maintenance organization. The final sample consisted of 739 members randomly drawn within stratified geographical regions. All were interviewed by telephone with three different versions of the questionnaire of approximately fifty items. Of the total, 94 percent granted permission for the authors to access their medical records. Medical information could be verified for 660 of the study participants. Accuracy of reporting was determined by comparing patients' recollections with data from their medical records. The findings indicate that overreporting occurred when respondents were asked about a specific procedure in the recent past, but there was a modest reduction in the number of those who reported an event over a two-month reference period when first asked about a six-month period. Respondents were given a date that indicated the beginning of the reference period. Consistent overreporting was found for all procedures with the single-

time frame condition, with the overreporting being more extensive over the six-month reference period. The authors view the data as supporting a "precision" hypothesis in that the two-time frame questioning procedure seems to convey to the respondent that the interviewer desires a greater degree of precision in the dating of events than implied with the single-time frame question. (2 footnotes, 13 references)

136. Schaeffer, Nora Cate. "Hardly Ever or Constantly? Group Comparisons Using Vague Quantifiers." *Public Opinion Quarterly* 55, no. 3 (Fall 1991): 395-423.

The meaning of the phrase *vague quantifiers* (or *vague intensifiers*) is briefly explained. Vague quantifiers include such phrases as "very often," "pretty often," or "very much," that express frequency as relative, rather than absolute. Schaeffer examines whether respondents' selection of either relative or absolute frequencies affects comparisons by several variables: race, education, and age, as well as the meaning of relative-frequency and relative-intensity phrases for the above-mentioned categories. Data were provided from an experiment conducted by the National Opinion Research Center. In 1975, face-to-face interviews were administered to 1,172 respondents selected in a national probability sample with quotas. The following results were found for the group comparisons for the items of excitement and boredom: (1) there were no significant race differences in the relative frequency of excitement; (2) with absolute frequencies, however, excitement appeared to be more frequent for whites than African Americans; (3) the relative frequency of boredom was significantly greater for African Americans than whites; (4) absolute frequencies for boredom revealed no group differences; (5) no significant gender differences were found for either excitement or boredom with either type of response; (6) better-educated respondents felt excited more often on both relative and absolute frequencies; (7) for the frequency of boredom measure, all education groups were about the same; and (8) both the relative and absolute frequencies indicate that younger respondents were excited and bored significantly more often than their older counterparts. In the second portion of the study, the author examined between-group differences in the meaning of relative frequencies. The data reveal significant differences by race, education, and age in the meaning of phrases conveying relative frequency. Such phrases represented higher absolute frequencies for white, younger, and better-educated respondents. Schaeffer concludes by discussing several ways in which respondents' reports can be conceptualized, the errors that may affect data, the problems associated with secondary analysis, and the merits of using relative versus absolute frequencies for specific purposes. (14 footnotes, 53 references)

137. Smith, Eric R.A.N., and Perverill Squire. "The Effects of Prestige Names in Question Wording." *Public Opinion Quarterly* 54, no. 1 (Spring 1990): 97-116.

Smith and Squire assess the impact of using prestige names, that is, the addition of names of prominent people or organizations for the purpose of providing an element of importance to survey questions (for example, identifying Contra aid as “President’s Reagan’s policy”) unless, of course, the questions concern those persons or organizations. The authors observe that the addition of prestige names generally should be avoided, and that research findings about the effects of including such information are somewhat contradictory. For the present investigation, two sets of experiments were analyzed. Both were conducted by the 1992 California Poll to determine the effects, if any, of prestige names, who might be affected, how they are affected, and what information is contained in them. The first experiment, conducted with 810 respondents, involved a question on state supreme court confirmation elections. The name of the incumbent governor (Democrat Jerry Brown) or that of the former governor (Republican Ronald Reagan) was added to one of the questions. The results indicate that (1) the inclusion of a prestige name sharply reduced the number of respondents who had no opinion; (2) the largest increases occurred among those who said the justices should be removed from office; and (3) the additional information reduced the education coefficients to “substantive and statistical insignificance.” The second experiment, conducted with 1,217 respondents, concerned an initiative (Proposition 7) that would require state personal income taxes to be indexed for inflation. Similar results were produced as in the first experiment. The authors conclude that prestige names not only shift responses in one direction, but they also eliminate the effect of education on “don’t know” responses. The addition of prestige names “adds a partisan component to the questions, but that the partisan component seems to be greatest when respondents know the least” (p. 113). An appendix lists the coding of variables. (7 footnotes, 26 references)

138. Smith, Tom W. “Changing Racial Labels from ‘Colored’ to ‘Negro’ to ‘Black’ to ‘African American.’ ” *Public Opinion Quarterly* 56, no. 4 (Winter 1992): 496-514.

The application of labels for defining certain groups and members of those groups has been widespread for many years. Labels have been used for racial and ethnic groups in general, and for African Americans in particular. (The designation “Blacks” is used in the article as the standard racial reference term.) Smith traces the development of the terminology that African Americans in the United States have adopted as the race strived to find an appropriate label to define themselves as a people—a label that “instilled group pride and self-esteem.” The author points out that such terms as “colored,” “Negro,” “black,” and “African” were established English designations for this race when America was first settled. The use of the term “African American” can be traced to the late 1700s. Thus, the various applications of the terms represent the shift in the degree of acceptance of the different labels, rather than the creation of new ones. The word “colored” was the most widely accepted nomenclature in the mid- to late-nineteenth century, although some viewed it as too inclusive, covering Asians and nonwhites as well. Toward the end of the century, however, preference

gradually shifted to “Negro,” a Spanish and Portuguese word for the color black. The adoption of this term was led by Booker T. Washington and W.E.B DuBois, influential African-American leaders of the time. This designation was seen as grammatically more specific, versatile, “stronger,” and representative of “a new way of thinking about Blacks.” By the 1930s, “Negro” was the well-established and preferred term, widely accepted by African-American organizations and the media. The change from “Negro” to “black” took place in the late 1950s and early 1960s, with the latter word representing “racial pride, militancy, power, and rejection of the status quo.” Although the label was favored initially by radical, militant, younger, and more progressive African-Americans, by the mid 1970s it had gained general acceptance as a natural balance for white. The term was perceived as one that “had helped to instill and maintain a sense of group consciousness, racial pride, and a hope for racial justice” (p. 503). The suggestion to substitute “African American” for “black” was initiated at a 1988 meeting of the National Urban Coalition, and endorsed by Jesse Jackson. “African American” was promoted to provide the race with “a cultural identification with their heritage and ancestral homeland.” The shift emphasized African Americans as an ethnic group rather than as a race. Despite objections, the term has become widely accepted by many African-American leaders, organizations, the news media, and among the general African-American population. Smith believes that it remains to be seen if “African American” will become the predominate term. The implications of the changing nomenclature for survey research are addressed. Two tables display the rates of preferred racial term by year for associations, and for African Americans among African Americans. Table 3 provides a breakdown of the use of racial terms by year in American surveys. (12 footnotes, 37 references)

139. Tucker, Clyde, Ruth McKay, Brian Kojetin, Roderick Harrison, Manuel de la Puente, Linda Stinson, and Ed Robison. *Testing Methods of Collecting Racial and Ethnic Information: Results of the Current Population Survey Supplement on Race and Ethnicity*. BLS Statistical Notes, no. 40. Washington, DC: [U.S.] Bureau of Labor Statistics, June 1996. 149p.

The document deals with the categories found in the Current Population Survey (CPS) Supplement on Race and Ethnicity, including a presentation of statistical design, an analysis of the questions by panel, an analysis of race and Hispanic origin by panel, and race and Hispanic origin by demographic characteristics. In 1977, the Office of Management and Budget issued the “Race and Ethnic Standards for Federal Statistics and Administrative Report,” a part of Statistical Policy Directive No. 15. Four racial categories are found in the report: “American Indian or Alaskan Native”; “Asian or Pacific Islander”; “Black”; and “White.” The ethnic categories are “Hispanic” and “Not of Hispanic origin.” The CPS, conducted monthly, samples approximately 60,000 households. Respondents are interviewed for four consecutive months, off for eight months, then interviewed again for four consecutive months. Administration is by

interviewers, primarily by telephone. The CPS supplement sought to (1) investigate the effect of using a multiracial category; (2) determine the impact of adding “Hispanic” to the list of racial categories; and (3) assess the effect of offering alternative names for racial and ethnic categories (such as “African American” for “Black,” and “Latino” for “Hispanic”). The findings indicate that more individuals identified themselves as Hispanic when asked a separate question than when “Hispanic” was included as a racial category. Providing the option “multiracial” changed the proportion of American Indian or Aleut. A substantial majority of respondents identifying as Hispanic preferred the term as a racial category. A plurality of African Americans preferred “Black,” although almost as many selected “African American” or “Afro-American.” Nearly half identifying as American Indian preferred “American Indian” or “Alaska Native,” but one-third chose “Native American.” The report writers observe that “for many Americans, race, ethnic group, and ancestry are overlapping concepts,” with the multiracial option being a “discretionary” choice. Appendix A lists the race and ethnicity supplement questions, and race and ethnicity questions from the CPS. (21 references)

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Sampling

GENERAL

140. Bailer, Barbara A. "Does Sampling Work?" *Business Economics* 32, no. 1 (January 1997): 47-53.

The history, characteristics, and advantages and disadvantages of sampling are briefly reviewed. The beginning of scientific sampling theory in the United States is traced to the late 1930s and early 1940s with the work of Morris Hanson and William Hurwitz, statisticians at the Bureau of the Census. Bailer observes that most large government surveys are based on probability samples, an environment in which "each unit of the population has a known nonzero probability of being in the sample before the sample is selected" (p. 47). The author discusses the many decisions that must be addressed in selecting a sample, emphasizing issues of quality control. Although there are a number of differences between household surveys and business surveys, the basic principles of sampling remain the same. The Monthly Retail Trade Survey serves as an example of a survey that has improved since inception in terms of meeting user needs, reducing variability and costs, and simplifying procedures. Sampling issues in the decennial census are discussed, with the author noting the bureau's long history of creative uses of the methodology to reduce expenses and attain higher quality. Although sampling error is a major concern in sample surveys (one arising when only a part of the population is interviewed rather than the whole, as in a census), Bailer maintains that many opportunities for error exist in censuses as well. Two significant problems are the length of time required to gather the data and the escalating costs involved in doing so (\$2.6 billion in 1990 and an estimated \$4 billion for the 2000 census). Possible cost-saving sampling applications to census-taking are suggested. (4 references)

141. Gelman, Andrew, and Thomas C. Little. "Improving on Probability Weighting for Household Size." *Public Opinion Quarterly* 62, no. 3 (Fall 1998): 398-404.

Two weighting procedures, *inverse-probability* and *poststratification*, are described. The former technique is employed to correct for unequal selection probabilities, while the second is used to make adjustments for known or expected discrepancies between the sample and the population. To determine how nonresponse rates vary by household size, Gelman and Little compared responses from several national polls to Census Bureau figures. Sources of nonresponse are nonavailability (when no one answers the telephone or receives the message on the answering machine), and refusal to participate. It was hypothesized that, in larger households, someone is more likely to be home to answer the telephone. The data analyzed came from polls conducted during the months prior to the 1988 presidential election by CBS News (which uses weights proportional to household size) and the *New York Times*. The census figures are from the 1990 Public Use Micro Survey. Also examined were face-to-face interviews from the National Election Study (NES). The weighted CBS surveys overrepresented the number of adults who live in large households, while the NES samples were very close to the census proportions for individuals. Poststratification is recommended as it automatically corrects the biases due to nonavailability/nonresponse and adjusts survey data to correspond to census figures. (96 references)

142. Laumann, Edward O., and L. Philip Schumm. "Measuring Social Networks Using Samples: Is Network Analysis Relevant to Survey Research?" In *Researching Sexual Behavior: Methodological Issues*, edited by John Bancroft, 390-416. The Kinsey Institute Series, vol. 5, edited by John Bancroft. Bloomington, [IN]: Indiana University Press, 1997. 461p.

The authors seek to answer the question as to whether the study of social networks can inform "substantive" questions that survey research is attempting to address. A second question posed is whether it is possible with present technical methods to use samples to study such networks. One of the challenges to the field has been the focus of survey researchers on individual-level characteristics of respondents, with much of the work in the area of network analysis development being in "opposition" to survey research. It is suggested that the way to address this problem is to have the researcher "theorize about how group-level network structures affect the probable interactional processes in which the individual is located" (p. 396). Laumann and Schumm observe that further improvements in sampling methodology will enable large populations to be studied in terms of their social networks. The difficulties in identifying socially relevant subgroups is discussed. Successful cases of measuring social networks based on samples of respondents are presented. The authors speak of the need for a "network mode of reasoning" as a requirement for successful network analysis by survey researchers. (110 references)

ERROR

143. Eisenberg, Bennett. "What is the Margin of Error of a Poll?" *College Mathematics Journal* 28, no. 3 (May 1997): 201-3.

Certain caveats need to be in place before error margin can be calculated. First, the sample must be representative of the target population under consideration. Second, there is an assumption that poll respondents provide honest answers. The discussion centers on the issue of whether a poll with a margin of error of ± 2 can nevertheless produce results with a 10-point difference between two political candidates. Eisenberg demonstrates mathematically that this can occur, and that it is not a rare phenomenon. Examples from the 1996 presidential race (Clinton/Dole) illustrate the main points. The presentation is intended for use by undergraduate students.

144. Green, Donald P., Alan S. Gerber, and Suzanna L. De Boef. "Tracking Opinion Over Time: A Method for Reducing Sampling Error." *Public Opinion Quarterly* 63, no. 2 (Summer 1999): 178-92.

The method under investigation is the Kalman algorithm, a statistical model with a wide range of applications, most notably in the engineering field. The technique, also referred to as Kalman "smoothing," is used by survey researchers to distinguish genuine movements from random movements produced by sampling error. The algorithm provides a systematic method for assigning weights to a sequence of poll results, taking into account not only such factors as sample size, but also the amount of time that has elapsed between polls. The authors review the technical aspects of the technique and demonstrate its applicability for analyzing public opinion with small samples and Web-based statistical software. The advantages of the procedure are that it (1) assists in differentiating between random samples and true opinion change; (2) provides a means for accumulating information across surveys; (3) allows for missing observations to be interpolated; and (4) improves forecasting accuracy. The procedure is seen to be most effective with large numbers of surveys, each with one hundred or more respondents. Limitations are discussed and empirical examples provided. (7 footnotes, 9 references)

INSTRUCTIONAL MATERIALS

145. Fink, Arlene. *How to Sample in Surveys*. Vol. 6 of *The Survey Kit*, edited by Arlene Fink. Thousand Oaks, CA: Sage Publications, 1995. 73p.

Among the questions addressed in this guide—the sixth in *The Survey Kit* [Item No. 24]—are the following: How does one distinguish between a target population and a sample? Of the available sampling methods, which is the most suitable for a given project? What constitutes an adequate sample? and What is an acceptable

response rate? Utilizing nontechnical language, Fink explains how to select and apply the most appropriate sampling methods when conducting a survey. The two primary designs discussed are probability and nonprobability. Probability sampling, described as providing “a statistical basis for saying that a sample is representative of the study or target population” (p. 9), is divided into simple random, stratified random, systematic, and cluster/multistage. In nonprobability sampling, “samples are chosen based on judgment regarding the characteristics of the target population and the needs of the survey” (p. 9). This category includes convenience, snowball, and quota sampling types, and focus group interviewing. The author discusses sources of error, ways to avoid bias, how to estimate standard error, and how to calculate sample size and response rates. All concepts covered are accompanied by examples, charts, exercises, and checklists. Fifteen suggested readings and a thirty-two-entry glossary are included.

146. Henry, Gary T. *Practical Sampling*. Applied Social Research Methods Series, v. 21, edited by Leonard Bickman and Debra J. Rog. Newbury Park, CA: Sage Publications, 1990. 139p.

The term “practical” was selected as part of the title because the book emphasizes a framework that presents alternatives, and guidance for choosing among them, rather than focusing on the theoretical aspects of the topic. The approach is labeled *practical sample design* and includes theory, logic, and execution. Attention is directed to the range of choices available to the researcher and the consequences of those choices on the outcome of the investigation. Practical sample design seeks to integrate design and execution into the overall research process by utilizing the concept of *total error* for assessing validity, credibility, and precision. The goal is the reduction of overall error. Henry defines and explains the differences between two sample selection approaches—probability and nonprobability. Probability designs include simple random, systematic, stratified, cluster, and multistage. Nonprobability designs include convenience, most similar/dissimilar, typical case, critical case, snowball, and quota. Henry considers sampling frames, techniques, sample size, and postsampling options including the use of weights, the evaluation of nonresponse, and data presentation. Throughout, the main points are illustrated by four case studies: the North Carolina Citizen Survey, the Survey of the Frail Elderly in Florida, the Deinstitutionalized Mentally Ill in Virginia, and the National Household Sample. The guide is appropriate for students taking graduate-level methods courses in the social and policy sciences. (48 references)

147. Henry, Gary T. “Practical Sampling.” Chap. 4 in *Handbook of Applied Social Research Methods*, edited by Leonard Bickman and Debra J. Rog, 101-26. Thousand Oaks, CA: Sage Publications, 1998. 580p.

The chapter is intended to help readers understand the consequences of making trade-offs between cost and accuracy when designing and executing research projects. Although Henry believes that sampling methodology is central to

nearly every applied research study, its use is most critical when conducting descriptive studies involving surveys of specific populations. The two basic types of designs, probability and nonprobability, are discussed, with emphasis on the former. *Total error* is defined as the difference between the true population value for the target population and the estimate based on the sample data. Its components are nonsampling bias, sampling bias, and sampling variability. Henry presents a framework, termed *practical sample design*, that outlines the decisions affecting total error in the presampling, sampling, and postsampling phases of a research project. Although error cannot be eliminated entirely, it can be reduced through careful design. (18 references)

148. Levy, Paul S., and Stanley Lemeshow. *Sampling of Populations: Methods and Applications*. 2^d ed. Wiley Series in Probability and Mathematical Statistics, Applied Probability and Statistics. A Wiley-Interscience Publication. New York, NY: John Wiley & Sons, 1991. 420p.

As with the first edition, *Sampling for Health Professionals* (1980), this volume is directed to the practicing statistician as well as to students taking formal courses in sampling methodology (the authors designate which parts of the book are most appropriate for each type of user). The material has been revised and expanded to include the noteworthy developments in survey methodology which have taken place over the past decade. The second edition contains added sections on regression and ratio estimates in stratified random sampling, a new chapter on variance estimation in complex sample surveys, updated material on imputation, and a chapter on special topics. Levy and Lemeshow cover a wide range of topics: sample survey applications; the components of a population; systematic sampling; stratification; stratified random sampling; ratio estimation; one- and two-stage cluster sampling; and variance estimation. Also covered are nonresponse, missing data, the construction of forms, collecting and interpreting data, and preparing the final report. The special topics considered are sampling in developing countries, quality assurance sampling, screening for rare events or members of rare populations, and how to procure sensitive information. User aids in the form of illustrations, tables, and material displayed in boxes are provided. Many of the examples are health science related, reflecting the authors' firsthand experiences. Most of the chapters have summaries, exercises, and references or bibliographies. An appendix contains a table of random numbers. A separate section provides the answers to selected exercises found in the narrative.

149. Maisel, Richard, and Caroline Hodges Persell. *How Sampling Works*. The Pine Forge Press Series in Research Methods, edited by Richard T. Campbell and Kathleen S. Crittenden. Thousand Oaks, CA: Pine Forge Press, 1996. 243p.

An easy-to-understand, step-by-step approach to the fundamentals of sampling is presented. The textbook is appropriate for undergraduate and graduate students

with limited backgrounds in mathematics and statistics. An introductory chapter provides examples of some typical sampling problems faced by researchers in various disciplines. Students are advised to install an original, user-friendly computer software package called the "Introduction to Sampling Error Experiments." From an empirical standpoint Maisel and Persell examine key concepts such as population parameter; distribution; potential, measurement, and sampling errors; simple random sampling; confidence intervals; and sample-size determination. The book concludes with a collection of summary topics pertinent to several sampling implementation issues: sample selection, the types of frames, frame problems, and methods of random selection. Throughout, the authors emphasize application to practical situations. Appendix A is a guide to installing, loading, searching, and exiting the computer program. Appendix B displays the cards and forms for recording observations, and the results of experiments found in the volume. Appendix C provides answers to exercises. (1 reference)

150. Rosnow, Ralph L., and Robert Rosenthal. "Survey Designs and Subject Recruitment." Chap. 9 in *Beginning Behavioral Research: A Conceptual Primer*, 203-27. 3^d ed. Upper Saddle River, NJ: Prentice Hall, 1999. 475p.

Rosnow and Rosenthal pose ten preview questions and then provide the reader with the answers to the fundamentals of sampling. Key terms are defined and basic designs (including simple random, stratified random, and area probability) are explained. One section deals with techniques for estimating bias due to the problem of nonresponse, noting that survey researchers are finding it increasingly difficult to obtain random samples, as more people close the door or hang up on pollsters. No matter the design undertaken, the researcher is urged to pretest and pilot test all materials. Procedures for recruiting study participants merit additional attention. This textbook is directed toward the undergraduate student in research methods courses. There is a glossary on pages 429-42. References are cumulated at the end of the book.

151. Scheaffer, Richard L., William Mendenhall III, and Lyman Ott. *Elementary Survey Sampling*. 5th ed. An Alexander Kugushev Book. Belmont, [CA]: Duxbury Press, 1996. 501p.

Written as a text on the design and analysis of sample surveys, the volume is intended for students in business, the social sciences, and natural resource management. An elementary course in statistics is considered a prerequisite for achieving maximum benefit. Topics covered include the following: simple random and stratified random sampling; ratio; regression and difference estimation; systematic sampling; cluster and two-stage cluster sampling; and estimating population size. Practical aspects are addressed with the methodology described, followed by estimation procedure details and the mathematical formulas needed. The fifth edition takes advantage of computer software by providing a data disk for the large datasets from the examples and exercises located in the text. Additionally, the disk contains eight actual datasets discussed in the appendix.

SPECIFIC POPULATIONS

Gay

152. Blair, Johnny. "A Probability Sample of Gay Urban Males: The Use of Two-Phase Adaptive Sampling." *Journal of Sex Research* 36, no. 1 (February 1999): 39-44.

The challenges encountered when attempting to survey rare populations are reviewed. Blair acknowledges the failure of haphazard and convenience samples (such as organization membership lists or patrons of gay bars) to provide a statistical basis for estimating population characteristics or for measuring behavior. When the population under consideration is rare, large numbers of households must be reached in order to identify the target sample, a practice known to increase survey costs. The author describes the implementation of a two-phase design, called *adaptive sampling*, which relies on data from the early stages of a survey to improve efficiency in subsequent stages. In the present study, data previously collected on household eligibility were used to determine whether to (1) redefine stratum boundaries; (2) identify within-stratum sampling procedures; (3) adjust cluster sizes; (4) delete or undersample certain costly strata; and (5) reduce or redistribute target sample sizes. A random-digit-dialing sampling procedure was used to screen for eligible households and to collect data in four cities: San Francisco, New York, Los Angeles, and Chicago. The process was initiated in waves, with information collected from one city being available before data collection was undertaken in another. This sequence allows the researcher to estimate costs before selecting the sample size for the next city. The role of the Mitofsky-Waksberg replacement procedure in collecting data is discussed. The results support the view that, overall, the two-phase design is a cost-effective technique for identifying a probability sample of gay men at the four locations sampled. The problem of undercoverage bias is discussed. (4 footnotes, 11 references)

153. Harry, Joseph. "A Probability Sample of Gay Males." *Journal of Homosexuality* 19, no. 1 (1990): 89-104.

The methodology and results of a national probability sample of 1,512 male and female respondents interviewed by telephone are presented, with the findings compared to data from earlier studies based on nonprobability samples. In addition to demographic variables, the interviews focused primarily on three topics: policies of the Reagan administration, smoking, and AIDS. The following sexual orientation question was placed at the end of the survey instrument: "...Would you say that you are sexually attracted to members of the opposite sex or members of your own sex?" This question, asked only of males, came last in the interview "to avoid the possibility that the sensitivity of the question would disrupt the interview" (p. 94). A group of questions about AIDS preceded the orientation item. American Broadcasting Company/*Washington Post* pollsters

weighted the data by gender, race, education, and age. The analysis indicates that of 663 males asked the sexual orientation item, 16 acknowledged being gay, 5 volunteered the response that they were bisexual (an option not offered on the instrument), 627 said they were heterosexual, and 15 refused to participate. The weighted data revealed an estimated 3.7 percent homosexuals and bisexuals, a number somewhat different from Kinsey's estimate of 10 percent. A "surprising" finding was that 42 percent of the homosexual/bisexual group were currently married (a figure far exceeding previous estimates), and had children of school age. The homosexual/bisexual men identified tended to be members of minority groups, had less education, resided small towns, and were older. The efficiency of the probability sampling design allowed Harry to locate other groups of men who reported homosexual attractions but who did not frequently participate in visits to gay bars, gay organization meetings, and so forth (the site of most previous work on the topic and reflecting underrepresentation in the view of the author). The inclusion of the sexual orientation question is deemed "practicable." (29 references)

154. Meyer, Ian H., and Mary Ellen Colten. "Sampling Gay Men: Random Digit Dialing versus Sources in the Gay Community." *Journal of Homosexuality* 37, no. 4 (1999): 99-110.

The sampling of the target population is described as "the single most important methodological factor influencing the evolution of research on homosexuality" (p. 100). Meyer and Colten attribute flawed estimates to the selection bias introduced in studies based solely on recruitment from sources within the gay community. In this environment, selection is made according to the homosexual's level of participation in gay activities and his exposure to the gay community, a practice likely to have "significant and unchecked effects" on the internal and external validity of the research. (Samples recruited in this manner tend to be white, older, and more affluent when compared to the general population.) The present research was designed to evaluate the feasibility of obtaining a probability sample of gay and bisexual men by means of random-digit-dialing (RDD) sampling procedures. Sample 1 consisted of twenty-six "presumed" gay and bisexual men whose telephone numbers were obtained via mailing lists from targeted New York City neighborhoods having a large number of AIDS cases. Sample 2, comprised of fifty-two men, was identified using RDD. A five-minute questionnaire, administered by telephone, contained sexual screening items as well as questions on general health, opinion, and demographics. Respondents who identified themselves as gay or bisexual were then asked about their gay identity and level of participation in gay organizations and groups. Both RDD and the screening instrument were found to have "excellent sensitivity" in identifying gay and bisexual men. Although there were few overall demographic differences between the two samples (there were more nonwhites in the RDD-identified sample), they were quite different with respect to all aspects related to affiliation with the gay community and gay identity. RDD-identified gays were less affiliated with the gay community, were more likely to be "in the closet,"

differed in the attitudes they endorsed, and had higher levels of “internalized homophobia.” RDD is recommended for improving representation in such surveys. (23 references)

Haitian

155. Stepick, Alex, and Carol Dutton Stepick. “People in the Shadows: Survey Research among Haitians in Miami.” *Human Organization* 49, no. 1 (Spring 1990): 64-77.

With groups comprised primarily of underground, illegal, and undocumented Haitian immigrants, the authors report the methodology used for a series of three surveys conducted in southern Florida (Miami, Fort Lauderdale, and Belle Glade) in 1983-84, 1985-86, and 1987. The special challenges encountered when attempting to survey immigrants and refugees in the United States are reviewed. These include determining the sampling frame, designing culturally sensitive questions, hiring appropriate interviewers, and obtaining the cooperation of respondents. In addition, Haitians’ great distrust of strangers (especially those connected to the Immigration and Naturalization Service), their level of poverty (many do not have telephones), and low educational achievement (many cannot complete a mail questionnaire) have implications for the choice of the data collection mode. Survey 1, using area random samples, involved 499 Haitians. In Survey 2, a longitudinal follow-up, 212 Haitians were interviewed. The third survey, composed of a new area random sample, was conducted with 500 Haitians. All respondents had arrived in the United States during or after 1980. The Stepicks describe their efforts at gaining access to the target communities, emphasizing the necessity to obtain support from Haitian community organizations. Although most of the interviewers lived in areas with high Haitian concentrations, it still was difficult to secure interviews. Haitian Creole, an urban derivation of French, was selected for the survey language. The instrument, which was extensively pretested, focused on background variables, first experiences and adaptation to this country, and mental health issues. The authors describe the difficulties involved when conducting longitudinal studies of immigrants. Locating the highly mobile respondents from the first survey for the follow-up interviews was assisted by fostering trust, paying \$5 for each of the first two surveys and \$10 for the third, and capitalizing on the community’s “social boundedness.” The population surveyed is characterized as isolated (showing little interaction with Anglos), unable to speak English, poorly educated, and having a “dismal” socioeconomic level. The authors observe that their research is the “only known successful random sample survey of such a population” (p. 64). The combining of anthropological and sociological methods is viewed as a necessary prerequisite for this type of research. The Stepicks live in Miami’s “Little Haiti” neighborhood. (24 endnotes, 109 references)

Hispanic

156. McKay, Ruth B. "Undercoverage of Hispanics in Household Surveys." *Monthly Labor Review* 116, no. 9 (September 1993): 39-42.

Data were examined from three household surveys: the Current Population Survey (CPS) which measures labor force activity in a monthly sample of approximately 60,000 households, the 1990 decennial census, and the 1990 Alternative Enumeration report. The Alternative Enumeration surveys, a Bureau of the Census project conducted during the three months following the census count, consisted of ethnographic surveys of twenty-nine minority communities (African American, Hispanic, Native American, and recent Asian immigrants) in the United States and Puerto Rico thought to have high census omission rates. The data from these surveys indicate that certain racial and ethnic groups had been undercounted—both by interviewers and by self-enumeration. Undercounts occurred when an entire house was missed, when dwellings had been subdivided into several unreported housing units (whole house omissions), or when all members of the household had not been reported (within household omissions). McKay's research focuses on the factors contributing to the undercoverage of Hispanics by conducting a small-scale field study of a Salvadoran community located in the Washington, D.C., metropolitan area. Individuals in seventeen Salvadoran households and fifteen non-Hispanic white households were interviewed about their recent work experience by a team of Hispanic and non-Hispanic researchers. These figures were compared to data from eight of the twenty-nine enumeration sites (those that were predominately Hispanic). The results of the field study indicate that there were (1) cultural differences in household composition; (2) differences in the identity of individuals who the household reporter thought constituted household membership; and (3) differences in household reporting patterns. The Salvadoran households tended not to report boarders and relatives as members, a finding supported by the Alternative Enumeration report. Implications of the research for improving Hispanic coverage in surveys and censuses are discussed. (9 endnotes)

Rare or Hidden

157. Heckathorn, Douglas D. "Respondent-Driven Sampling: A New Approach to the Study of Hidden Populations." *Social Problems* 44, no. 2 (May 1997): 174-99.

Historically, three methods—snowball sampling and other chain-referral designs, key informant sampling, and targeted sampling—have been used to identify "hidden" populations, that is, groups for which no sampling frame exists and where there are strong privacy issues involving stigmatized or illegal behavior. Heckathorn points out a number of deficiencies with traditional methods and proposes the adoption of *respondent-driven sampling (RDS)*, a new form of

chain-referral sampling developed as part of an AIDS prevention intervention program. RDS is used both to recruit study participants and to produce samples that are “independent of the initial subjects from which sampling begins,” with less bias generated. The author details the implementation of RDS in two small Connecticut cities, each having substantial illicit drug use and AIDS cases. The methodology involves the following: (1) researchers recruit and interview a handful of subjects who serve as “seeds”; (2) seeds are then offered financial incentives (recruitment coupons and \$10) if they recruit their peers for an interview; and (3) new recruits are presented the same dual incentives as the seeds, with everyone being rewarded both for completing the interview and for recruiting their peers. In this way an expanding system of chain referrals is established in which subjects recruit more subjects, and so forth. One caveat is that the specific trait determining membership in the population must be objectively verifiable (a seven-step protocol was used in this study to confirm illicit injection drug use). Sampling is deemed to be completed either when the targeted community is saturated, or when a minimum target sample size has been attained. RDS can be applied in combination with other sampling techniques, such as Seymour Sudman’s network sampling. The limitations of the procedure are discussed. (5 footnotes, 25 references)

158. Kalton, Graham. “Sampling Considerations in Research on HIV Risk and Illness.” Chap. 2 in *Methodological Issues in AIDS Behavioral Research*, edited by David G. Ostrow and Ronald C. Kessler, 53-74. AIDS Prevention and Mental Health Series, edited by David G. Ostrow and Jeffrey A. Kelly. New York, NY: Plenum Press, 1993. 354p.

Sampling designs for surveys involving high-risk populations (for example, groups especially vulnerable to contracting AIDS) pose serious methodological challenges for survey researchers. Such groups are termed “rare” or “hidden” in the survey sampling literature. Due to the social stigma associated with membership in these high-risk groups, they tend to be hidden to disguise their identity. Kalton reviews numerous strategies that might be appropriate for sampling these populations, including the use of screening; disproportionate stratification; multiple frames; two-phase screening; and multistage, multiplicity, location, and snowball designs. Although standard area probability sampling or random digit dialing may be appropriate for general population surveys or with client surveys of particular AIDS-related services, the author advocates the “imaginative” application of a range of other techniques—especially in combination—when sampling hidden, socially stigmatized, or rare populations. The strengths and limitations of the various approaches are illustrated with a sample of gay men in an urban environment. Kalton believes that high response rates are an especially critical component in sensitive surveys. (41 references)

159. Thompson, Stephen K. “Adaptive Sampling in Behavioral Surveys.” In *The Validity of Self-Reported Drug Use: Improving the Accuracy of Survey Estimates*, edited by Lana Harrison and Arthur Hughes, 296-

319. NIDA Research Monograph 167; NIH Publication No. 97-4147. Rockville, MD: U.S. Department of Health and Human Services, National Institutes of Health, National Institute on Drug Abuse, Division of Epidemiology and Prevention Research, 1997. 508p. [SuDocHE20.3965:167]

Conventionally designed large-scale surveys detect relatively few members of the population who are rare, unevenly distributed, hidden, or hard to reach, thereby producing estimates of population characteristics that have “high uncertainty.” Ethnographic studies also employ procedures that leave researchers unable to generalize from their sample to the hidden population as a whole. Thompson proposes the use of two techniques, *adaptive sampling* and *graph sampling*, to identify sufficient numbers of hard-to-reach individuals. Adaptive sampling designs are defined as “those in which the procedure for selecting units to include in the sample may depend on values of the variable of interest observed during the survey” (p. 299). For example, whenever “interesting” values are observed (such as illicit drug use, high-risk sexual behaviors, or positive HIV test results), sampling intensity may be “adaptively” extended to neighboring or linked units (such as geographic proximity, or social contact or kinship). Adaptive sampling designs include ordinary sequential sampling, adaptive allocation in stratified sampling, adaptive cluster sampling, and optimal model-based designs. Graph sampling refers to situations with “nodes” (for example, people or units) connected by “edges” (for example, social links or geographic proximity). With this procedure, an initial sample of nodes or edges is selected. Edges are subsequently followed in order to bring additional nodes into the sample. The author also discusses resultant estimators that are unbiased. (90 references)

Senior Citizens

160. Psaty, Bruce M., Allen Cheadle, Susan Curry, Thomas McKenna, Thomas D. Koepsell, Thomas Wickizer, Michael VonKorff, Paula Diehr, Edward B. Perrin, and Edward H. Wagner. “Sampling Elderly in the Community: A Comparison of Commercial Telemarketing Lists and Random Digit Dialing Techniques for Assessing Health Behaviors and Health Status.” *American Journal of Epidemiology* 134, no. 1 (1 July 1991): 96-106.

A study of health behaviors in four communities—two in northern California, one in southern California, and one in Hawaii—provided the opportunity to examine the efficiency of two sampling approaches: telemarketing lists compiled and sold by the R. L. Polk Company of Detroit, Michigan, and random digit dialing [RDD]. The goal of the study was to compare the methods’ capability for identifying elderly respondents for a telephone interview assessing various self-reported health behaviors, health status, and participation in health-related programs and classes. List-identified individuals received a letter prior to initial contact. The Polk

lists identified 1,407 respondents aged 65 and older in the targeted communities, while RDD identified 253 respondents in the same age group in the same geographic areas. The overall response rate was 57.3 percent for the lists and 49.3 percent for RDD. On average, the identification of one elderly respondent using the list-assisted method required about 2.3 telephone numbers as compared to 14 for RDD. List-identified respondents were significantly older, and the proportions who were married, white, or had an income greater than \$10,000 were slightly higher. There were significant differences between the two samples on only three of the forty health variables measured. Commercially obtained lists are considered an efficient sampling method for identifying elderly respondents, producing estimates of health behaviors comparable to those obtained by RDD. (31 references)

Vulnerable

161. Bindman, Andrew B., Kevin Grumbach, Dennis Keane, and Nicole Lurie. "Collecting Data to Evaluate the Effect of Health Policies on Vulnerable Populations." *Family Medicine* 25, no. 2 (February 1993): 114-19.

The authors report on an aggressive approach used to enroll and track patients from vulnerable populations, such as the poor, the disabled, the mentally ill, those with HIV infection, and non-English-speaking individuals. Standard methods for collecting survey data may be inadequate for these groups due to illiteracy, language challenges, lack of telephones, and unstable addresses. The goal of the research was to evaluate the effect of healthcare policies on the target population. The initial step was to identify the groups most likely to be affected by a public health policy, for example, closing a rural hospital, moving patients off Medicaid, or changing a county's ambulance routing policy. Suggestions are offered for recruiting and enrolling patients and for selecting a comparison sample as similar as possible to the main study participants. The use of secondary sources and incentives, as well as acquiring a culturally sensitive and empathetic staff, contributed to high response rates. Survey instruments developed for other patient populations can be adapted to assess specific policy changes. A number of techniques may be necessary to maintain longitudinal data. These include tracking, secondary contacts, home visits and community outreach, and the assistance of organizations, institutions, and networks. The role of trust between researcher and patient is emphasized. The authors believe that with persistence and ingenuity, primary data can be successfully collected from the vulnerable populations described. (15 references)

TELEPHONE

Bias

162. Keeter, Scott. "Estimating Telephone Noncoverage Bias with a Telephone Survey." *Public Opinion Quarterly* 59, no. 2 (Summer 1995): 196-217.

Telephone service is episodic for some Americans—namely, those individuals who acquire or lose service depending on financial condition or change in residence. Therefore, the number of telephone households at any given time would include households that were recently a part of the nontelephone-owning population. Data from two national panel surveys and several statewide surveys were analyzed to determine the nature and magnitude of noncoverage error by estimating the size of the “transient” telephone population and comparing it with the total nontelephone population on several demographic characteristics. The conditions for the study were that the transient households had to be reasonably representative of the nontelephone population, and numerous enough to provide reliable estimates. The surveys analyzed were the 1992-93 Current Population Survey (CPS), the 1992 National Election Study (NES), and eight telephone surveys conducted in the state of Virginia. The CPS and NES data suggest that a “nontrivial” proportion of nontelephone households, at any given time, will probably join the telephone population over the course of one year. The state surveys compared intermittent telephone service households with nontelephone households, the latter surveyed with face-to-face interviews. The transient households were able to provide data characteristic of the nontelephone households. Although the former were better off financially than households continuously without telephone service, they were much the same on most of the other variables tested. When data were compared from the Virginia surveys with “benchmarks” from the CPS (the CPS is designed for state-level estimations of a variety of economic characteristics), the transient telephone households in the Virginia surveys were very similar to CPS nontelephone households on some key variables. Keeter believes the study findings can help alert researchers to possible noncoverage bias and be useful as a supplement or alternative to conventional weighting techniques. An appendix describes the Virginia surveys conducted by the Survey Research Laboratory at the Virginia Commonwealth University. (12 footnotes, 14 references)

163. Potthoff, Richard F. “Telephone Sampling in Epidemiologic Research: To Reap the Benefits, Avoid the Pitfalls.” *American Journal of Epidemiology* 139, no. 10 (15 May 1994): 967-78.

The article was written to inform investigators of effective telephone sampling practices, and to alert them to the potential sources of bias that can accompany this methodology. Two primary applications of telephone sampling in epidemiologic research are in general surveys (cross-sectional or prevalence studies) and in

case-control studies (population-based studies and center-based studies). Most telephone sampling in the field uses some form of the Mitofsky-Waksberg random-digit-dialing (RDD) sampling procedure. The general survey is discussed in terms of how to obtain a sample; the establishment of the RDD sampling frame; the issues that arise during interviewing; and the choice of weighting options to help offset bias. The principles underlying this type of survey are similar to those of general surveys in other fields. Two varieties of case control studies are discussed, noting that although many of the previous comments also apply here, there are special and unique aspects in these surveys. In population-based case-control studies, the cases examined are all the eligible ones in a specified geographic region for a given time period. Callbacks are advocated for reducing nonavailability and refusal biases. For center-based case-control studies, the cases consist of all the eligible ones that arise in specified hospitals or other treatment centers for a given time period. Potthoff suggests three approaches for selecting study controls. These may be used singly or in combination to broaden the Mitofsky-Waksberg RDD procedures. One technique involves selecting telephone numbers which agree with the number of the case, except that the last two digits are chosen randomly and dialed until enough matched controls are obtained. With the second approach, numbers with the same area and prefix as the case's number are dialed, while varying the last four digits. A third method utilizes telephone directories. (47 references)

Random Digit Dialing

164. Aquilino, William S., and Debra L. Wright. "Substance Use Estimates from RDD and Area Probability Samples: Impact of Differential Screening Methods and Unit Nonresponse." *Public Opinion Quarterly* 60, no. 4 (Winter 1996): 563-73.

Two methods for screening sample elements and recruiting respondents were compared: a face-to-face screening of households in an area probability design, and a random-digit-dialed (RDD) telephone screening of households in a centralized telephone survey. The research was part of a larger study of adults residing in the thirty-seven largest Standard Metropolitan Statistical Areas (SMSAs) in the United States. The purpose of the comparison was to determine if and to what extent the two screening methods influenced survey estimates, specifically unit nonresponse rates. A total of 2,417 respondents in the area probability sample were randomly assigned to one of three interview modes: face-to-face, telephone, or self-administered. (The present analysis is based on the responses of 740 respondents to the telephone interviews.) In this random subsample, respondents were screened face-to-face to determine eligibility and select a respondent who was then contacted by telephone for the interview. For the RDD-generated sample, telephone interviews were conducted with 1,093 respondents from the same 168 counties comprising the SMSAs. The questionnaire administered to both samples was based on the 1990 National Household Survey on Drug Abuse

and concerned tobacco, alcohol, and illicit drug usage. Each sample had a different set of interviewers—some professional field workers versus an in-house staff operating from a central location. Aquilino and Wright found that the screening response rates were substantially higher for the area probability sample—94.3 percent to 79.5 percent for the RDD sample, a result attributed to the screening of refusals in the latter. The two screening techniques produced samples nearly identical in demographic characteristics (except for racial/ethnic distribution). Self-reported substance use was very similar on nine of the eleven measures. The different screening methods and the varying response rates did not appear to be a major source of mode effects. The implications of the research for surveys concerning sensitive topics are discussed. (3 footnotes, 15 references)

165. Brick, J. Michael, Joseph Waksberg, Dale Kulp, and Amy Starer. "Bias in List-Assisted Telephone Samples." *Public Opinion Quarterly* 59, no. 2 (Summer 1995): 218-35.

The authors review the perceived operational difficulties associated with the use of the Mitofsky-Waksberg method of random digit dialing (RDD), the best known and perhaps most widely utilized of existing techniques to select random samples of telephone households [Waksberg, Joseph. "Sampling Methods for Random Digit Dialing." *Journal of the American Statistical Association* 73, no. 361 (March 1978): 40-46.]. To overcome some of the undesirable features of this method, a particular type of list-assisted sampling is advocated. (List-assisted samples have the disadvantage of excluding some households from the sample, thereby producing coverage bias in the estimates.) The present method involves dividing the entire frame of telephone numbers from the Bellcore file (the telephone company's file of all exchanges in the United States) into two strata: listed and zero-listed. The first category includes both listed and unlisted telephone numbers; the second contains numbers in 100-banks that have no listed residential numbers. Sampling was completed only in the listed stratum—the "truncated" sample. Three advantages of the list-assisted method are that the single-stage design eliminates the sequential nature of the Mitofsky-Waksberg technique; the percentage of telephone numbers sampled that are residential is often higher; and an equal probability sample design can be used without producing a "clustering" effect. Coverage bias was found to be minimal—approximately 3 to 4 percent of all households. In addition, the differences in characteristics between covered and uncovered populations generally were not large. (6 footnotes, 12 references)

166. Brick, J. Michael, Mary Collins, and Kathryn Chandler. *An Experiment in Random-Digit Dial Screening: National Household Education Survey*. National Center for Education Statistics Technical Report, NCES-98-255. Washington, DC: U.S. Department of Education, Office of Educational Research and Improvement, National Center for Education Statistics: Educational Resources Information Center, December 1997. 48p. [SuDoc ED1.310/2:414344]; Microfiche. ERIC Doc ED414344.

An experiment was conducted to evaluate the impact on screening response rates by comparing a full enumeration of households (no screen-out) versus a screen-out question, and mailing an advance letter. (The purpose of a screen-out question is to eliminate ineligible households prior to enumeration.) The authors used approximately 10,000 telephone numbers from the sampling frame of the National Household Education Survey (NHES), a data collection system of the National Center for Education Statistics. The NHES employs random-digit-dialing (RDD) sampling techniques and computer-assisted telephone interviewing to survey from 45,000 to 60,000 households for each administration. The impetus for the research was the significantly lower response rates found in the 1995 survey (other NHES surveys were conducted in 1991, 1993, and 1996). Since the 1995 survey was the first in the series to use full enumeration of all household members in all sampled households, this methodology was suspected to be a likely factor in the decline of the screening response rate. The RDD sample consisted of four conditions: (1) screen-out and letter; (2) screen-out and no letter; (3) no screen-out and letter; and (4) no screen-out and no letter. The screen-out option produced significantly higher response rates. Although the advance mailing had the effect of increasing cooperation in the no screen-out condition, that impact was not evident in the screen-out variation. The no screen-out option was much more expensive, but at the same time produced more data for each completed case.

167. Lele, Chitra, Elizabeth A. Holly, Diane S. Roseman, and David B. Thomas. "Comparison of Control Subjects Recruited by Random Digit Dialing and Area Survey." *American Journal of Epidemiology* 140, no. 7 (1 October 1994): 643-48.

The research goal was to assess the accuracy of a random-digit-dialing (RDD) sampling procedure for identifying a variety of health-related characteristics of control subjects. The RDD-selected controls were compared to a group identified by "the best traditional alternative," namely, household area surveys. The RDD data came from the 1978 and 1979 National Bladder Cancer Study conducted in King and Pierce Counties in the state of Washington. The household area survey took place at the same location during the same time period. There were 134 respondents in the RDD control group and 240 in the area sample. Both groups received face-to-face interviews, yielding response rates of 74 percent for the RDD sample and 85 percent for the area sample. Identical information—including race, religion, education, marital status, smoking status, height, weight, and some dietary and occupational exposure data—was obtained for both groups. Since the authors found, overall, "no consistencies among the few differences" observed, they conclude that there is strong evidence that RDD-selection techniques can provide representative samples. (10 references)

168. Olson, Sara H., Jennifer L. Kelsey, Thomas A. Pearson, and Bruce Levin. "Evaluation of Random Digit Dialing as a Method of Control

Selection in Case-Control Studies." *American Journal of Epidemiology* 135, no. 2 (15 January 1992): 210-22.

Random digit dialing [RDD] has become a commonly used technique in health-related fields for selecting control groups for the purpose of examining the relationship between exposure and disease. However, prior research is cited which indicates a lack of representativeness of control groups chosen as a result of this method. The problem is low response rates, primarily due to individuals who refuse to participate. Biased data can then be produced. The authors compared the results of two studies: (1) the 1989 Otsego County Health Census, a private population census conducted in upstate New York that collected demographic, health status, and health behavior information, by mail, on 15,563 adults between 40 and 74 years of age; and (2) a "hypothetical" control group of 341 similarly aged adults selected by RDD (Mitofsky-Waksberg two-stage cluster method) and interviewed face-to-face in 1990. The RDD questionnaire was adapted from a cancer control instrument. Response rates were 86.7 percent for the New York study and 74.9 percent for the in-home interviews. Although there were few differences between the census population and the RDD sample for most measures, control group members were somewhat more likely to have had certain medical screening tests and were somewhat better educated. The authors conclude that, at least for this setting, RDD-selected control groups are representative of the general population in most respects. (14 references)

169. Orden, Susan R., Alan R. Dyer, Kiang Liu, Laura Perkins, Karen J. Ruth, Gregory Burke, and Teri A. Manolio. "Random Digit Dialing in Chicago CARDIA: Comparison of Individuals with Unlisted and Listed Telephone Numbers." *American Journal of Epidemiology* 135, no. 6 (15 March 1992): 697-709.

The goals of the research were to (1) determine how many individuals eligible to take part in the Coronary Artery Risk Development in Young Adults (CARDIA) lived in homes having unlisted telephone numbers; (2) investigate whether the proportions of unlisted numbers varied by race, gender, age, and educational level; (3) compare how likely eligible individuals with listed and unlisted numbers were to participate in CARDIA; (4) assess differences in the reporting of health status and health behaviors between the two groups; and (5) examine the implications of unlisted numbers for selecting a representative sample. The authors report an effort to recruit eligible individuals for the Chicago, Illinois, portion of CARDIA, one of four such centers in the national longitudinal collaborative study. The Chicago recruitment was carried out by the National Opinion Research Center at the University of Chicago. In total, 953 African Americans and whites between 18 and 30 years of age, of both high and low education levels, were selected by using random-digit-dialing (RDD) sampling procedures. (RDD was chosen because of the capability to generate unlisted as well as listed telephone numbers.) At least ten callbacks were made to invite participation. The results indicate that, overall, 31 percent of randomly selected eligible persons, a sample composed of about 50

percent African-American men and women and 28 percent white men and women, had unlisted telephone numbers. No consistent pattern of differences was found in participation rates across race, gender, or education subgroups for unlisted and listed numbers. Regarding the health measures, significant differences were shown only for cigarette usage, with the numbers being generally higher for those having unlisted numbers (especially among African-American women). RDD is viewed as the preferred method for selecting a representative population-based sample, although there is potential for bias if the sample is not stratified by sociodemographic characteristics. (31 references)

170. Pavlik, Valory N., David J. Hyman, Carlos Vallbona, J. Kay Dunn, Katheleen Louis, Charlene M. Dewey, Lynn Wieck, and Christine Toronjo. "Response Rates to Random Digit Dialing for Recruiting Participants to an Onsite Health Study." *Public Health Reports* 111, no. 5 (September-October 1996): 444-50.

A random-digit-dialed (RDD) sampling procedure was used in a study designed to determine the prevalence of undetected and uncontrolled hypertension and to evaluate hypertension-related knowledge, attitudes, and behaviors. RDD, rather than geographic area sampling and household interviews, was employed to identify and recruit 2,100 African-American men and women residing in twelve low-income ZIP code areas of Houston, Texas. A brief health survey was conducted with the Behavioral Risk Factor questionnaire. In addition, respondents were asked about insurance coverage, the availability of primary care, the amount of time since their last blood pressure check, and their employment status, education, and ethnicity. Those respondents identifying themselves as African American were requested to take part in a community blood pressure screening study. A \$10 compensation was paid for a completed visit, and reminder letters and telephone calls were used to encourage clinic visits. A longer face-to-face interview took place in this environment. The results indicate that 94 percent of eligible individuals completed the telephone portion of the survey. Although 65 percent agreed to a clinic visit, only 26 percent actually kept the scheduled appointment. (In a subgroup study in which a \$25 incentive was offered, this figure rose to 85 percent.) Full-time employment, a lack of a history of hypertension, and age were associated with failure to keep appointments. "Unacceptably low" are the words used to describe the response rate. (20 references)

171. Perneger, Thomas V., Tamra L. Myers, Michael J. Klag, and Paul K. Whelton. "Effectiveness of the Waksberg Telephone Sampling Method for the Selection of Population Controls." *American Journal of Epidemiology* 138, no. 8 (15 October 1993): 574-84.

The Waksberg two-stage, random-digit-dialed (RDD) sampling procedure was evaluated for selecting general population control subjects as part of a population-based, case-control study of risk factors for end-stage renal disease. The provisions of the technique, which has become increasingly popular in epidemiologic research,

are reviewed and then compared with simple random sampling (approximated by the first stage of the Waksberg). The study was conducted in 1991 in Maryland, Virginia, West Virginia, and Washington, D.C. Cases were identified through the Health Care Financing Administration; controls were identified by RDD. Both groups were administered a standardized thirteen-minute questionnaire. All telephone numbers were dialed up thirteen times to maximize response; a completion rate of 95 percent was achieved. Additional numbers were generated in the second stage by changing the last two digits. Overall, 3,860 telephone numbers yielded 1,311 residences and 362 completed interviews. The proportion of residences was higher in the second stage (54 percent) as compared to the first stage (11 percent), while telephone numbers "not in service" was lower (12 percent versus 67 percent, respectively). The authors calculate that up to 18,522 telephone calls would have been necessary with simple random sampling. Although the Waksberg procedure was found to be more complex to manage, it was effective for generating an appropriate control group at a reasonable cost. RDD is considered to be particularly suitable for selecting population controls when the density of residential connections is low, the variables of interest are not homogeneous within sampling units, and the expected number of respondents is limited due to strict eligibility requirements. (22 references)

172. Voigt, Lynda F., Scott Davis, and Linda Heuser. "Random Digit Dialing: The Potential Effect on Sample Characteristics of the Conversion of Nonresidential Telephone Numbers." *American Journal of Epidemiology* 136, no. 11 (1 December 1992): 1393-99.

The research was undertaken to (1) assess the rate of conversion of nonworking and business telephone numbers to residential numbers; (2) identify the characteristics of the households that had received the converted numbers; (3) investigate whether the time between the first and second stages of sampling should be restricted; and (4) evaluate whether sampling without the replacement of telephone numbers could introduce bias. The authors determined the 1987 status of 9,107 numbers that had been identified as nonresidential by random digit dialing [RDD] between 1979 and 1986 in a thirteen-county area of western Washington State. Household characteristics (such as age, gender, race, level of education, annual income, and household size) were obtained by telephone interviews completed for 1,333 of the 1,901 numbers that had been converted to residential by 1987. As many as twenty-seven call attempts were made to reach a household. The results of the study indicate a 21 percent increase in converted telephone numbers. Further, when the data were compared to 1980 decennial census figures and 1987 population estimates, the characteristics of converted households were found to be different from those of the general population, in that members were younger, better educated, and had lower incomes. A substantial number of conversions occurred within one year, but the rate of conversion was not uniform across all geographic areas or prefixes within the same county. The authors conclude that RDD sampling procedures employing two-stage designs or excluding previously dialed numbers may result in biased samples unless the changes over time are taken into account. (5 references)

Interviewers

BIAS

173. Leal, David L., and Frederick M. Hess. "Survey Bias on the Front Porch: Are All Subjects Interviewed Equally?" *American Politics Quarterly* 27, no. 4 (October 1999): 468-87.

Leal and Hess acknowledge that although much prior research has focused on racial and gender dynamics between interviewers and respondents in face-to-face surveys, the question of whether interviewers' negative personal opinions and perceptions of respondents impact the answers provided has not been adequately addressed. Interviewers can display signs, albeit subtly, of friendliness or hostility through body language, tone of voice, or a "cool, formal" questioning style. To test for the presence of interviewer bias toward some respondents, an experiment was conducted that used three face-to-face public opinion surveys that asked the interviewer to evaluate respondents based on her/his intelligence and level of political knowledge. The three surveys were the American Citizen Participation Survey, yielding 2,517 interviews; the Latino National Political Survey, yielding 2,817 interviews; and the 1996 postelection version of the National Election Studies, yielding 684 interviews. In all the surveys, interviewers were found to be systematically biased: affluent respondents were coded as being better informed and as possessing a greater understanding of the questions; African American respondents were judged more negatively; and younger respondents were coded as both less informed and less intelligent. The authors conclude that there is evidence of potential bias even after controlling for objective levels of political information. (9 endnotes, 39 references)

174. Salazar, Mary Kathryn. "Interviewer Bias: How It Affects Survey Research." *AAHON Journal: Official Journal of the American Association of Occupational Health Nurses* 38, no. 12 (December 1990): 567-72.

Interviewing is considered a crucial skill for the occupational health nurse. Salazar believes the technique is useful for facilitating clinical decisions, conducting research, and acquiring information not easily obtained in other ways. Interviews are categorized into two types: *standardized* (structured, guided) and *nonstandardized* (unstructured, open-ended), each representing the extreme ends of the continuum. The advantages and disadvantages of two data collection methodologies, face-to-face and telephone, are evaluated. In the face-to-face approach, the respondent can be observed in her/his own surroundings, and nonverbal cues can be ascertained. Visual anonymity may reduce self-consciousness in telephone interviews, and they are considerably more cost-effective. The interviewer is viewed as "the critical point of failure in survey research," with success depending to a great extent on the interviewer's attitude during the survey, rather than the particular skill level. The author discusses the enduring problem of interviewer bias on data quality, due primarily to the effect of personal variables such as social status, age, gender, race, and physical appearance, as well as an array of behavioral characteristics, such as motivation, personality, and attitude. The interviewer's level of competency needs to be appropriate for the survey task. (27 references)

EFFECTS

Age

175. Ford, Kathleen, and Anne E. Norris. "Effects on Interviewer Age on Reporting of Sexual and Reproductive Behavior of Hispanic and African American Youth." *Hispanic Journal of Behavioral Sciences* 19, no. 3 (August 1997): 369-76.

Two hypotheses formed the basis for the research: (1) adolescent and young adult respondents between 15 and 24 years of age will tend to underreport their involvement in certain sensitive sexual and reproductive practices when interviewed by older interviewers; and (2) these differences will be greater for female respondents. Data were analyzed from a 1991 household probability sample of low-income African-American and Hispanic youths living in Detroit, Michigan. The Survey Research Center of the Institute for Social Research at the University of Michigan designed the sample and carried out the fieldwork, producing 1,435 completed, hour-long, face-to-face interviews. The response rate was approximately 85 percent. The sixty interviewers employed were divided into three age groups: 20 to 30; 31 to 40; and 41 and older. More than 95 percent of the interviewers were minority residents of Detroit. The questionnaire items focused on sexual activities within the last year, condom use, the number of live births, and abortion. Ford and Norris found that interviewer age had little effect on the reporting of sensitive behaviors for Hispanic males and African-American males and females. However, age was strongly associated with sexual activity reporting for Hispanic females,

who were significantly more likely to report activity to the youngest interviewers. Cultural and social desirability factors may account for this finding. (12 references)

Gender

176. Catania, Joseph A., Diane Binson, Jesse Canchola, Lance M. Pollack, Walter Hauck, and Thomas J. Coates. "Effects of Interviewer Gender, Interviewer Choice, and Item Wording on Responses to Questions Concerning Sexual Behavior." *Public Opinion Quarterly* 60, no. 3 (Fall 1996): 345-75.

The authors hypothesized that by allowing respondents to select the gender of their interviewer, as well as asking questions that are supportive of "questionable" sexual behaviors, data quality would be improved in surveys dealing with sensitive topics. The study population was composed of a random-digit-dialed sample of 2,030 adults between 18 and 49 years of age. A staff of forty experienced interviewers attempted as many as twelve calls to reach the selected telephone numbers. Respondents were randomly assigned to one of three conditions: same-gender-interviewer, opposite-gender-interviewer, or choice-of-interviewer groups. Respondents were randomly assigned to either *enhanced-item-wording questionnaires* (that is, those "using questions that are 'supportive' of what may be perceived of as nonnormative behavior"), or *standard-item-wording questionnaires*. The standard items came from a variety of existing AIDS and human sexuality studies; the less judgmental enhanced items were based on work by Bradburn, Sudman, and others. Among the findings reported are the following: (1) in general, matching respondents and interviewers according to gender was superior to the other two options; (2) the enhanced items encouraged respondents to answer some of the more sensitive questions; (3) allowing respondents greater control was associated with decreased question threat; (4) males tended to be more affected on a wider range of sexual topics by the factors under consideration; (5) the effects of question wording on response were often mediated by interviewer conditions; and (6) gender discrepancies in self-reports were reduced, but not eliminated, by wording and interviewer manipulations. The authors believe that, overall, "the data support the view that in terms of preferred procedures, not all sexual topics are created equal" (p. 346). Limitations and recommendations are discussed. (63 references)

177. Huddy, Leonie, Joshua Billig, John Bracciodieta, Lois Hoeffler, Patrick J. Moynihan, and Patricia Pugliani. "The Effect of Interviewer Gender on the Survey Response." *Political Behavior* 19, no. 3 (September 1997): 197-220.

Two goals were pursued: to test for the presence of gender-of-interviewer effects while controlling for the identity of individual interviewers, and to determine the characteristics of those respondents most susceptible to such effects. Two local-area telephone surveys yielded a sample of 303 respondents from Suffolk County, New

York, and 335 from Long Island, New York (Suffolk and Nassau Counties), with both samples closely resembling the populations from which they were drawn. The Suffolk County survey was conducted in the fall of 1991; the Long Island survey was conducted in the fall of 1993. Male and female undergraduate students enrolled in a survey research class conducted most of the 1991 interviews, but undergraduate and graduate students and three professional female interviewers administered the 1993 survey. Response rates were 53 percent and 45 percent, respectively. Interviewers were randomly assigned to a subset of active telephone numbers, with a male or female randomly designated as the target respondent at each number. The survey instrument contained a wide range of items dealing with the women's movement, women's issues, and gender equality. For the present analysis the authors used questions assessing gender-related attitudes commonly included in such surveys as the General Social Survey and the National Election Studies. The results indicate that (1) respondents were more likely to provide "feminist" answers to female interviewers; (2) there were small, but consistent, gender-of-interviewer effects on questions dealing with the topics listed above; (3) effects were somewhat more pronounced and consistent for controversial political items; (4) there was conflicting evidence as to whether respondents were equally susceptible to gender-of-interviewer effects; and (5) in the 1991 survey, gender-of-interviewer effects were strongest among younger respondents and those having the least education. An appendix provides the items presented. (13 endnotes, 32 references)

178. Hutchinson, Kevin L., and David G. Wegge. "The Effects of Interviewer Gender upon Response in Telephone Survey Research." *Journal of Social Behavior and Personality* 6, no. 3 (September 1991): 573-84.

The data analyzed were derived from a telephone survey of 795 Wisconsin residents age eighteen and older. Random-digit-dialing sampling procedures were used to select the sample households. Twenty-six male and female interviewers were employed, with the fifteen female interviewers completing 56.5 percent of the interviews and the eleven male interviewers completing 43.5 percent. The proportion of interviews completed in each gender-respondent category (with the interviewer gender listed first) are as follows: female-female, 34.1 percent (271); female-male, 22.4 percent (178); male-female, 24.9 percent (198); and male-male, 18.6 percent (148). The survey questions dealt primarily with topics related to the 1984 presidential election. The findings indicate that there were no interviewer gender effects on certain demographic characteristics such as age, occupation, race, education, religion, income, or union membership. However, on six of the fifteen political content questions, males and females responded differently to male and female interviewers. According to Hutchinson and Wegge, the most interesting outcome is that five of the six statistically significant findings existed among male respondents. The gender gap phenomenon is offered as one explanation. An appendix lists the questionnaire items. (28 references)

179. Johnson, Timothy P., and Robert W. Moore. "Gender Interactions between Interviewer and Survey Respondents: Issues of Pornography and Community Standards." *Sex Roles* 28, nos. 5-6 (March 1993): 243-61.

The basis for the research is the question, "Does interviewer gender influence survey responses to threatening or sensitive questions?" Johnson and Moore review existing hypotheses of social distance and social acquiescence effects, observing that most prior research in the area has been carried out with face-to-face interviews. To test for possible interviewer gender effects, a telephone survey was conducted by fifteen female and seven male interviewers from the Survey Research Center at the University of Kentucky, with 219 female respondents and 230 male respondents, who were primarily white, middle-class adults residing in a medium-sized metropolitan community. Random-digit-dialing techniques were used to sample households. The response rate was 66 percent. The survey instrument contained twenty-five items concerning attitudes, opinions, and behaviors related to pornography—specifically, the acceptability of selling, buying, and viewing sexually explicit materials, the right of individuals to do so, and the personal consumption of such materials. The findings indicate that interviewer gender was not significantly associated with the responses of either gender regarding the selling/purchasing/viewing of sexually explicit materials. Although female respondents were more candid with male interviewers about their book purchasing or reading habits, there was little evidence overall for either social distance or acquiescence effects. The authors conclude that although telephone surveys are prone to nonsampling errors, the gender of the interviewer may not be a serious contributor to these. The problems of the small number of male interviewers and the limited size of the sample are addressed. (30 references)

180. Kane, Emily W., and Laura J. Macaulay. "Interviewer Gender and Gender Attitudes." *Public Opinion Quarterly* 57, no. 1 (Spring 1993): 1-28.

The research examines the impact of interviewer gender on responses to a wide range of gender-related survey questions in order to determine the presence of interviewer-gender effects, whether they vary by respondent gender, and if certain attitudinal measures are more susceptible than others to such effects. The data analyzed were drawn from telephone interviews with a national probability sample of 1,750 adults. The interviews were conducted during 1990 and 1991 by fourteen trained, part-time, male and female interviewers, nearly all of whom attended the University of Wisconsin at Madison. Four attitude measures were assessed: home-related gender attitudes; work-related gender attitudes; action orientations, including attitudes toward gender-related collective action and government policy; and perceptions of men's and women's group interests. The results of the research indicate the following: (1) both male and female respondents offered more critical responses to female interviewers; (2) male respondents provided significantly different responses to male and female interviewers on items dealing with gender inequality in the workplace; (3) female respondents varied significantly with respect to male and female interviewers on action orientation

and group interests; and (4) female respondents displayed fewer effects for the more common topics. Kane and Macaulay conclude that “interviewer-gender effects are statistically significant in most attitudinal domains but that the interaction between interviewer gender and respondent gender does not tend to be statistically significant” (p.1). The authors stress the need to control gender-of-interviewer effects in gender-related survey research. (15 footnotes, 34 references)

181. Lueptow, Lloyd B., Susan L. Moser, and Brian F. Pendleton. “Gender and Response Effects in Telephone Interviews about Gender Characteristics.” *Sex Roles* 22, nos. 1-2 (January 1990): 29-42.

The authors investigate the effects, if any, of interviewer gender on respondents' answers to questions concerning sex role orientations, a problem known as response effects, or the variance in response due to characteristics of the interviewer and/or the respondent. Based on a review of prior research in three areas (survey interviews, job interviews and counseling studies, and other gender experiments), it was hypothesized that male interviewers will elicit a greater number of response effects, especially from female respondents; that female respondents will show more social desirability effects; and that respondents, especially females, will disclose their liberal orientations more frequently to female interviewers. To test these hypotheses, a random-digit-dialed telephone survey was conducted with 432 adult respondents and their partners in a midwestern metropolitan area. The measures focused on personality traits, attitudes toward interpersonal relations, and attitudes about women's roles. Both self-ratings and partner ratings were obtained. The study findings indicate that (1) male interviewers did not elicit more response effects, especially among female respondents; (2) desirability effects, rather than conformity effects, were evident, especially for the female interviewers; and (3) female respondents and “low-power,” highly educated males provided more liberal responses to female interviewers. Some of the response effects noted constitute “potentially damaging” sources of error. (29 references)

Race

182. Davis, Darren W. “The Direction of Race of Interviewer Effects among African-Americans: Donning the Black Mask.” *American Journal of Political Science* 41, no. 1 (January 1997): 309-22.

The basis for the research is the belief that race-of-interviewer effects are indicative of “evolving areas of interpersonal tension between African-Americans and whites, and deserve to be treated as a fact of social life and not merely as an artifact of the survey interview” (p. 309). Further, African Americans can be expected to (1) exhibit more sensitivity to white interviewers; (2) conceal and censor their true political beliefs; (3) appear more docile, accommodating and deferent; and (4) acquiesce (that is, to agree with and support the statements) to white interviewers. (Acquiescence is a form of sophisticated “masking” in which

facial expressions, gestures, tone of voice, and attitudes are altered depending on the interviewer's race.) The analysis is based on data from the 1984 National Black Election Study, a longitudinal telephone survey of 1,150 African Americans conducted from July through November. Reinterviews with 872 members of the original sample followed the November election. Response rates were 57 percent and 76 percent, respectively. African-American and white interviewers were randomly assigned and occasionally alternated between the preelection and postelection waves. To test for race-of-interviewer effects, a series of sequentially ordered questions with similar response sets, but with clearly different and contradictory positions, were posed. Davis found that African Americans, in response to white interviewers, were more likely to acquiesce to mutually contradictory evaluations of both the Democratic and Republican parties, to both Ronald Reagan and Jesse Jackson, and to African-American officials supportive of both Reagan and Jackson. Alternations in interviewer race between the panel waves indicate that when the change was from an African-American interviewer to the same or different white interviewer, African-American respondents were more likely to admit that African Americans are powerless and cannot change things, that they cannot make a difference with their votes, that they should not form their own political party, and that whites do not "keep blacks down." An appendix provides the wording of the feeling thermometer items. (4 footnotes, 27 references)

183. Davis, Darren W. "Nonrandom Measurement Error and Race of Interviewer Effects among African Americans." *Public Opinion Quarterly* 61, no. 1 (Spring 1997): 183-207.

Some of the literature relating to the pervasiveness of race-of-interviewer effects is reviewed. The concept refers to the willingness of some respondents to adjust their attitudes to what they think will please the racial expectations of the interviewer. The resulting data are frequently biased. Davis examines the extent to which this sensitivity to the interviewer's race influences nonrandom measurement error, perhaps introducing bias across multiple items of entire datasets. The relationship between African Americans' racial consciousness and support for Jesse Jackson's 1984 presidential bid serves to highlight the serious consequences of race-of-interviewer effects on political and racial survey questions. The analysis is based on data from the 1984 National Black Election Study (NBES), a longitudinal telephone survey of 1,150 African Americans conducted from July through November. Following the November election, reinterviews were conducted with 872 of the original respondents. In the 1984 NBES, forty-nine different white interviewers were responsible for 48 percent of the sample, and twenty-seven different African-American interviewers were responsible for 52 percent of the sample. The response rate was 57 percent for the preelection interviews and 76 percent for the reinterviews. Among the results of the study are the following: (1) race-of-interviewers effects were pervasive across measures of racial consciousness and support for Jackson; (2) throughout the interview, interviewer race appeared to be a "salient" force on both racial and nonracial questions; (3) over 60 percent of the attitude questions were affected by the interviewer's race; and (4) the age of

the African-American respondents and their level of social consciousness were significant factors, with older African Americans and those with lower levels of racial consciousness showing less support for Jackson and more support for the Democratic party. Considerable discussion is devoted to the solutions necessary for correcting nonrandom measurement error. (15 footnotes, 52 references)

184. Finkel, Steven E., Thomas M. Guterbock, and Marian J. Borg. "Race-of-Interviewer Effects in a Preelection Poll: Virginia 1989." *Public Opinion Quarterly* 55, no. 3 (Fall 1991): 313-30.

Lieutenant Governor Douglas Wilder, an African-American Democrat, and Marshall Coleman, a white Republican, were the two candidates for the 1989 Virginia gubernatorial election. Four major published preelection polls (Mason-Dixon Opinion Research, Incorporated, the *Washington Post*, the *Richmond Times-Dispatch*, and the Commonwealth Poll of Virginia Commonwealth University), as well as one election day exit poll, all overestimated the number of votes the eventual winner, Wilder, would receive. In an effort to account for these "unrealistic" results, the authors hypothesized that in some elections with opposing African-American and white candidates, white respondents would be less inclined to report their intention to vote for the white candidate, but more willing to report their intention to vote for the African-American candidate—depending on whether the interviewer is African American or white. To test for a social desirability bias and/or a race-of-interviewer effect, data were analyzed from a statewide telephone survey of 362 respondents (of whom 256 were registered voters) conducted by the Survey Research Center at the University of Virginia. Trained students administered the survey, with the African-American interviewers generating approximately one-third of all completed interviews. Among the results are the following: (1) there was a significant race-of-interviewer effect; (2) whites were 8-11 percentage points more likely to state they will vote for the African-American candidate to the African-American interviewers and more likely to voice support for the white candidate to the white interviewers; and (3) the effects were greatest among two groups: white Democrats and undecided white voters. The authors conclude that race-of-interviewer effects may seriously distort preelection forecasting in African-American/white contests. If such effects are found, pollsters should be alerted to the "possible hidden importance" of race in the election since the presence of effects indicates that "some portion of the white electorate is responding to racial cues" in the overall electoral context. (10 footnotes, 26 references)

185. Webster, Cynthia. "Hispanic and Anglo Interviewer and Respondent Ethnicity and Gender: The Impact on Survey Response Quality." *Journal of Marketing Research* 33, no. 1 (February 1996): 62-72.

Webster's research focuses on whether interviewer gender and ethnicity impact levels of response, item omission, item response effort, and item distortion rates among a sample of Anglo and Hispanic respondents. The experimental design was comprised of sixteen possible combinations of the two gender interviewer

and respondent conditions, and the two ethnicity interviewer and respondent conditions. The interviewers were 39 Anglo men and women and 40 Hispanic men and women between 31 and 45 years of age with a "mid-status" social position. Male and female respondents (60 to 92 in each of 16 manipulations) were selected by a systematic sample of shoppers at a local mall according to procedures introduced by Seymour Sudman ["Improving the Quality of Shopping Center Sampling." *Journal of Marketing Research* 17, no. 4 (November 1980): 423-31.]. The field experiment used face-to-face interviews and a survey instrument containing demographic, socioeconomic, culturally related, and general items. There were approximately fifty closed-ended and four open-ended questions requiring about twenty minutes to complete. Overall, few significant main effects were evident. However, response quality was significantly affected by respondent and interviewer gender and ethnicity. Anglo and female interviewers had a significantly higher item-response effort rate than their counterparts, and female interviewers produced fewer omitted items. Both Anglo and Hispanic respondents "deferred to an interviewer of a different ethnic background when queried about the interviewer's culture, but not when asked noncultural, albeit sensitive questions" (p. 62). Discussion continues on the impact of matching interviewer and respondent ethnicity on some items. (2 footnotes, 41 references)

ERROR

186. Fowler, Floyd J., Jr. "Reducing Interviewer-Related Error through Interviewer Training, Supervision, and Other Means." Chap. 14 in *Measurement Errors in Surveys*, edited by Paul P. Biemer, Robert M. Groves, Lars E. Lyberg, Nancy A. Mathiowetz, and Seymour Sudman, 259-78. Wiley Series in Probability and Mathematical Statistics, Applied Probability and Statistics. A Wiley-Interscience Publication. New York, NY: John Wiley & Sons, 1991. 760p.

Interviewer-related error is characterized as "underappreciated," "easy to ignore," and "abundantly available." Fowler believes interviewers can contribute to survey error due to personal characteristics or job performance. Following a discussion on the detection of interviewer-related error (in most surveys the contribution of the interviewer to total error cannot be calculated), suggestions are offered for minimizing this source of faulty data. Interviewers must be provided with exacting procedures to follow so that consistency with other interviewers will reduce their individual effects on data. These procedures include reading questions precisely as they are written, asking follow-up probe questions if necessary, recording answers without interpretation, and maintaining a professional and neutral relationship with the respondent. At least two or three days of training are recommended. Supervision should include tape recording or direct monitoring. Another option for reducing error involves selecting interviewers who are least likely to affect answers. Designing questions that can be asked in a standardized manner is seen as perhaps the most important contributor to the reduction of interviewer-related error. In

addition, limiting the number of interviews per interviewer lessens the impact of interviewer effects on total survey error, as well as the potential for bias due to interviewer fatigue. There are 822 cumulated references on pages 687-733.

187. Fowler, Floyd J., Jr. and Thomas W. Mangione. *Standardized Survey Interviewing: Minimizing Interviewer-Related Error*. Applied Social Research Methods Series, vol. 18. Newbury Park, CA: Sage Publications, 1990. 151p.

Fowler and Mangione focus on an enduring challenge in survey research methodology—namely, in what ways do interviewers contribute to survey error and what can be done to reduce interviewer-attributed error. Since the publication of Herbert Hyman's 1954 text, *Interviewing in Social Research*, there has been increasing and sustained interest in the role of the interviewer in the survey process, and a growing body of literature as well. The authors are strong proponents of the *standardized interview technique*—one of the many types of interviewing methods. Central to the standardized approach is the requirement that questions be read as they are written, nonbiasing probes be utilized for inadequate answers, responses be accurately recorded, and interviewers remain as neutral as possible. Following these guidelines, any differences in the final answer will be attributed to differences among respondents instead of differences in the study methodology. Nine chapters cover standardized survey interviewing techniques; interviewer-related error and its remediation; the establishment of the context for survey interviews; the role of good question design and pretesting; and interviewer selection, training, and supervision. Many of the chapters contain literature reviews which are cumulated into a fifty-one-item list of references at the end of the book.

188. Presser, Stanley, and Shanyang Zhao. "Attributes of Questions and Interviewers as Correlates of Interviewing Performance." *Public Opinion Quarterly* 56, no. 2 (Summer 1992): 236-40.

Four hypotheses formed the basis for the research: (1) the less exposure interviewers have to a question, the less likely the question would be read verbatim; (2) the later a question is asked in the interview, the less likely it would be read verbatim; (3) questions asked as part of a series with the same formats would cause variations from the question text; and (4) interviewers' reading errors would vary depending on their efficiency and experience, and the number of refusals obtained. To test these hypotheses Presser and Shanyang used two trained students to monitor seventy-nine telephone interviews. The statewide random-digit-dialed survey was conducted by forty interviewers at the Maryland Survey Research Center. The ninety-four survey questions were coded as "no change in wording," "minor change," or "major change," according to the degree of departure from the intended wording. The analysis indicates that more than 91 percent of the 5,619 monitored questions had been read verbatim. The most frequent errors (8.2 percent) occurred in the "minor change" category, with only a few (0.2 percent) read with major changes. Shorter question formats were associated with improved accuracy. However, accuracy was unaffected by an item's placement in the questionnaire, the frequency

with which the question was asked, interviewer efficiency and experience, or refusal rate. There was a fairly constant tendency of novice interviewers to make reading errors across interviews, but for experienced interviewers, error was interview-specific. The authors suggest that it is possible that centralized telephone interviewing produces less variation in question wording than face-to-face interviewing. (3 footnotes, 8 references)

INTERVIEWER-RESPONDENT INTERACTION

189. Catania, Joseph A. "A Model for Investigating Respondent-Interviewer Relationships in Sexual Surveys." In *Researching Sexual Behavior: Methodological Issues*, edited by John Bancroft, 417-35. The Kinsey Institute Series, vol. 5, edited by John Bancroft. Bloomington, [IN]: Indiana University Press, 1997. 461p.

The theoretical framework presented, called the *interviewer-respondent interaction model*, brings together a variety of models and factors that may contribute to the understanding of the "somewhat unusual, interpersonal relationship" that exists between interviewer and respondent, with the goal of reducing item nonresponse in sex research surveys—those that deal with highly emotional and sensitive topics. With this model, the interviewer and respondent have a "dynamic, bidirectional relationship" which is part of a broader contextual framework composed of the investigator's reason(s) for conducting the survey; the topic(s) being studied; the wording and context of questions; the interviewer; and the respondent, including recruitment procedures, motives for participation or nonparticipation, and difficulties experienced during the interviewing process. Catania discusses the variables that may impact the relationship and describes some new procedures designed to help minimize nonresponse bias. Two other issues influencing interviewer-respondent interaction are demographic characteristics and gender-role stereotypes. The author observes that research in the field of sexological surveys is continuing "at a pace that is somewhat unprecedented historically" (p. 432). The role of replication studies is discussed. (28 references)

190. Coit, Mary Van Norman. "An Interactional Sociolinguistic Approach to the Telephone Survey Interview as a Speech Event." Ph.D. diss., Georgetown University, 1996. 308 leaves. [*Dissertation Abstracts International* Order No. DA9706695; *DAI* 57A, no. 9 (March 1997): 3913.]

Coit investigates the issue of whether telephone survey interviewing is an appropriate format for gathering data which can be used to estimate statistics. By considering fourteen interviews in depth, the author examines the interview as speech, and thereby describes the "norms of this event." The survey interview is defined as a "co-constructed, task oriented speech event" that can provide data that suggest trends rather than exact percentages. An earlier study is cited which states that questions or a set of questions "can not [*sic*] be used to assess

preferences in an absolute sense" (p. 14). In subsequent chapters each aspect of the interview process is discussed, beginning with how the interviewer reads the question and "diverges" from the script. Respondent replies are considered next, followed by interviewer reaction to the responses. Requests for clarification are addressed, the rhythm of turn taking and associated issues are discussed, and roles, relationships, and goals of the interview environment are outlined. Coit observes that throughout the interviews analyzed, questions were asked which did not match those on the written questionnaire, and responses were recorded that did not correspond to the questions asked. On the part of the interviewer, this concept is known as "referring the question," and, on the part of the respondent, "referring the answer." The author perceives the interviewer to be a co-participant, meaning that the responses cannot be viewed as "the true value" of the respondent, but rather as co-constructed with the interviewer. (270 references)

191. Cradock, Robert M., Douglas Maynard, and Nora Cate Schaeffer. *Re-Opening Closed Questions: Respondents' Elaborations on Categorical Answers in Standardized Interviews*. CDE Working Paper 93-24. Madison, WI: University of Wisconsin-Madison, Center for Demography and Ecology, 1993. 13p.

Several examples demonstrate the tendency of some respondents to produce "talk" (one of the offered fixed-choice answers for some of the questions presented) and then proceed to engage in further conversation following that answer. The authors focus on the consequences of such an interchange on survey results. The data used came from audiotapes of telephone interviews emanating from two sources: twenty-four pretests of the labor force participation questions in the Current Population Survey, and fifteen interviews conducted by the Letters and Science Survey Center at the University of Wisconsin, the latter concerning taxes, government, the economy, and so forth. Each interview was analyzed for occurrences of post-answer elaborations without interviewer prompting. This "extra" talk took the form of expressions of uncertainty, asking the interviewer's opinion or acknowledgment of the answer, or commenting on the answer, thereby providing more information than the respondent's initial answers contained. Problems involved in recording and coding these types of responses and the impact on the subsequent course of the interview are considered. The authors are of the view that it is not possible to assess the effect of elaborations on data validity and reliability.

192. Holstein, James A., and Jaber F. Gubrium. *The Active Interview*. A Sage University Paper. Qualitative Research Methods Series, vol. 37. Thousand Oaks, CA: 1995. 84p.

The authors advocate the use of the *active interview*, a technique that considers the interviewer and the respondent as equal partners in constructing meaning from an interview event. The goal of the approach is to provide "an environment conducive to the production of the range and complexity of meanings that address relevant issues, and not be confined by predetermined agendas" (p. 17). The active

interview is compared and contrasted to the traditional or conventional interview in which respondents are perceived as “passive vessels of answers,” that is, repositories of facts and the related details of experience. Although methodologically sophisticated, the traditional interview fails to answer the question, “Where does this knowledge come from and how is it derived?” Holstein and Gubrium propose an environment in which “researchers acknowledge interviewers’ and respondents’ constitutive contributions and conscientiously incorporate them into the production and analysis of interview data” (p. 4). Using a theoretical approach, rather than a pedagogical one, the authors focus on how the “meaning-making” process develops during an interview, rather than on an inventory of methods or formulas for conducting them. The active interview is discussed in terms of (1) respondent selection; (2) the resources (“stocks of knowledge”) from which answers are formulated; (3) its role in setting parameters and shaping exchanges with the respondent; (4) the establishment of meaning through collaboratively constructing interview narratives; (5) the involvement of others (for example, spouses and caregivers); and (6) how some of the traditional interview procedures are “rethought” in relation to the active interview. (92 references)

193. Schaeffer, Nora Cate. “Conversation with a Purpose—Or Conversation? Interaction in the Standardized Interview.” Chap. 19 in *Measurement Errors in Surveys*, edited by Paul P. Biemer, Robert M. Groves, Lars E. Lyberg, Nancy A. Mathiowetz, and Seymour Sudman, 367-91. Wiley Series in Probability and Mathematical Statistics, Applied Probability and Statistics. A Wiley-Interscience Publication. New York, NY: John Wiley & Sons, 1991. 760p.

The interaction of three components—interviewer, respondent, and questionnaire—shape the interview and its resulting data. Schaeffer proposes a framework for investigating and evaluating the combined effects of this interaction, discussing the case for and against the standardized interview and how it differs from a “conversation.” Three models (structural, social-psychological, and cognitive) used by survey researchers to examine issues related to interaction are reviewed, with their major features noted. Literature is cited concerning interviewer coding behavior and how the data produced presents difficult statistical and methodological challenges. The author draws on research from beyond the survey tradition to consider context of interaction concepts, interaction as a “medium of comprehension,” and interaction research for the study of the survey interview. Schaeffer supports the view that the characteristics of survey questions, as well as the responses obtained, affect interaction. The discussion concludes with comments on how respondents agree or disagree with survey questions; the intricacies of “talk”; the importance of analytical studies of conversation; and the ways in which the concepts of repair, tokens, and laughter impact the interviewing process. There are 822 cumulated references on pages 687-733.

194. Schaeffer, Nora Cate, Douglas W. Maynard, and Robert Cradock. *Negotiating Certainty: Uncertainty Proposals and Their Disposal in*

Standardized Survey Interviews. CDE Working Paper 93-25. Madison, WI: University of Wisconsin-Madison, Center for Demography and Ecology, 1993. 14 pages plus 18 unnumbered pages.

This initial analysis of in-progress research focuses on respondents' displays of uncertainty when they attempt to answer survey questions. Whether or not a respondent displays this characteristic is attributed to three factors: the question being asked, the respondent's own store of information and understanding, and the enactment of the "interactional substrate" during the interview. Respondents' uncertainties are seen to be mutual and interactive, with the tentativeness used to invite collaboration with the interviewer while the response is being formulated. The interviewer may regard the respondent's "talk" as an adequate response and proceed with the next question, or the collaboration may take an extended form, occurring over several turns. The data analyzed were derived from tape recordings of twenty-four telephone interviews conducted by Census Bureau interviewers for a pretest of redesigned labor force participation questions for the Current Population Survey. *Conversational analysis* of the transcripts was the method utilized to examine the structure of the interviewer-respondent interaction. Implications of respondents' uncertainty for interviewers and question design are addressed. (25 references)

195. Schaeffer, Nora Cate, and Douglas W. Maynard. "From Paradigm to Prototype and Back Again: Interactive Aspects of Cognitive Processing in Standardized Survey Interviews." Chap. 4 in *Answering Questions: Methodology for Determining Cognitive and Communicative Processes in Survey Research*, edited by Norbert Schwarz and Seymour Sudman, 65-88. San Francisco, CA: Jossey-Bass Publishers, 1996. 469p.

Joint cognitive processing is defined as "the collaborative process of producing, understanding, and answering a question" (p. 82). Schaeffer and Maynard's research focuses on the interaction between interviewers and respondents, with the premise that an interview is more than just a sum of the behaviors of the participants, and that an understanding of the process can be obtained through a *conversational analysis* of the interactions occurring in the survey interview. This analysis provides a theory "about how interactional sequencing makes utterances and associated interactional objects understandable" (p. 70). The authors use a factual question—"Is this business or organization mainly manufacturing, retail trade, wholesale trade, or something else?"—to illustrate the various ways that respondents deal with the ambiguous portion of the question—that is, "something else." The data analyzed were derived from tape recordings of twenty-four computer-assisted telephone interviews conducted by Bureau of the Census interviewers for a test of the redesigned labor force participation questions for the Current Population Survey. The findings suggest that respondents employed a variety of techniques when attempting to answer the question: some respondents asked the interviewer for clarification; some did not request further clarification; others provided information they thought was relevant, trusting the interviewer to

select the correct answer; and one respondent thought “something else” required her/him to supply a new category. Interviewers can shape responses by customizing the questionnaire, engaging in verification protocols, and omitting questions. The authors believe conversational analysis can help identify ambiguous questions as well as assist interviewers in knowing how and when they should deviate from the standardized questionnaire. (11 endnotes) There are 534 cumulated references on pages 403-41.

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Interviewing

COGNITIVE

196. DeMaio, Theresa J., and Jennifer M. Rothgeb. "Cognitive Interviewing Techniques: In the Lab and in the Field." Chap. 8 in *Answering Questions: Methodology for Determining Cognitive and Communicative Processes in Survey Research*, edited by Norbert Schwarz and Seymour Sudman, 177-95. San Francisco, CA: Jossey-Bass Publishers, 1996. 469p.

DeMaio and Rothgeb describe two methods, *cognitive laboratory interviews* and *respondent debriefings*, utilized by the Census Bureau to test and improve questionnaires. (The authors are social science statisticians at the bureau.) Cognitive laboratory interviews are conducted with small numbers of respondents, feature concurrent and retrospective verbal protocols, are fairly unstructured and flexible, and are intended to identify weaknesses in the questionnaire (such as ambiguous or awkward wording), variability in respondents' interpretations, inadequate or unnecessary response categories, and the need for "screener" questions. Upon completion, the bureau supplements the interviews with pilot tests and debriefings, that is, the follow-up questions in a field test interview that are used to determine if respondents understand and interpret questions in the manner intended by the survey designers. Unlike laboratory interviews, debriefings are structured, conducted on a larger scale, and produce more generalizable results. Debriefing interviews may include open-ended or closed-ended questions, vignettes, and direct probes. The authors regard the techniques as complementary for generating information on cognitive processes. There are 534 cumulated references on pages 403-41.

197. Means, Barbara, Gary E. Swan, Jared B. Jobe, and James L. Esposito. "An Alternative Approach to Obtaining Personal History Data." Chap. 10 in

Measurement Errors in Surveys, edited by Paul P. Biemer, Robert M. Groves, Lars E. Lyberg, Nancy A. Mathiowetz, and Seymour Sudman, 167-83. Wiley Series in Probability and Mathematical Statistics, Applied Probability and Statistics. A Wiley-Interscience Publication. New York, NY: John Wiley & Sons, 1991. 760p.

An experimental, cognitive psychology-inspired approach for obtaining personal history data is described, with the goal of helping respondents establish a context for recalling past events (in this case, smoking cessation). The challenges and failings of traditional methods are reviewed, particularly the demands placed on the respondent's autobiographical memory. With the alternative interviewing method, questions are ordered in such a way as to be compatible with the respondent's memory retrieval processes. Unlike the standard interviewing environment, the respondent is asked first about *why* s/he did something, then *how* they did it, the *result* of the action, and *when* the event occurred. Additionally, open-ended responses are sought first, and then followed by individual probes or options. In 1982-83, SRI International conducted a study of smoking behavior and relapse. Seventy-six of the study participants served as subjects for the 1988-90 alternative methods investigation. The respondents were divided into two groups and administered face-to-face interviews. Varying question formats were presented. These results were compared with data produced from the 1982-83 SRI study. The findings indicate that the experimental technique appeared highly effective in assisting respondents to accurately date past events. Experimental group respondents provided more accurate histories for the period following the stop-smoking program, selected a smaller number of options concerning the reasons for trying to stop smoking, and tended to remember less salient events more accurately. However, in some ways the two methods produced similar results. The authors believe the approach merits further investigation. There are 822 cumulated references on pages 687-733.

198. Willis, Gordon B. *Cognitive Interviewing and Questionnaire Design: A Training Manual*. Cognitive Methods Staff Working Paper Series, no. 7. [Hyattsville, MD]: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Health Statistics, 1994. 56p.

Willis describes and discusses the cognitive interviewing techniques applied to questionnaire development and testing performed by the staff of the Questionnaire Design Research Laboratory (QDRL), Centers for Disease Control and Prevention, National Center for Health Statistics (NCHS). Although NCHS questionnaires are typically reserved for large-scale household surveys, information is provided on their modification and adaptation for smaller-scale projects. The goal is the reduction of response error attributed to the survey instrument. Cognitive interviewing procedures focus on the mental processes (such as comprehension, recall, and decision making) that respondents employ to formulate their answers to survey questions (in the case of the QDRL, paid

volunteer subjects are recruited). Two such techniques discussed are “think-aloud” protocols and interviewer probing. The activities of the QDRL laboratory are reviewed, as well as the limitations and criticisms of this approach to questionnaire development. (17 references)

199. Willis, Gordon B. “The Use of the Psychological Laboratory to Study Sensitive Survey Topics.” In *The Validity of Self-Reported Drug Use: Improving the Accuracy of Survey Estimates*, edited by Lana Harrison and Arthur Hughes, 416-38. NIDA Research Monograph 167; NIH Publication No. 97-4147. Rockville, MD: U.S. Department of Health and Human Services, National Institutes of Health, National Institute on Drug Abuse, Division of Epidemiology and Prevention Research, 1997. 508p.[SuDocHE20.3965.167]

The cognitive interviewing techniques currently used to examine sensitive survey topics such as drug use, reproductive behavior, and drinking habits are categorized and described. Willis distinguishes between cognitive laboratory research and field experimentation by observing that the former is carried out as an explicit psychological experiment in the laboratory setting, is usually small in scale and qualitative in nature, and has different goals. In an attempt to gain an understanding of how sensitive questions are perceived by the respondent, approaches that feature cognitive procedures usually involve either focus group discussions, or the cognitive interviewing of individuals. The establishment of psychological laboratories has been, in part, a response to inconsistent findings in field surveys. The author reviews the literature on the topic and presents a number of hypotheses to be considered by survey methodologists. Based on this analysis and review, several recommendations are made concerning specific aspects of survey design. These include selecting open-ended question formats, shortening the survey instrument, and limiting the complexity of the concepts presented. (53 references)

200. Willis, Gordon B., Theresa J. DeMaio, and Brian Harris-Kojetin. “Is the Bandwagon Headed to the Methodological Promised Land? Evaluating the Validity of Cognitive Interviewing Techniques.” Chap. 9 in *Cognition and Survey Research*, edited by Monroe G. Sirken, Douglas J. Herrmann, Susan Schechter, Norbert Schwarz, Judith M. Tanur, and Roger Tourangeau, 133-53. Wiley Series in Probability and Statistics, Survey Methodology Section, edited by Robert M. Groves, Graham Kalton, J.N.K. Rao, Norbert Schwarz, and Christopher Skinner. A Wiley-Interscience Publication. New York, NY: John Wiley & Sons, 1999. 395p.

Two goals of the cognitive aspects of survey methodology (CASM) movement are to gain an understanding of the sources of response error in survey questions and to devise strategies to reduce this error. The authors believe that, over the past fifteen years, two differing perspectives on how to accomplish these goals have developed. The first focuses on the establishment of general cognitive

principles; the second emphasizes the pretesting of survey questions and questionnaires, primarily in cognitive laboratories, with researchers relying on procedures known as cognitive interviewing techniques. Such approaches as applied by survey researchers are defined and evaluated. The discussion turns to two issues: Is cognitive interviewing effective in identifying flawed questions, and does the application of these techniques result in improved questions? Suggestions are offered for evaluating the validity of cognitive interviewing, namely, developing criteria (including independent measures) for assessing question quality. Three forms of evaluation are described: *content validation*, *criterion validation*, and *construct validation*. Cognitive interviewing is compared with other pretesting techniques such as expert review and behavioral coding, with the authors documenting the complexities involved with method comparisons. Survey researchers are urged to reduce the disparities between the “assembly-line” process of pretesting questionnaires and the more general search for understanding cognitive processes. (2 footnotes, 68 references)

CONFIDENTIALITY

201. Katz, James E., and Annette R. Tassone. “Public Opinion Trends: Privacy and Information Technology.” *Public Opinion Quarterly* 54, no. 1 (Spring 1990): 124-43.

In attempting to address the issue of whether public concern over privacy has increased, Katz and Tassone refer to data collected through 1983 by William H. Dutton and Robert G. Meadow [“A Tolerance for Surveillance: American Public Opinion Concerning Privacy and Civil Liberties.” In *Government Infrastructures*, edited by Karen B. Levitan, 147-70. New York, NY: Greenwood Press, 1987. 320p.], who concluded that public opinion toward privacy has remained stable since 1974. However, more recent poll results suggest that privacy concerns have risen in the mid to late 1980s. For the present trend study, data were analyzed from six survey organizations: Cambridge Reports, Incorporated; the Gallup Organization; Harris; Maritz Marketing Research, Incorporated; the National Opinion Research Center; and the Roper Center for Public Opinion Research. The research findings indicate the following: (1) although valued, most Americans will not sacrifice to protect their privacy; (2) a modest and often conflicting amount of evidence suggests more concern about privacy in the 1980s; (3) privacy loss will become a larger problem in the future; (4) proportionally more people believe that they give up their privacy to participate in a consumer society, and that they are the subjects of computer files; (5) a substantial percentage of the public is refusing to divulge complete personal information; (6) more Americans support particular laws to protect privacy, but public support for major governmental action has decreased; (7) the manner in which an issue is presented consistently influences the response; (8) telephone privacy is viewed as a “highly regarded right”—one that should be strongly protected;

and (9) the public has a basic disapproval of wiretapping and surveillance. (3 footnotes, 9 references)

202. Singer, Eleanor, Dawn R. Von Thurn, and Esther R. Miller. "Confidentiality Assurances and Response: A Quantitative Review of the Experimental Literature." *Public Opinion Quarterly* 59, no. 1 (Spring 1995): 66-77.

Two hypotheses were tested: a general one that assumes confidentiality assurances increase or improve survey response, and a subsidiary one that links confidentiality assurances to improved response rates in cases involving sensitive data. The authors, through various literature search procedures, retrieved 113 research reports, thirty of which were germane to the central hypothesis. The thirty reports yielded sixty-four tests of hypotheses: 82.8 percent were from journal articles, 11 percent originated from unpublished reports, and 6.3 percent came from book sources. Nearly half (48.4 percent) were based on laboratory experiments, while 51.6 percent were carried out under field conditions. Response rates, when provided, ranged from 32 percent to 100 percent. Only 37.5 percent of the tests were based on probability samples, with the rest representing convenience samples (51.6 percent) and quota or purposive samples (10.9 percent). A metaanalysis of the empirical studies linking confidentiality and response revealed no support for the general hypothesis. However, when the questions asked were of a sensitive nature, confidentiality assurances improved response rates at a small but statistically significant level, an effect described as "robust" in the presence of various control variables. The authors conclude that confidentiality assurances produce "negligibly small negative effects," and even when the questions are sensitive the effect is not large. Two untested variables may be respondents' evaluation of sensitive material and their degree of trust in the assurances offered. Appendix A contains the hypotheses and frequency counts; Appendix B lists the research reports analyzed. The reports range in date from 1975 to 1992. (10 footnotes, 9 references)

CONVERSATIONAL

203. Schober, Michael F. "Making Sense of Questions: An Interactional Approach." Chap. 6 in *Cognition and Survey Research*, edited by Monroe G. Sirken, Douglas J. Herrmann, Susan Schechter, Norbert Schwarz, Judith M. Tanur, and Roger Tourangeau, 77-93. Wiley Series in Probability and Statistics, Survey Methodology Section, edited by Robert M. Groves, Graham Kalton, J.N.K. Rao, Norbert Schwarz, and Christopher Skinner. A Wiley-Interscience Publication. New York, NY: John Wiley & Sons, 1999. 395p.

Schober believes that, in addition to individual cognitive processes, respondents engage in certain interactive processes to determine the meaning of questions. For example, respondents make inferences about the interviewer's intentions and

rely on the interviewer to assist in interpreting questionnaire items in subsequent dialogue. Two interactive processes are discussed: *audience design* (in which the wording and framing of questions is based on knowledge, beliefs, and assumptions that both conversational participants share), and *grounding procedures* (in which the respondent can have her/his understanding of the question validated). Schober compares and contrasts the operation of these processes in two different settings—natural conversation and the standardized survey interview. Most notably, in standardized surveys conversation is restricted, respondents can expect only some interviewer assistance to clarify problematic questions, and interviewers and respondents cannot interact to resolve misunderstandings. In the author's view the "scripted" nature of the standardized survey interview inhibits the processes that contribute to meaningful conversation. (45 references)

204. Schober, Michael F., and Frederick G. Conrad. "Does Conversational Interviewing Reduce Survey Measurement Error?" *Public Opinion Quarterly* 61, no. 4 (Winter 1997): 576-602.

The arguments for and against *standardized interviewing* versus *conversationally flexible interviewing* approaches are reviewed. Schober and Conrad hypothesized that standardized interviewing should produce accurate results when respondents completely understand how concepts in a question "map" onto their life circumstances in a straightforward manner. Flexible interviewing, on the other hand, should produce higher response accuracy when respondents are unsure about these mappings and receive interviewer assistance when necessary. Forty-three study participants received either standardized or flexible interviews. A \$25 incentive was offered via the *Washington Post*. Twenty-two Census Bureau interviewers in Hagerstown, Maryland, telephoned the respondents once the respondents had arrived at the Bureau of Labor Statistics laboratory. Twelve pretested questions were asked using fictional scenarios, or fictional descriptions. The questions were drawn from three large government surveys and dealt with issues of employment, housing, and retail purchases. Two versions of each scenario were presented: a straightforward one and one less clear. Both techniques produced highly accurate responses when the concepts in the questions clearly mapped onto the fictional situations. However, flexible interviewing produced nearly 60 percent greater accuracy when the mapping was complicated. This was true whether respondents in the flexible group asked for interviewer assistance or assistance was volunteered. The flexible interviews proved to be quite costly due to their longer length. The authors conclude that mapping is a potential source of measurement error for any question, and different interviewing techniques may be appropriate for different circumstances. Two appendixes provide the questions and definitions of key concepts, and instructions to respondents. (9 footnotes, 43 references)

205. Suchman, Lucy, and Brigitte Jordan. "Interactional Troubles in Face-to-Face Survey Interviews." *Journal of the American Statistical Association* 85, no. 409 (March 1990): 232-41.

The interview is described as a standardized data collection technique employing a questionnaire. Suchman and Jordan, both anthropologists, write from the point of view that the interview is an essentially “interactional event,” relying on many conventions and resources from ordinary conversation. The authors also believe that the concern with standardization methods, and the error they attempt to reduce, impose “constraints” on the survey interview, thereby suppressing crucial elements of ordinary conversation. To support these views, videotapes were analyzed of five facsimile interviews—three using the General Social Survey (GSS) questionnaire and two based on the National Health Interview Survey (NHIS) survey instrument. The videotapes were made for research purposes in conjunction with the Seminar on Cognitive Aspects of Survey Methodology. Volunteer respondents were interviewed face-to-face by Census Bureau interviewers. Four points form the basis for the research: (1) there is “unresolved tension” between the survey interview as an interactional event and as a neutral measurement instrument; (2) relevant questions cannot always be determined in advance of the interview, and it cannot be assumed that even though questions are read correctly, that they will be understood in the manner intended by the researcher; (3) topics arising from outside a conversation “run the risk of irrelevance”; and (4) the survey interview “suppresses those interactional resources that routinely mediate uncertainties of relevance and interpretation” (p. 232). These areas, among others, are discussed in terms of question design, the quality of the answers generated, and the validity of the survey data produced. Suchman and Jordan conclude that “the standardized interview question has become such a fragile, technical object that it is no longer viable in the real world of interaction (p. 241). Suggestions are offered to survey researchers for remediating this problem. (10 references) Five responses to Suchman and Jordan’s article follow the text (pp. 241-51): Stephen E. Fienberg; Robert A. Hahn; Mary Grace Kovar and Patricia Royston; Emanuel A. Schegloff; and Roger Tourangeau. Suchman and Jordan offer a rejoinder (pp. 252-53).

206. Suchman, Lucy, and Brigitte Jordan. “Validity and the Collaborative Construction of Meaning in Face-to-Face Surveys.” Chap. 12 in *Questions about Questions: Inquiries into the Cognitive Bases of Surveys*, edited by Judith M. Tanur, 241-67. New York, NY: Russell Sage Foundation, 1992. 306p.

Data from five videotaped face-to-face interviews (three used the General Social Survey questionnaire and two the National Health Interview Survey questionnaire) were the basis for the analysis. (The videotapes were made for research purposes.) The summary finding is that the validity of survey data is “undermined by the same prohibition against interaction that is intended to ensure reliability” (p. 242). The rigid standardization imposed on the survey interview by researchers in search of accurate data may, in fact, violate the usual patterns of conversational behavior, thereby reducing validity. Suchman and Jordan recommend a collaborative technique—one that would not introduce bias—but would permit the kinds of interactional exchanges between interviewers and respondents necessary to

guarantee standardized interpretations. Considerable discussion is devoted to the distinctions between the interview environment and ordinary conversation, with more differences than similarities noted. The collaborative model proposed is based on the premise that the interview, no matter how standardized, remains fundamentally an interactional event. Questions should be clearly worded, and interviewers should be allowed to assume an active role, when necessary, in clarifying ambiguous meanings. The production of valid data rests on cooperation among all participants—the interviewer, the respondent, the coder, and the analyst. Interviewers, in particular, “rather than administering a set of questions designed by a third party whose intentions they do not know and for which they are not prepared to take responsibility, might then see the work of data collection as an enterprise for which they have some appreciation and about which they have something to say” (p. 266). (8 footnotes, 18 references)

ETHNOGRAPHIC

207. Freidenberg, Judith, Michael Mulvihill, and Louis R. Caraballo. “From Ethnography to Survey: Some Methodological Issues in Research on Health Seeking in East Harlem.” *Human Organization* 52, no. 2 (Summer 1993): 151-61.

The integration of two data collection methods—qualitative ethnography and survey research—is investigated, with the goal of producing a culturally sensitive research instrument capable of assessing respondents’ health-seeking behaviors. The authors discuss the similarities and differences between the two approaches, noting that, traditionally, ethnographic methods have been applied only in the initial stages of the total survey process. A three-stage strategy is reported that consisted of developing an instrument based on ethnographic fieldwork, validating the instrument ethnographically, and testing its cultural sensitivity by analyzing the congruence of data produced by the two methods. The study participants were forty-eight poor, elderly, Hispanic men and women recruited from, among other sources, hospital clinics, senior citizen centers, and private physicians’ offices in East Harlem, New York City. Data collection involved a variety of techniques: field observation, participant observation, direct interviewing (in Spanish), and fourteen specifically designed vignettes depicting various health problems. In comparing the two datasets, one based on structured interviews and the other on ethnographic fieldwork, three categories of healthcare systems were identified: the professional medical, the “folk” (such as a “spiritist” or card reader), and the popular (such as special teas, medicinal herbs, prayer, and candles). The collection mode was found to impact the data elicited—both the healthcare systems and their order of preference. The degree of concordance between the methods was quite variable. Vignettes were found to be an appropriate technique for capturing the utilization of the popular system. A combination of ethnographic and survey research methodologies is advocated. (12 endnotes, 39 references)

208. Gerber, Eleanor R. "The View from Anthropology: Ethnography and the Cognitive Interview." Chap. 14 in *Cognition and Survey Research*, edited by Monroe G. Sirken, Douglas J. Herrmann, Susan Schechter, Norbert Schwarz, Judith M. Tanur, and Roger Tourangeau, 217-34. Wiley Series in Probability and Statistics, Survey Methodology Section, edited by Robert M. Groves, Graham Kalton, J.N.K. Rao, Norbert Schwarz, and Christopher Skinner. A Wiley-Interscience Publication. New York, NY: John Wiley & Sons, 1999. 395p.

The contributions of cognitive anthropological methods to the field of survey research are explored, specifically those appropriate for pretesting questionnaires, conducting interviews, and analyzing survey responses. Such methods are designed to produce descriptions of culture or groups of people, with the written descriptions of the process of data acquisition referred to *ethnography*. The term is used here to describe in-depth, unstructured, and informal interviewing. Gerber maintains that evaluating survey responses "requires an understanding of the context of beliefs and social knowledge within which survey responses are located" (p. 217). A search of the literature retrieved 126 citations, primarily to journal articles, whose content involved the use of both survey methodology and ethnography. Of the total, there were fifty-one papers in medicine and forty-eight in education; forty-nine studies had been carried out in foreign countries. The ways in which ethnography contributes to the cognitive interviewing process are described, with the author noting the problems inherent when blending two quite different question-asking strategies. The concept of *schemas*, in contrast to sets of terms, as an important function of cognitive anthropology is discussed, as are the consequences of the concept for the manner in which survey questions are written and pretested. (2 footnotes, 23 references)

HISTORY

209. Fontana, Andrea, and James H. Frey. "Interviewing: The Art of Science." Chap. 22 in *Handbook of Qualitative Research*, edited by Norman K. Denzin and Yvonna S. Lincoln, 361-76. Thousand Oaks, CA: Sage Publications, 1994. 643p.

The history of interview methodology applications to social science research is briefly reviewed, including both its qualitative and quantitative origins. Fontana and Frey trace the development of the interview through many centuries, but focus on the origination of scientific opinion polling in 1935 with the founding of George Gallup's American Institute of Public Opinion. Another increase in survey research occurred during World War II, when great numbers of sociologists were hired as survey researchers. The contributions of Paul Lazarsfeld, Robert Merton, Harry Field, and Rensis Likert are acknowledged. Survey research grew rapidly in universities in the 1950s and continued its dominance over sociology from the 1970s into the 1990s when other methods

began to erode its prominence. The interview is discussed in terms of three major forms: structured (in which the interviewer asks the respondent a series of preestablished questions having a limited number of response categories); group; and unstructured (primarily the open-ended, ethnographic, in-depth interview). (109 references)

INCENTIVES

210. Caspar, Rachel A. "Follow-Up of Nonrespondents in 1990." Chap. 6 in *Survey Measurement of Drug Use: Methodological Studies*, edited by Charles F. Turner, Judith T. Lessler, and Joseph C. Gfroerer, 155-73. DHHS Publication no. (ADM) 92-1929. Washington, DC: U.S. Department of Health and Human Services, Public Health Service, Alcohol, Drug Abuse, and Mental Health Administration, 1992. 413p. [SuDocHE20.8002:S7/2]

The nonrespondents investigated were those who failed to participate in the 1990 National Household Survey on Drug Abuse (NHSDA), the nation's primary survey for monitoring drug use. The overall nonresponse rate was 18 percent for that year. In order to assess the impact of the nonresponse on the quality of the data obtained, Caspar conducted a study with a subset of 426 NHSDA nonrespondents residing in the Washington, D.C., metropolitan area. The group included refusals; parental refusals for 12- to 17-year-olds; cases in which no one was at home after repeated visits; and potential respondents who remained unavailable after repeated visits. To encourage participation in the follow-up, an incentive of \$10 was offered, and a significantly shortened questionnaire was designed. Nine former NHSDA interviewers administered the instrument. The findings indicate an overall response rate of only 38 percent. The demographic characteristics of the follow-up subset were quite similar to those of NHSDA respondents. All interviewers felt the monetary payment was helpful, but perceived the shortened questionnaire to be less persuasive in encouraging participation. The author concludes that the results presented do not completely demonstrate either the presence or absence of a serious nonresponse bias in the 1990 NHSDA. (11 footnotes)

211. Jackson, Aurora P., and André Ivanoff. "Reduction of Low Response Rates in Interview Surveys of Poor African-American Families." *Journal of Social Service Research* 25, nos. 1-2 (1999): 41-60.

A framework is presented for increasing response rates when surveying poor African-American families headed by women with young children. For such economically deprived minority families, participation in research is particularly "burdensome and of low priority." Jackson and Ivanoff emphasize the critical role of the interviewer who must establish trust and credibility with the target population. The element of giving, that is, addressing respondents' perceptions

that they will receive something from the encounter, can alleviate emotional distress. Gifts of cash demonstrate the credibility of the interviewer and help respondents feel a direct benefit for participating. Additional persuasion and motivation techniques are discussed. The authors describe how data were obtained for a study of 300 single African-American mothers (there were 188 in the final sample) and their preschoolers who received welfare benefits, and with former recipients employed in low-wage jobs in New York City. The data were gathered for the first wave of a three-year longitudinal study. Following an initial telephone call, face-to-face interviews were conducted by Jackson, an African American. A \$25 incentive was offered to those who chose to cooperate. The importance of the mothers' participation and the goals of the research were emphasized. Response rates were increased by implementing the strategies outlined. In 71 percent of cases the researchers were successful in offsetting respondents' objections to being interviewed. (49 references)

212. Singer, Eleanor, John Van Hoewyk, and Mary P. Maher. "Does the Payment of Incentives Create Expectation Effects?" *Public Opinion Quarterly* 62, no. 2 (Summer 1998): 152-64.

Central to the research are the possible unintended consequences of the increasingly common practice of offering some form of payment to respondents for survey participation. Several concerns are raised by this practice: (1) incentives create a precedent for future payment expectations; (2) response quality can be compromised due to the substitution of external for internal motivation; and (3) the use of incentives to convert refusals will be perceived as unfair by those who willingly choose to participate. In 1995, the Survey Research Center at the University of Michigan added five evaluative questions to the Survey of Consumer Attitudes, an ongoing, national telephone survey conducted monthly with about 500 respondents, of which 300 are newly selected random-digit-dialed households and 200 are reinterviews of respondents first interviewed six months earlier. It was found that the participants who had previously received a monetary incentive were much more likely to agree with the statement that "people should be paid for doing surveys like this." In addition, these respondents were more likely to participate in a subsequent survey—even if they received no additional payment. Respondents who received an incentive six months earlier were no more likely than those who received no incentive to refuse to answer (or to provide a "don't know" response) to eighteen survey items. They also expressed more favorable attitudes toward the general usefulness of surveys. (6 footnotes, 17 references)

213. Singer, Eleanor, Robert M. Groves, and Amy D. Corning. "Differential Incentives: Beliefs about Practices, Perceptions of Equity, and Effects on Survey Participation." *Public Opinion Quarterly* 63, no. 2 (Summer 1999): 251-60.

The Detroit Area Study (DAS), a survey established over forty years ago by the University of Michigan, served as the basis for the research. Although the foci

of the 1996 DAS were interracial contacts and attitudes, it also was designed to allow the investigation of hypotheses concerning respondents' feelings toward the payment of incentives to encourage participation. The authors consider an unintended consequence of such a practice—specifically, whether the use of incentives to convert refusals will be perceived as inequitable by respondents who choose to cooperate without an incentive. Face-to-face interviews were conducted with an area probability sample of 451 households, yielding a response rate of 66 percent. The research design involved four groups of respondents: those who had not been offered an incentive but nevertheless granted an interview; those who had granted an interview after receiving \$5; those who had given an interview after receiving \$25; and those who consented after receiving \$30. It was the opinion of most of the respondents that survey organizations currently use incentives to encourage participation, a belief affected by personal experiences. Some respondents thought that there were unequal payment distributions, while others felt the practice was unfair. Past payments were found to have no significant effect on respondents' willingness to participate in future surveys. An appendix provides the question wording for major variables. (8 footnotes, 17 references)

214. Willimack, Diane K., Howard Schuman, Beth-Ellen Pennell, and James M. Lepkowski. "Effects of a Prepaid Nonmonetary Incentive on Response Rates and Response Quality in a Face-to-Face Survey." *Public Opinion Quarterly* 59, no. 1 (Spring 1995): 78-92.

Most published experimental studies on the use of incentives in mail surveys indicate increased response rates. However, the impact of offering cash or gifts in telephone surveys, and especially in face-to-face surveys, is "not well documented." The authors test the effect of a prepaid nonmonetary incentive on both response rate and data quality using the face-to-face interview mode. The incentive presented was a special ballpoint pen imprinted with the words, "The University of Michigan," and bearing the university seal. The pen and a notification letter were sent to a random half sample prior to the interviewer's visit to the home. The sample was derived from the Detroit Area Study (DAS), an annual survey conducted by the University of Michigan. The final count consisted of 1,334 eligible housing units, yielding a response rate of 78.1 percent. The incentive group, as compared to the nonincentive control group, produced a statistically significant increase in response rates, primarily through a reduction in refusals. This effect is attributed to greater cooperation on the part of the incentive respondents at the interviewer's initial visit. A surprising finding was that the incentive group had a significantly higher rate of sample ineligibility due to a variety of factors. The effect of the gift on both response and refusal rates was higher in suburban areas. Data quality was higher in the incentive group, with no evidence of increased measurement error due to the presentation of a gift. An appendix lists the three DAS questions used to measure response completeness. (8 footnotes, 36 references)

INDIRECT

215. Droitcour, Judith, Rachel A. Caspar, Michael L. Hubbard, Teresa L. Parsley, Wendy Visscher, and Trena M. Ezzati. "The Item Count Technique as a Method of Indirect Questioning: A Review of Its Development and a Case Study Application." Chap. 11 in *Measurement Errors in Surveys*, edited by Paul P. Biemer, Robert M. Groves, Lars E. Lyberg, Nancy A. Mathiowetz and Seymour Sudman, 185-210. Wiley Series in Probability and Mathematical Statistics, Applied Probability and Statistics. A Wiley-Interscience Publication. New York, NY: John Wiley & Sons, 1991. 760p.

Obtaining honest answers from respondents is an enduring challenge for survey researchers—especially when the questions asked concern highly sensitive behaviors and issues, such as income, voting, religious beliefs, sexual practices, illicit drug usage, and certain illegal activities. Previous studies indicate consistent underreporting and response distortion for socially disapproved items. The authors review various attempts since 1965 to use indirect survey-based estimation techniques and report on the application of a similar questioning method—the *item count technique*. In contrast to direct questioning, respondents are given a list of items describing various behaviors and asked to report *how many*—not *which ones*—s/he has engaged in. Through the use of double lists (with one list omitting the undesired behavior), and by comparing responses from subsamples, an item count estimate of the socially disapproved behavior is obtained. The technique is discussed in relation to a pilot study and pretest of the National Household Seroprevalence Survey (NHSS), whose primary objective was to estimate HIV prevalence in the population between 18 and 54 years of age in the United States. The pretest involved 1,352 respondents who were interviewed face-to-face in Dallas County, Texas. Cognitive techniques were part of the interviewing protocol. The results indicate that (1) only 30 percent of respondents preferred the item count technique; (2) respondents seemed to understand how to properly answer the item count questions; (3) those respondents most likely to have participated in sensitive behavior, and those answering under less private conditions, preferred the item count technique; (4) better-educated respondents and whites preferred the direct questioning method; (5) males preferred the item count technique; and (6) marital status and age showed no clear relationship with either method. The authors believe that NHSS pretest adaptations “appear to have detracted from the overall simplicity of the technique, and caused greater variance in the prevalence estimates” (p. 206). The issue of non-key items is discussed. There are 822 cumulated references on pages 687-733.

INSTRUCTIONAL MATERIALS

216. Frey, James H., and Sabine Mertens Oishi. *How to Conduct Interviews by Telephone and in Person*. Vol. 4 of *The Survey Kit*, edited by Arlene Fink. Thousand Oaks, CA: Sage Publications, 1995. 170p.

As with other members of the set [Item No. 24], this addition begins with a list of instructional objectives. Frey and Oishi concentrate on two data collection methods: telephone and face-to-face. Interviewing is characterized as “a complex and demanding task”—which, if conducted inadequately, can seriously compromise the validity of the results. Basic concepts such as sample determination, random digit dialing, and area probability sampling are defined and discussed. The pros and cons of each data-gathering technique are outlined. One section covers interviewer effects and the negative impact they may have on respondent replies. The step-by-step guide offers detailed instruction on many phases of questionnaire design and execution: the introductory statement; the contents; question wording and context; the types of questions (split, funnel and inverted funnel); questioning methods; and recall techniques (aided, bounded, and visual aids). The authors also discuss interviewer selection and training, providing numerous examples of a sample job description, a sample table of contents of an interviewer training manual, an interview summary form, and an agenda for interviewer training sessions. Exercises and answers, and a suggested reading list of fifteen briefly annotated titles, are included.

217. U.S. Department of Commerce. Bureau of the Census. *Current Population Survey Interviewing Manual*. 1 vol. CPS-250. [Washington, DC]: U.S. Department of Commerce, Bureau of the Census, January 1994. [SuDocC3.6/2:IN2/5/9940146-A]

The manual consists of five parts (A through E), an index to parts A through D, four appendixes, and an items book presenting all computer interview screens. Part A, “The Current Population Survey” (CPS), covers the purpose of the survey, its background, how the sample is determined, the application of the data collected, and how the interviewer is to initiate, administer, and complete the interview. Since 1940, the Census Bureau has collected information about the number of Americans who are employed, unemployed, or not in the market for employment, as well as demographic data and related facts about hours worked and income earned. The survey, conducted monthly with 71,000 sample units, utilizes face-to-face and telephone interviews and, since 1992, computer-assisted interviewing. In Part B, “Current Population Survey Concepts,” the primary framework and terminology found in the survey are defined. Part C, “The Current Population Survey Instrument,” includes discussions on the questionnaire, how to read and interpret the computer screens, and techniques for entering data. Part D, “The Housing Vacancy Survey,” provides a description of a part of the CPS that collects information on a monthly basis on certain sample units identified as

vacant. Part E contains computer procedures. The appendixes provide additional details on certain classifications.

218. U.S. Department of Health and Human Services. National Center for Health Statistics. *National Health Interview Survey, 1991: Field Representative's Manual*. 1 vol. ICPSR Series No. 6049. Ann Arbor, MI: Inter-University Consortium for Political and Social Research, 1992.

The National Health Interview Survey (HIS), [also referred to as the NHIS], is one part of the National Health Survey. Its purpose is threefold: to gather information concerning the prevalence and incidence of illness; to examine the effects of illness in terms of disability and chronic impairment; and to identify the kind of health services received by the public. Prior to the establishment of these surveys in 1957 (Public Law 652 of the 84th Congress), the last nationwide survey had been conducted in 1935-36. The HIS is based on a sample of the entire civilian noninstitutionalized population of the United States. Annual interviews are conducted with about 50,000 households. The manual is divided into three parts: D, E, and F. Part D, the main body of the work, provides detailed explanations for conducting the HIS interview. Eighteen chapters cover the rules for filling out each of the eighteen items on the questionnaire. Part E, interviewing techniques and administration, deals with the role of the interviewer, including how to initiate the interview, ask the questions, use the telephone, and transmit the interview. Issues regarding confidentiality are also discussed. Part F is an index of the questionnaire terms and concepts found in Part D.

INTRODUCTIONS

219. Couper, Mick P. "Survey Introductions and Data Quality." *Public Opinion Quarterly* 61, no. 2 (Summer 1997): 317-38.

A substantial part of the literature in the field of survey research deals with the effects of respondent-interviewer interaction on the quality of the data produced. Couper's goal, however, was to examine the relationship between what respondents say during the interviewer's introductory request for survey participation, and substantive responses and data quality. Specifically, Couper focuses on the content and quality of the information provided in the completed interview and on what impact features from the introductory conversation might have. The data analyzed came from the 1990 National Election Study (NES) carried out by the Survey Research Center at the University of Michigan. The NES is conducted with face-to-face interviews using a nationally representative sample of 2,806 eligible individuals. The information considered was collected as part of a study on nonresponse. Following initial contact with the respondent, the interviewer completed a series of structured items, providing information on what was said and other details of the introductory interaction. Analysis was based on the 1,997 cases for which contact description data had been obtained.

The results indicate that those who stated they were not interested when the interviewer requested an interview were less likely to participate in the subsequent survey, less likely to provide meaningful answers, differed in their substantive responses when given, and produced higher levels of missing data and “don’t know” responses. Respondents with lower levels of education were more likely to express disinterest in a topic, while higher educated individuals were more likely to say they were “too busy.” A large number of systematic differences were found in the content and quality of answers made during the introductory conversation, leading Couper to conclude that “we ought to pay attention to what is being said by respondents and interviewers during the initial request for an interview” (p.337). The implications of the findings for nonresponse and response error are discussed. (2 footnotes, 33 references)

220. Presser, Stanley, Johnny Blair, and Timothy Triplett. “Survey Sponsorship, Response Rates, and Response Effects.” *Social Science Quarterly* 73, no. 3 (September 1992): 699-702.

The results of prior research suggest that response rates are higher when the survey sponsor is identified as an institution of higher education than as a business, and that there are minimal sponsorship effects on respondent answers. By contrast, the authors found that response rate was unrelated to the sponsor, and there was a definite difference in response distributions on one issue. The Survey Research Center at the University of Maryland conducted a jointly sponsored survey with the *Washington Post* to determine if the newspaper’s polls were affected by the perception that the paper was hostile to Marion Barry, Washington, D.C.’s African-American mayor. The survey took place a few weeks following Barry’s arrest on drug charges. A total of 806 interviews were completed with a random-digit-dialed telephone sample of District of Columbia residents. Three questions followed the introductory sentence which varied the names of the sponsors. The difference in response distributions on the vote intention item is attributed to the *Post’s* clearly stated position and the uncrystallized opinion of many respondents. The impact of race on the outcome is discussed. (2 footnotes, 11 references)

221. Reagan, Joey, Bruce Pinkleton, Dustin Aaronson, and Edward Ramo. “Differentiating Telephone Surveys from Telemarketing to Increase Response Rates.” *Communication Research Reports* 12, no. 2 (Fall 1995): 170-77.

To determine the impact of telemarketing on response rates, an experiment was conducted using the words “I’m not selling anything” in the introductory portion of a telephone survey. In addition, the effects of adding a university affiliation and a reference to long-distance calling were tested. Telephone interviews were conducted with a random-digit-dialed (RDD) sample of 655 individuals residing in the Seattle metropolitan area. Demographic data were also collected, revealing that the total sample was comprised of 58.8 percent females and 41.2

percent males, primarily white, with a median age of thirty-nine. Most of the respondents had had some college education, with 39.6 percent holding a bachelor's degree and 21.8 percent having completed some graduate work. Results indicate that the introduction without additional comments, and the introduction containing only the nonsolicitation statement, had significantly lower response rates than either the introduction containing only a reference to a university affiliation and the introduction containing references to both university affiliation and informing respondents that nothing was being sold. Respondents with lower educational levels and incomes, and minorities, exhibited significantly more favorable attitudes toward telemarketers. The authors conclude that there is little support for adding the "I'm not selling anything" statement. A longer statement, and introductions that clearly differentiate legitimate telephone surveys from sales solicitations should be the topics of future research. (2 endnotes, 22 references)

PROBING

222. Sanchez, Maria Elena, and Giovanna Morchio. "Probing 'Don't Know' Answers: Effects on Survey Estimates and Variable Relationships." *Public Opinion Quarterly* 56, no. 4 (Winter 1992): 454-74.

"Don't know" (DK) responses to survey items are unclear in that these words are perceived by respondents to mean different things, such as ignorance, indecision, or uncertainty about the question being asked. Interviewers frequently are trained to probe DK responses in an attempt to clarify ambiguous replies. In order to evaluate the impact of interviewer probing on data quality, Sanchez and Morchio devised an experiment involving two groups of interviewers from the Survey Research Center (SRC) at the University of Michigan who had administered the postelection survey of the 1984 American National Election Study (NES). The NES study design called for postelection interviews to be conducted with all preelection survey participants. A decision was made to reinterview a random half of the respondents—half in the field and half by telephone. There were 893 field cases and 914 telephone cases, with response rates of 92 and 88 percent, respectively. The same questions were administered to both groups. Significant differences were found in the number of DK responses, with the telephone half sample providing fewer such responses, especially to the knowledge items. These large, unintended effects are attributed to the extensive probing activities of the SRC telephone interviewers who probed at a different rate from the field interviewers. Even though both groups of interviewers had been trained in a similar manner, there were differences in style and level of experience of individual workers. The authors conclude that the telephone respondents produced more substantial answers to opinion and knowledge items due to interviewer probing, which encouraged more guessing on the part of uninformed respondents. However, the quality of their answers was questionable. The authors believe that interviewer probing of knowledge questions should be avoided, and knowledge items, as compared to opinion and

factual questions, are more likely to be probed. Although there were significant distributional and means differences across half samples, the relationships among variables were largely unaffected by probing practices. (7 footnotes, 4 references)

SPECIFIC POPULATIONS

African Americans

223. Fullilove, Mindy Thompson, and Robert E. Fullilove III. "Understanding Sexual Behaviors and Drug Use among African-Americans: A Case Study of Issues for Survey Research." Chap. 5 in *Methodological Issues in AIDS Behavioral Research*, edited by David G. Ostrow and Ronald C. Kessler, 117-32. AIDS Prevention and Mental Health Series, edited by David G. Ostrow and Jeffrey A. Kelly. New York, NY: Plenum Press, 1993. 354p.

The challenges encountered when surveying minority populations are magnified for AIDS researchers, who must probe for the most private details of an individual's life. Some of the conditions that have created massive social instability and disintegration in African-American and other minority communities are lower levels of education, loss of unskilled jobs, and urban decay. The authors suggest several strategies for interviewing hard-to-reach respondents. The first is to gain access to the community, a task that researchers can accomplish by overcoming social barriers. Since there are few "natural connections" between the African-American ghetto and the university, investigators must contact a "guide," that is, a community-based individual who can serve as a link between the two. Additionally, researchers must gain the trust and understand the language of the groups being examined. Lastly, something of value should be returned to the community, such as knowledge and/or the results of the research. The authors provide examples from their work on HIV risk behaviors, AIDS, crack cocaine use, sexual behavior patterns, and gender roles. (18 references)

224. Milburn, Norweeta G., Lawrence E. Gary, Jacqueline A. Booth, and Diane R. Brown. "Conducting Epidemiologic Research in a Minority Community: Methodological Considerations." *Journal of Community Psychology* 19, no. 1 (January 1991): 3-12.

The difficulties "frequently inherent" in community-based surveys of minority populations include low response rates, interviewer bias, homogeneous samples, and small numbers of male respondents. Three strategies were devised to minimize these challenges in the implementation of an epidemiological, field-based, face-to-face survey of 1,018 African Americans. The first was to obtain a broad base of support for negotiating entry into the community under investigation. Letters describing the project were sent to "key informants" and city leaders; two local residents were hired to oversee the field operations; and a

press conference, a community forum, and project staff interviews were held. The second strategy involved recruiting an appropriate interviewing staff. In an attempt to reduce interviewer bias, 104 African-American interviewers (23 males, 81 females) were selected (primarily from the Urban League) and given a three-day training session. In spite of payment and incentives, 78 percent of the male interviewers and 81 percent of the female interviewers failed to complete the task, usually due to a conflict with another job. The third strategy concerned the development of adequate sampling procedures to assure maximum response rates. The sampling design was a stratified, multistage cluster sampling of African-American households in the city. Enumerators returned to certain blocks (oversampling) until the desired sample size had been achieved. Of the 1,018 interviews completed, 537 were with male respondents. The total sample was heterogeneous, representative of the general African-American population in the city, and consistent with 1980 census data. The overall response rate was 81 percent. The lowest response rates occurred in those tracts that were high income and overwhelmingly African American. (4 footnotes, 22 references)

225. Smith, A. Wade. "Survey Research on African Americans: Methodological Innovations." Chap. 11 in *Race and Ethnicity in Research Methods*, edited by John H. Stanfield II and Rutledge M. Dennis, 217-29. Sage Focus Editions, no. 157. Newbury Park, CA: Sage Publications, 1993. 314p.

Smith maintains that, up until the early 1980s, "the treatment of Blacks in survey research had not changed much since the inception of modern sample surveys" (p. 221). The author laments the fact that survey researchers have included African Americans in surveys only as a comparison to their white counterparts, thereby oversimplifying many of the differences among African Americans. This group was also omitted from samples drawn from voter registration lists, a practice that resulted in underrepresentation in most national surveys. In addition, surveys rarely included extra questions applicable only to small numbers of the respondents, and, for many years, "Blacks were not allowed to respond to racial attitude questions." Before the 1980s there were few national surveys of African Americans (Smith cites only nine cross-sectional surveys with nine hundred or more African Americans, with only three of the nine attempting to sample the general African-American population in the United States). This lack of inclusion has produced little reliable data on age, gender, social class, religion, attitudes, policy issues, or regional differences among African Americans. Three recent methodological developments facilitating the surveying of African Americans are (1) intergenerational research (the National Survey of Black Americans and the Three Generation Family Study); (2) new techniques for sampling African Americans (the 1982 General Social Survey); and (3) the increase of telephone interviewing (the National Black Election Study). Successful surveying of this community "appears to be limited only by the collective vision of researchers and funders of research" (p. 229). (1 endnote) There are cumulated references on pages 284-304.

Asian Americans

226. Sasao, Toshiaki. "Using Surname-Based Telephone Survey Methodology in Asian-American Communities: Practical Issues and Caveats." *Journal of Community Psychology* 22, no. 4 (October 1994): 283-95.

Some of the methodological issues involved in implementing telephone surveys in Asian-American communities include (1) identifying and sampling the population; (2) obtaining respondent cooperation; (3) designing bilingual interview protocols; (4) assessing interviewer bias; and (5) determining the cost-effectiveness of telephone-administered interviews. The Statewide Asian Drug Abuse Community Phone Survey was part of a larger needs assessment project whose objectives were to document alcohol, tobacco, and other drug use and related problems, as well as to identify psychosocial correlates of such usage among people of Chinese, Japanese, Korean, Pilipino, (the "currently preferred" term among Asian-Americans to describe the people of the Philippines), and Vietnamese descent residing in five California counties. Using surname-based telemarketing phone lists, a final sample of 1,764 respondents was obtained. Extensive publicity preceded the interview which lasted about fifteen minutes and included forty questions. There were sixteen male and female interviewers, with two or three bilingual interviewers assigned per ethnic group. The interview was conducted in the language of the respondent's choice, with all items first written in English, then translated into Chinese, Japanese, Korean, Pilipino (Tagalog), and Vietnamese, and then back-translated into English. Sasao's approach yielded low- to moderate-level response rates (ranging from 29 percent to 67 percent). The length of the interview was found to be satisfactory, interviewer bias was minimal, and costs were far lower than those of face-to-face interviews. Telephone surveying is recommended as long as the telephone number lists for Asians with identifiable surnames are available. (4 footnotes, 47 references)

Deaf

227. Barnett, Steven, and Peter Franks. "Telephone Ownership and Deaf People: Implications for Telephone Surveys." *American Journal of Public Health* 89, no. 11 (November 1999): 1754-56.

The purpose of the research was to examine the relationship between telephone ownership and age at onset of deafness. Barnett and Franks hypothesized that prelingually deafened adults (that is, before the age of three) would be less likely to own a telephone than would members of the general population, and that individuals deafened postlingually (that is, after the age of three) would own telephones at a rate similar to that of the general population. Prior studies indicate that people who are deaf differ from the general population on such factors as healthcare utilization, health-related behavior, and knowledge about

healthcare. The authors suggest that there may be implications for telephone-based surveys with this population due to their limited access to telephone-based communication. The analysis is based on data from the National Health Interview Survey (NHIS) of 1990 and 1991—years in which the NHIS Hearing Supplement was administered. The findings of the investigation support both hypotheses. The authors conclude that telephone surveys, even when modified for teletypewriters, may be biased, overlook some populations, and have limited use with prelingually deafened adults. Many members of this group communicate in American Sign Language, the third most commonly used language in the United States (following English and Spanish), for which there is no written form. (16 references)

Elite

228. Johnson, Janet Buttolph, and Richard A. Joslyn. "Elite Interviewing and Survey Research." Chap. 10 in *Political Science Research Methods*, 261-93. 3^d ed. Washington, DC: CQ Press, 1995. 452p.

The first few pages of this chapter consider *elite interviewing* (that is, unstructured interviews conducted with high-status individuals such as politicians, civic leaders, and members of Congress), with the remainder focused on survey research. Issues of question wording, type, and order are discussed with special attention to closed-ended and open-ended options. The advantages and disadvantages of each are noted. Questionnaire design and the three primary data collection modes are considered, namely, mail questionnaires, and telephone and face-to-face interviews. Response rates and data quality issues are reviewed. A discussion of costs and administrative procedures closes this textbook format. A list of twenty-five terms found in the text are defined. Johnson and Joslyn define survey research in the following way: "Research based on the interview method of data collection" (p. 292). Five exercises for classroom use are provided, along with eleven suggested references. (90 endnotes)

Foreign Born

229. U.S. General Accounting Office. *Survey Methodology: An Innovative Technique for Estimating Sensitive Survey Items*. [Washington, DC]: U.S. General Accounting Office, [1999]. 85p. Microfiche. [SuDocGA1.13: GGD-00-300546-D]

Originally designed to ascertain the immigration status of foreign-born respondents, the three-card method described may also have application to areas involving sensitive policy-relevant topics. The purpose of the card method is to yield "more truthful" responses while simultaneously protecting respondent privacy. ("Trainer" cards are used to help familiarize respondents with the

procedure.) The technique involves presenting the respondent with an 8" by 11" card, with three alternatives appearing in a variety of arrangements. The wording of the items is such that the sensitive answer category is not explicitly provided, but rather is included as part of a broader answer. The study reported utilized three independent representative samples. The respondents were interviewed in Spanish because it is the most common foreign language spoken in the United States. To achieve success, only one of the answer categories can be sensitive, and adding the category should not be considered rare in the population surveyed. Follow-up questions are not asked of respondents who choose the category containing the sensitive answer, but those selecting the first answer are asked additional questions. While the implied sensitive answer is key to the approach, the need to estimate the sensitive item indirectly is considered a challenge. The use of flash cards is deemed essential, and therefore the presence of face-to-face interviewers—thereby making the three-card method more expensive than telephone surveys. (45 references)

Hispanics

230. Marín, Gerardo, and Barbara Vanoss Marín. *Research with Hispanic Populations*. Applied Social Research Methods Series, vol. 23, edited by Leonard Bickman and Debra J. Rog. Newbury Park, CA: Sage Publications, 1991. 130p.

Although research on Hispanics increased a “thousandfold” during the 1980s, the Maríns maintain that little attention has been paid to a variety of important issues—the correct manner of translating survey instruments, the development of culturally appropriate research procedures, and the influence of certain variables such as acculturation and language preference. An overview of the demography, history, and culture of Hispanics in the United States is provided, with the authors tracing the wide variety of family backgrounds including Mexican-Americans, Puerto Ricans, Cubans, and other South or Central Americans. This diversity presents a number of challenges for the investigator, for example, identifying and accessing the target population, establishing survey legitimacy, and obtaining community sponsorship. Other problematic factors include language, interviewer ethnicity, payment for survey participation, instrument format, data collection methods, and data analysis and interpretation. Hispanics frequently provide inaccurate and socially desirable responses, produce large proportions of missing data, may be reluctant to disclose sensitive information to strangers, and tend to select the middle response category at a lower rate than non-Hispanics (instead, favoring extreme options). Evidence for each of these observations is presented with suggestions for improving survey research with this population. (216 references)

231. Marín, Gerardo, Barbara Vanoss, and Eliseo J. Perez-Stable. “Feasibility of a Telephone Survey to Study a Minority Community: Hispanics in

San Francisco." *American Journal of Public Health* 80, no. 3 (March 1990): 323-26.

The telephone survey undertaken was designed to obtain estimates of the prevalence of cigarette smoking among a sample of Hispanics, with the goal of community intervention to lower such use. The 1980 decennial census found that 92 percent of self-identified Hispanic households in San Francisco census tracts having 400 or more Hispanics had at least one telephone (compared to 94 percent for non-Hispanics). A modified random-digit-dialing (RDD) sampling procedure (Mitofsky-Waksberg) was tested in two telephone surveys of 1,669 (Study 1) and 2,059 (Study 2) Hispanic respondents. Respondents' mean age was 35.5, the mean number of years of education was 11.6, and about 70 percent were foreign-born, primarily in Central America. The survey instrument contained approximately sixty items dealing with smoking behavior and sociodemographic variables, as well as an acculturation scale. Respondents were offered their choice of language in which to respond: Spanish or English (67 percent and 69 percent, respectively). Interviewers were bilingual. The analysis indicates low refusal rates, low assumed noncontact rates (an index of the accessibility of respondents), and high response rates (88.6 percent for the first study and 84.4 percent for the second study). The high response rates are attributed to the presence of a cultural characteristic termed *simpatica* that promotes cooperation and "dictates" positive interpersonal relations. This cultural norm would "move Hispanic respondents to agree to be interviewed in order to maintain a fluid and positive social relationship with the interviewer when the relationship is perceived as nonthreatening and as sanctioned by a respected local institution..." (p. 325). The authors conclude that it may be both feasible and efficient to use RDD techniques to obtain a sample of the Hispanic population. (20 references)

232. Marín, Gerardo, Raymond J. Gamba, and Barbara V. Marín. "Extreme Response Style and Acquiescence among Hispanics: The Role of Acculturation and Education." *Journal of Cross-Cultural Psychology* 23, no. 4 (December 1992): 498-509.

Previous research with ethnic and racial minorities suggests a tendency for *acquiescence* (that is, respondents' preference to provide a "yes" response to a survey question), or for choosing the extreme categories in a response scale. Four separate research projects provided the data for analyzing the characteristics of response styles among Hispanics and non-Hispanic whites. In three of the four studies, respondents had been interviewed in San Francisco; the fourth was based on data from the public use tape for the AIDS Supplement to the 1987 National Health Interview Survey. The datasets examined included the following: items with Likert-type response categories; information on certain sociodemographic variables such as gender and education; and an acculturation scale that measured such variables as attitudes, values, knowledge, and social behaviors. A total of 871 Hispanic respondents and 622 non-Hispanic whites had participated in the San Francisco studies, and 1,037 Hispanics and 13,803 non-Hispanic whites were

represented in the national study. Consistent with prior research, the analysis indicates that Hispanics tend to agree with a given item to a greater extent than non-Hispanic whites and strongly prefer extreme response categories. Better-educated Hispanics and those with higher levels of acculturation tend not to select extreme responses or to agree with the interviewer. There were few consistent gender differences. (9 references)

Mexican Americans

233. Baer, Roberta D. "Health and Mental Health among Mexican American Migrants: Implications for Survey Research." *Human Organization* 55, no. 1 (Spring 1996): 58-66.

The study was part of a larger project undertaken by the Bureau of the Census to assist in revising the questionnaire developed by the National Center for Health Statistics for the National Health Interview Survey (NHIS). One goal of the NHIS update was to clarify the language and terminology used to discuss health topics in diverse cultural communities. Baer, an anthropologist, conducted two sets of in-depth, face-to-face interviews with forty Spanish-speaking Mexican and Mexican-American migrant workers in Florida. The intent was to determine how these workers categorize the areas of health and mental health; how they perceive and understand the survey questions asked; and how the results compare to middle-class Americans. The migrants' perceptions of the health topics proved to be very different from the biomedical model, but surprisingly similar to a sample of white, middle-class, highly educated urban residents from another study. Differences in ethnicity, educational attainment, language, and socioeconomic status were less critical than the differences in understanding the categories between the lay population under study and the researchers who designed the instrument. The author concludes that "the biomedical categories used in survey research may be inappropriate not only for ethnic minorities, but also for the mainstream population" (p. 58). (31 references)

234. Hurtado, Aída. "Does Similarity Breed Respect? Interviewer Evaluations of Mexican-Descent Respondents in a Bilingual Survey." *Public Opinion Quarterly* 58, no. 1 (Spring 1994): 77-95.

Hurtado investigated the impact of four respondent characteristics on interviewers' evaluations of respondents' ability to comprehend questions, express themselves adequately, cooperate, and exhibit interest in the interview. The characteristics examined were gender, socioeconomic status (SES), English-speaking capability, and *phenotype*, that is, the visible properties of an individual such as facial features and skin color. Data for the study came from a 1979 survey conducted by the Institute for Social Research at the University of Michigan. The survey was based on a probability sample of Mexican-ancestry households in five southwestern states and in the Chicago metropolitan area. The sample is described

as “representative of almost 90 percent of the total U.S. population of Mexican ancestry identified in the U.S. census” (p. 81). The interviewers, who were Spanish/English bilinguals possessing knowledge of both Mexican and U.S. cultures, obtained 991 face-to-face interviews. The survey instrument contained items about employment, language, culture, social identity, political consciousness, mental health, and family life. Among the findings are that (1) respondents’ SES showed the strongest relationship to interviewers’ evaluations; (2) interviewers provided more positive evaluations of respondents’ abilities if they were better educated and had higher incomes; (3) fair-skinned, European-looking, English-speaking respondents achieved more favorable ratings; (4) skin color was related to comprehension of questions and articulation of answers; (5) facial features were associated with comprehension of questions, articulation of answers, and level of cooperation; (6) Spanish-interviewed respondents were judged to be more motivated at the beginning of the interview; (7) English-interviewed respondents were evaluated as better able to comprehend the questions; and (8) gender had little relationship to interviewers’ evaluations. The author concludes by discussing possible sources of bias and implications for interviewer training (especially when interviewers and respondents are being matched for ethnicity). (3 footnotes, 32 references)

Senior Citizens

235. Gribble, James N., Susan M. Rogers, Heather G. Miller, and Charles F. Turner. “Measuring AIDS-Related Behaviors in Older Populations: Methodological Issues.” *Research on Aging* 20, no. 6 (November 1998): 798-821.

With new therapies becoming available to treat those with HIV and AIDS, persons so infected may begin to survive to middle and old age. The question investigated is whether the methodological findings of research conducted with younger populations generalize to older respondents. Few studies have focused on the sexual and risk behaviors associated with HIV transmission in the over-50 population. The challenges involved in assessing sensitive behaviors are reviewed, especially the collection mode and its impact on the data obtained. Data from the 1990 National Household Survey on Drug Abuse (NHSDA) field test were selected for the analysis for several reasons: (1) the survey contains an embedded experiment comparing interviewer-administered questionnaires (IAQs) with self-administered questionnaires (SAQs); (2) the NHSDA gathers statistics on tobacco, drug, and alcohol usage and associated behaviors; and (3) it samples a wide range of ages (12 to 92 years) of residents in thirty-three metropolitan areas. The NHSDA field test yielded 3,284 completed interviews, reflecting an overall response rate of 76.4 percent. Four versions of the questionnaire were administered: two with IAQs and two combining IAQs and SAQs. Substance usage data were gathered for three time periods—the past thirty days, the past year, and lifetime—and for three age groups: 12 to 49 years, 50 to 64 years, and

65 years and older. Consistent mode effects were not apparent across all drug use behaviors and across the 50 to 64, and 65 and older age groups. However, it was found that IAQs produced higher estimates of the prevalence of substance use or alcohol-related problem behaviors for those in the older age strata, a finding contrary to much prior research involving younger samples. The “inescapable” conclusion is that caution should be exercised when generalizing from younger to older segments of the population. (7 endnotes, 26 references)

236. Jobe, Jared B., and David J. Mingay. “Cognitive Laboratory Approach to Designing Questionnaires for Surveys of the Elderly.” *Public Health Reports* 105, no. 5 (September-October 1990): 518-24.

The technique examined is the “think-aloud” interview with follow-up probes. This procedure requires respondents to verbalize their thought processes as they formulate their answers to survey questions, a potentially difficult task for older respondents who may have difficulty understanding the questions, recalling the information requested, and employing appropriate decision-making strategies. The study participants were eight men and ten women, ages 65 to 69, and 80 and above, recruited from senior centers located in the Washington, D.C., metropolitan area. The questionnaire, containing items selected from the 1984 Supplement on Aging to the National Health Interview Survey, focused primarily on functional ability, with additional questions on housing, social support, and general health. The interviews required about one hour, and used think-aloud protocols and scripted and nonscripted probes. These procedures were deemed effective for identifying difficulties with the survey questions. Although comprehension problems were particularly common for some items, they were easily identified by the interviewing techniques. Jobe and Mingay suggest that the cognitive approaches investigated are “equally applicable” to other surveys of the elderly, such as the Long-Term Care Survey. (23 references)

237. Jobe, Jared B., Donald M. Keller, and Albert F. Smith. “Cognitive Techniques in Interviewing Older People.” Chap. 9 in *Answering Questions: Methodology for Determining Cognitive and Communicative Processes in Survey Research*, edited by Norbert Schwarz and Seymour Sudman, 197-219. San Francisco, CA: Jossey-Bass Publishers, 1996. 469p.

Several cognitive methods utilized by the National Center for Health Statistics for studying the special problems encountered when interviewing older respondents are reported. In order to determine the cognitive capabilities of respondents age 65 and older as they pertain to answering survey questions, a series of three studies were conducted. For first study the authors investigated whether “think-aloud” interviews with extensive probing could be employed with eighteen older respondents, and whether changes in the methodology might be required. Questions were selected from the 1984 Supplement on Aging of the National Health Interview Survey. Although the older respondents seemed to have more

difficulty thinking aloud than younger respondents, the interviews were found to be helpful in identifying problems that older people experience with survey questions. For the second study, think-aloud interviews, extensive probing, and aided recall lists were examined with thirty-six respondents. The questions concerned daily living activities. The results indicate that recall lists were beneficial. Questions about assistance from others were generally underreported. For the final study, the authors investigated whether think-aloud protocols could reveal problems in cognitive processing unique to individuals 50 years of age and older. A self-administered dietary questionnaire provided the items for forty-eight interviews. Respondents were found to have difficulty estimating how frequently they had consumed a particular food product when the choices were grouped. The authors conclude that cognitive interviewing techniques can be effectively utilized with older respondents, and that some techniques can be “customized” to accommodate specific populations. There are 534 cumulated references on pages 403-41. (1 endnote)

238. Wallace, Robert B. “Assessing the Health of Individuals and Populations in Surveys of the Elderly: Some Concepts and Approaches.” *Gerontologist* 34, no. 4 (August 1994): 449-53.

Most prior health survey research has been conducted to measure the prevalence and incidence of disease, the signs and symptoms, people’s functional states, and the utilization of health services. Additionally, most of the work in conceptualizing health has been directed toward the individual, with far less emphasis on the health of populations. Wallace discusses the problems encountered when assessing health status among individuals—especially the elderly—and offers suggestions for improving individual health status, such as the importance of prenatal and birth activities; a new consideration of the term “normality”; and the application of the disciplines of sociology and cognitive social psychology to understanding the health problems of older people. A caveat is offered: quantitative measures frequently fail to recognize variation in personality and behavioral styles, and definitions of “normal” are often culturally conditioned, ignoring personal preferences. There are also difficulties in summarizing multiple measures, that is, obtaining a total picture of an individuals’ health; in defining the comparisons and standards for these measures; and in identifying new risk factors. The similarities as well as the differences between individual and group health surveys of the elderly are noted. The author observes that there are many characteristics of groups and communities that are not reflected by simply aggregating individual health measures. Rather, there should be simultaneous assessment of group and environmental characteristics of the communities under investigation. (13 references)

Urban

239. Ford, Kathleen, and Anne Norris. "Methodological Considerations for Survey Research on Sexual Behavior: Urban African American and Hispanic Youth." *Journal of Sex Research* 28, no. 4 (November 1991): 539-55.

Approximately half the article is devoted to reviewing prior research on data collection methods and reporting experiences in collecting data on the urban, low-income minority populations identified in the title. Although little research has addressed issues specific to low-income minorities, the spread of AIDS and other sexually transmitted diseases in these groups has stimulated investigation. Some of the problems in sexuality research include terminology misunderstandings; respondents' faulty information processing; misreporting due to concerns about self-image; interviewer gender and ethnicity effects; high illiteracy rates; and inter- and intra-ethnic differences. Ford and Norris describe a pilot study of a sample of thirty male and female Hispanics and thirty-four male and female African Americans, between 15 and 21 years of age, residing in Detroit. Gender- and ethnicity-matched interviewers and respondents were part of the study protocol. Open-ended questions were asked to assess knowledge of AIDS and condoms, and closed-ended questions were used to determine sexual experience, and condom and drug use. An acculturation scale also was included. The results indicate that (1) sexual behavior data can be successfully collected with the face-to-face interviewing approach; (2) professional, clinical language can be used, with women being more comfortable with formal terminology; (3) women provided more truthful answers as evaluated by the interviewer; (4) anal intercourse was a sensitive topic for both sexes, with little activity reported; and (5) Hispanic women exhibited a greater sensitivity to topics involving sexuality and menstruation, and were the most problematic for the interviewers in terms of eliciting responses. (3 footnotes, 46 references)

240. Pottick, Kathleen J., and Paul Lerman. "Maximizing Survey Response Rates for Hard-to-Reach Inner-City Populations." *Social Science Quarterly* 72, no. 1 (March 1991): 172-80.

The challenges encountered when interviewing hard-to-reach populations, and the details of the authors' previous National Institute of Mental Health-funded study, are reviewed. The study used the *agency-based design* which involved face-to-face interviews conducted by human service personnel, with parents of inner-city youths. The design was found to be ineffective for securing respondents and inefficient for obtaining interviews. Pottick and Lerman discuss the problems associated with the original methodology and explain how a redesigned survey was able to increase response rates. The new approach, the *research-team contact design*, varied the cover letter requesting participation of a random sample of 219 parents. Two manipulations were introduced. One letter was composed by the authors, the other by a metropolitan newspaper writer, with a follow-up

telephone call if necessary. In addition, parents were contacted directly by the authors (rather than by agency personnel), interviewed at a neutral location (a university campus), paid \$20 for participation, and scheduled at the parents' convenience. The journalistic-style letter proved to be significantly better for attracting and encouraging parents to respond quickly and positively, although the response rates for the two samples were comparable after six weeks. The follow-up telephone calls were found to increase response rates as well—rates described as “similar to national household surveys on nonclinical populations in urban areas” (p. 179). The research-team contact design also was superior to the agency-based design in terms of sample representativeness, time required in the field, and cost per completed interview. (4 references)

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Data Collection Methods

COMPUTER ASSISTED

241. Anderson, Ronald E., and Shon Magnan. "The Questionnaire Programming Language (QPL): An Overview with Examples of Call Management." *Social Science Computer Review* 13, no. 3 (Fall 1995): 291-303.

The *Questionnaire Programming Language (QPL)* software was produced by Kevin Dooley and associates at the U.S. Accounting Office. Version 3.1 of the software runs on IBM PC or compatibles with DOS, is in the public domain, and is accompanied by 500 pages of documentation. Anderson and Magnan describe the software as a relatively easy, quick, and reliable way to automate surveys. Applications of QPL to the survey research process include assisting in the preparation of online questionnaires, facilitating data entry, and generating system files of data ready to be analyzed. The software is also useful for data entry and automated production of *SPSS* [Statistical Package for the Social Sciences] and *SAS* [Statistical Analysis System] data definition files, and for conducting small- to large-scale computer-assisted telephone interviewing (CATI) and self-administered questionnaire surveys. The advantages of *QPL* are that questionnaire design is faster, interviewers can operate the program with minimal training, interview time is reduced, and costs are modest if computer stations and telephones are available. Limitations include the problem that missing values are not automatically defined for some types of questions, and a network version is not currently available. Several examples illustrate how the program has been applied in the past, especially to the educational setting. The authors conclude that the relative advantage of CATI depends on the flexibility of the software and the training of the staff. (6 references)

242. Baker, Reginald P. "New Technology in Survey Research: Computer-Assisted Personal Interviewing (CAPI)." *Social Science Computer Review* 10, no. 2 (Summer 1992): 145-57.

Computer-assisted personal interviewing (CAPI) is reviewed in terms of background, application, interviewer and respondent acceptance, quality of the data produced, and costs involved. Two European statistical agencies, Statistics Sweden and The Netherlands' Central Bureau of Statistics, are credited with the development of CAPI in the early 1980s. As associate director for information services at the National Opinion Research Center (NORC), Baker plans and oversees the implementation of computer technology in support of NORC-conducted surveys. CAPI was preceded by computer-assisted telephone interviewing (CATI), a technology that researchers are now extending to the face-to-face interviewing environment. With the use of CAPI, software is loaded into a personal computer, thus permitting interviewers to conduct interviews in a variety of settings, and then send the completed disks to a central office for processing. Major CAPI tests for labor-force surveys have been conducted in the United Kingdom and France. In the United States nearly all major survey organizations (governmental, university, and private) also are actively developing CAPI technology. The author summarizes by observing that most interviewers and respondents react favorably to CAPI, and there appear to be obvious improvements in data. Costs can be expected to decline over time. (1 endnote, 24 references)

243. Couper, Mick P. "The Application of Cognitive Science to Computer Assisted Interviewing." Chap. 18 in *Cognition and Survey Research*, edited by Monroe G. Sirken, Douglas J. Herrmann, Susan Schechter, Norbert Schwarz, Judith M. Tanur, and Roger Tourangeau, 277-300. Wiley Series in Probability and Statistics, Survey Methodology Section, edited by Robert M. Groves, Graham Kalton, J.N.K. Rao, Norbert Schwarz, and Christopher Skinner. A Wiley-Interscience Publication. New York, NY: John Wiley & Sons, 1999. 395p.

Recent cognitively oriented research that has applied computer technology to the collection of survey data is documented. With the development of computer-assisted telephone interviewing, computer-assisted personal interviewing, and computer-assisted self-interviewing, Couper believes the shift to automation has gained much momentum over the last several decades. Further, computer-assisted interviewing (CAI) "has the potential for fundamentally changing the entire data collection process." The author focuses on usability and design issues surrounding CAI. A framework for these issues is devised by linking survey research applications to the field of human-computer interaction (HCI) or usability research. HCI has its roots in cognitive psychology and computer science, and has grown rapidly since it originated in the late 1970s. HCI research encompasses a wide range of theoretical perspectives and methodologies, such as expert evaluation and end-user evaluation. Couper discusses the similarities to CAI, the

cognitive demands placed on the interviewer (a neglected aspect in the literature), and the challenges that lie ahead for CAI usability. (97 references)

244. Gribble, James N., Heather G. Miller, Susan M. Rogers, and Charles F. Turner. "Interview Mode and Measurement of Sexual Behaviors: Methodological Issues. *Journal of Sex Research* 36, no. 1 (February 1999): 16-24.

The difficulties of collecting data on sensitive topics are reviewed, as are the advantages and disadvantages of the commonly used data collection modes. For the present research the authors compared interviewer-administered questionnaires with self-administered questionnaires, observing that respondents have a tendency in the face-to-face environment to underreport or deny engaging in certain sexual behaviors or using illicit drugs. Although self-administered questionnaires require a degree of literacy as well as the ability to comprehend and follow implicit instructions, more privacy is afforded the respondent. A negative bias may result from the use of these techniques in estimating the prevalence of illicit or stigmatizing behavior—in this case the transmission of HIV and other sexually transmitted diseases. Technological advances since the mid 1980s have contributed to the development of computer-assisted personal interviewing (CAPI); computer-assisted telephone interviewing (CATI); and computer-assisted self-interviewing (CASI) and its variations: audio computer-assisted self-interviewing (ACASI) and telephone ACASI (T-ACASI). The use of ACASI in the National Survey of Adolescent Males and the National Survey of Family Growth is discussed. Both interviewers and respondents were found to adapt well to computerized technology. There were higher levels of reporting of sensitive behaviors, thereby reducing response bias. Two studies have pilot-tested T-ACASI, with significantly higher levels of stigmatized or illicit activities reported. The authors review the strengths and weaknesses of CAPI, CATI, and CASI and its variations. (4 footnotes, 59 references)

245. Tourangeau, Roger, and Tom W. Smith. "Asking Sensitive Questions: The Impact of Data Collection Mode, Question Format, and Question Context." *Public Opinion Quarterly* 60, no. 2 (Summer 1996): 275-304.

Some of the previous research dealing with the collection of data on sensitive topics is reviewed. (A table highlights eighteen such studies, providing collection mode, research topic, setting, and major findings.) Tourangeau and Smith compared the efficacy of three techniques: computer-assisted personal interviewing (CAPI), computer-assisted self-administered interviewing (CASI), and audio computer-assisted self-administered interviewing (ACASI). Additionally, the authors compared open and closed question formats, and varied the context in which the questions were embedded. From an area probability sample of residents in Cook County, Illinois, 643 eligible persons were identified (the results for 339 completed interviews are reported in this article). The survey instrument, based primarily on existing sources such as the Women's Health Study, contained

items on demographics, sexually transmitted diseases, the number of sex partners, AIDS risk factors and condom use, illicit drug use, and attitudes toward abortion and the legalization of marijuana. A total of twenty-two interviewers, including one male, conducted the interviews and fifty-three reinterviews. Respondents were assigned to one of three experimental conditions. The results of the analysis indicate the following: (1) CAPI, CASI, and ACASI groups produced similar response rates; (2) CASI and ACASI tended to reduce the differences between males and females for the number of sex partners reported; (3) ACASI elicited a greater number of reported sex partners; (4) CASI, and especially ACASI, produced increased numbers of respondents who admitted illicit drug use; (5) when closed-answer formats emphasized the low end of the distribution, fewer sex partners were reported; (6) responses to open-ended versions of the sex partner questions generally fell between responses to the two closed versions; and (7) responses were strongly affected by self-presentation concerns. The authors identify three key variables impacting data quality: “the degree of privacy permitted, the level of cognitive burden imposed, and the sense of legitimacy fostered” (p. 302). (6 footnotes, 38 references)

246. U.S. Federal Committee on Statistical Methodology. Subcommittee on Computer Assisted Survey Information Collection. *Computer Assisted Survey Information Collection*. Statistical Policy Working Paper 19. [Washington, DC]: U.S. Office of Management and Budget, Office of Information and Regulatory Affairs, Statistical Policy Office. May 1990. 101p. [SuDocPrEx2.28:19]; [NTIS Document Sales No. PB90-205261]

Survey practitioners in the federal government are the intended users. The report was written to provide guidance for planning and refining survey data collection methods. Three options for automated statistical surveys are discussed in detail: computer-assisted telephone interviewing (CATI), computer-assisted personal interviewing (CAPI), and computer-assisted self-interviewing (CASI). With CATI, the oldest of the three approaches, the questionnaire is displayed by the computer to the interviewer who then reads the questions over the telephone to the respondent. CAPI uses face-to-face interviews that are usually conducted at the respondent’s home or place of business. The interviewer carries a personal computer, reads the questions, and records the answers on the computer. CASI involves data collection without the direct presence of the interviewer. The respondent records her/his answers on a personal computer or terminal. Examples of current applications in the government sector are given for each technique. A substantial part of the report covers a variety of methodological issues such as human-machine interfaces, software development, hardware planning, computer security, and network planning. A subject-classified, unannotated list of forty-two books, reports, conference proceedings, and journal articles, published primarily during the 1980s, is provided on pages 63-66. Appendix A is a discussion of cost measurement. Appendix B deals with issues of data quality. Appendix C lists survey efforts currently underway, with a point of

contact for additional information. Appendix D presents a suggested classification model for surveys that depend on computer support. Appendix E is a glossary of technical terms.

FACE-TO-FACE

247. Van Kammen, Welmoet Bok, and Magda Stouthamer-Loeber. "Practical Aspects of Interview Data Collection and Data Management." Chap. 13 in *Handbook of Applied Social Research Methods*, edited by Leonard Bickman and Debra J. Rog, 375-97. Thousand Oaks, CA: Sage Publications, 1998. 580p.

The focus of the chapter is the face-to-face interview. The authors offer detailed instructions concerning the collection and management of data accessed by this approach, stressing that the quality of the research cannot be better than the quality of the data obtained. The first topic addressed is the planning of the research project. This step involves hiring a competent research staff. Among the key personnel in this group are the interviewers who are to be selected, trained, and supervised. The strategies interviewers use to obtain and retain respondents are discussed. Van Kammen and Stouthamer-Loeber provide information on detecting and correcting interviewer error, adjusting for missing data files, and developing a system for coding variables. Throughout, the production of high-quality research is emphasized. If the researcher makes small inaccurate concessions, many such decisions, over time, may compromise the study. (25 references)

FACE-TO-FACE AND DIARY

248. Silberstein, Adriana R., and Stuart Scott. "Expenditure Diary Surveys and Their Associated Errors." Chap. 16 in *Measurement Errors in Surveys*, edited by Paul P. Biemer, Robert M. Groves, Lars E. Lyberg, Nancy A. Mathiowetz, and Seymour Sudman, 303-26. Wiley Series in Probability and Statistics, Applied Probability and Statistics. A Wiley-Interscience Publication. New York, NY: John Wiley & Sons, 1991. 760p.

Using data from the 1987 U.S. Consumer Expenditure Survey (CE), the authors report an empirical study on how various sources of error can make their way into respondents' diary reports on consumer purchases. The CE, a national survey, contains two interviewing components: the two-page journal-type diary portion is completed by about 5,000 respondents per year for two consecutive weeks; the face-to-face interviews are conducted in five quarterly sessions with about 6,000 respondents per year. The two data collection approaches, although conducted independently, utilize the same multistage selection design with 109 primary sampling units. The special challenges of diary surveys are reviewed. In

general, they require greater respondent cooperation since respondents must assume an active role in recording data for an extended period of time. Telescoping errors tend not to be as extensive in diary reports, but the design of the survey instrument is viewed as being of greater importance. The findings indicate the following: (1) there were sizable declines in reporting after the first diary day and in the second diary week; (2) about 25 percent of the diaries departed from the intended methods because respondents recalled some data only with the assistance of an interviewer; (3) specificity was lacking in many diary entries; (4) underreporting of certain commodities was evident with both collection methodologies; (5) the diary method "captured" lower levels of expenditures more effectively than the face-to-face interviews; and (6) the interview method produced higher quality data for less frequent or large purchases. There are 822 cumulated references on pages 687-733.

FACE-TO-FACE AND MAIL QUESTIONNAIRE

249. Krysan, Maria, Howard Schuman, Lesli Jo Scott, and Paul Beatty. "Response Rates and Response Content in Mail versus Face-to-Face Surveys." *Public Opinion Quarterly* 58, no. 3 (Fall 1994): 381-99.

The purpose of the research is twofold: to determine the presence of mode-of-administration effects on response rates, and to ascertain whether respondents answer questions differently depending on the method of data collection. Two surveys were conducted, both based on the same area probability sampling frame and with some of the same questions. The sample segments previously had been stratified according to the percentage of African-American residents—a predominantly African-American stratum of 93 percent or more African American, and a predominantly white stratum of less than 7 percent African American. The first sample was used for hour-long, face-to-face interviewing in the 1992 Detroit Area Study. One individual was randomly selected from within the household by the interviewer. Respondent and interviewer race were usually matched. There were approximately 220 to 300 questions, some dealing with sensitive racial issues. The second survey was administered by a mail questionnaire containing forty-five items, some also focusing on controversial racial and nonracial social issues. Five sequential mailings and a gift-boxed University of Michigan pen were sent to maximize response. In the predominately African-American stratum, there were 84 completed mail questionnaires and 512 completed face-to-face interviews. In the predominately white stratum, there were 476 completed mail questionnaires and 1,037 completed face-to-face interviews. Few mode effects were evident for the white stratum (although there were considerable context differences), and mail respondents were more candid. The face-to-face survey achieved a considerably higher response rate in the predominately African American stratum—an area characterized by lower levels of education, income, and housing values. (4 footnotes, 18 references)

FACE-TO-FACE, MAIL QUESTIONNAIRE, AND SELF-ADMINISTERED QUESTIONNAIRE

250. Krysan, Maria. "Privacy and the Expression of White Racial Attitudes: A Comparison across Three Contexts." *Public Opinion Quarterly* 62, no. 4 (Winter 1998): 506-44.

Three hypotheses formed the basis for the research: (1) white respondents will express less liberal racial attitudes as the amount of privacy in the interview increases; (2) questions measuring traditional racial attitudes and principles of racial equality, as opposed to those about racial policies, will have the greatest privacy effects; and (3) these effects will be stronger among well-educated respondents. Three different data collection approaches were compared: a standard face-to-face interview; a modified face-to-face design in which respondents answered a subset of racial questions on a self-administered form, with the sealed envelope given to the interviewer; and a mail questionnaire. Options 2 and 3 were perceived to create less social desirability pressure, thereby evoking less liberal racial attitudes. The first two approaches were carried out in 1994 by the Detroit Area Study. The mail survey was conducted by the author in the same year. A multistage area probability sample of white households in the Detroit metropolitan area was used for all studies. There were a total of 1,796 addresses for the three samples: 383 for the face-to-face interview, 383 for option two, and 1,030 for the mail questionnaire. Response rates were similar across the three survey conditions. Krysan found some support for the social desirability hypothesis, especially among the more educated respondents. In contrast to a widely held assumption, privacy effects did not differ depending on the type of question, thereby lending no support for the second hypothesis. Appendix 1 provides the question wording for measures of racial attitudes by category. (29 footnotes, 51 references)

FACE-TO-FACE, MAIL QUESTIONNAIRE, AND TELEPHONE

251. Fowler, Floyd Jackson, Jr., Anthony M. Roman, and Zhu Xiao Di. "Mode Effects in a Survey of Medicare Prostate Surgery Patients." *Public Opinion Quarterly* 62, no. 1 (Spring 1998): 29-46.

In order to evaluate differences in responses to self- and interviewer-administered questions, three data collection modes were compared: mail, telephone, and face-to-face. The sample, consisting of Medicare beneficiaries who had had surgery for prostate cancer, was drawn from both inside the state of Massachusetts and outside (referred to as the "U.S. sample"). The 840 U.S. cases were randomly sampled and randomly assigned to one of two groups: (1) those interviewed by telephone, with mail questionnaires used for nontelephone

households, unknown telephone numbers, and those found to be unreachable by telephone; and (2) those sent a mail questionnaire, with telephone calls for nonrespondents. Within Massachusetts, all 405 cases in the sample who had had radical prostatectomies were randomly assigned to one of two groups: (1) those who received the same mail and telephone interviews as the U.S. sample groups; and (2) those who received in-house face-to-face interviews. The extensively pretested survey instrument contained fifty-one items designed to elicit information about postsurgical experiences, the recurrence of cancer, and general quality of life. Response rates ranged from 87 to 93 percent. Of the total items compared, there were twenty-five statistically significant differences between the mail and telephone responses, primarily among the questions requiring current self-descriptions. Answers provided by telephone were more positive and less problematic. Questions with sensitive content were not more predictive of when mode effects would occur, but whether a question focused on a current state or past experiences was highly predictive. Comparisons of mail and face-to-face responses revealed only nine significant differences, of which four indicated more problems with responses obtained by mail. A six-page appendix provides the wording of the questions. (1 footnote, 22 references)

252. Schweigert, Wendy A. "Mail Surveys, Telephone Surveys, and Personal Interviews." Chap. 9 in *Research Methods in Psychology: A Handbook*, 127-45. Pacific Grove, CA: Brooks/Cole Publishing Company, 1998. 27p.

The ways in which surveys can be administered to respondents—namely, by mail, telephone, or face-to-face—are evaluated and compared. The advantages of mail surveys are seen to be the elimination of interviewer bias, the reduction of sampling bias (questionnaires can be sent to a large number and wide variety of potential respondents), and the greater anonymity provided the respondent when information of a sensitive nature is desired. The primary disadvantage is nonresponse. By contrast, telephone surveys have a higher response rate, and interviewers can clarify questions and probe answers. Sampling and interviewer bias, however, can be problematic. A major feature of face-to-face interviews is the high response rate generated. Negatives include the lack of anonymity, the tendency for respondents to produce socially desirable answers, and cost. Schweigert also discusses survey construction (question type and wording) and survey development (the primary sampling techniques). The book contains exercises, appendixes, a glossary, a cumulated bibliography, and an index.

FACE-TO-FACE AND SECRET BALLOT

253. Bishop, George F., and Bonnie S. Fisher. " 'Secret Ballots' and Self-Reports in an Exit-Poll Experiment." *Public Opinion Quarterly* 59, no. 4 (Winter 1995): 568-88.

Bishop and Fisher report on a controlled exit-poll experiment conducted on election day (3 November 1992) to assess the accuracy and validity of responses obtained by two modes of data collection: self-administered secret ballots and face-to-face interviews. The authors hypothesized that the former procedure would be more anonymous, would minimize socially desirable responses, and would reduce the number of refusals, thereby possibly yielding differences in self-reports. A systematic sampling design was used to select 1,010 voters from 10 precincts (from a total of 1,041 precincts) in Hamilton County (includes Cincinnati), Ohio. Fifty-one upper-class undergraduate students enrolled in a political science research methods class at the University of Cincinnati served as interviewers. The one-page questionnaire contained eight closed-ended items: (1) three questions about how the respondents had just voted for president of the United States, for U.S. senator, and for a county-level tax issue; (2) three demographic items (age group, race, and gender); and (3) two questions concerning party preference and ideological self-identification. Respondents were randomly assigned to either of the collection protocols. The response rate across the precincts ranged from 64 to 85 percent. The experiment revealed that refusing to answer questions and other evasive forms of responding were significantly lower with the self-administered secret-ballot approach. Although there were some "suggestive interactions" with the secret-ballot format with age, gender, and the partisanship of the precinct, they were borderline, inconsistent, difficult to interpret, and unhypothesized. When compared to official election results, the secret ballots yielded more accurate and valid self-reports of voting on socially sensitive issues. An appendix reprints the questionnaires used. (16 footnotes, 15 references)

FACE-TO-FACE AND SELF-ADMINISTERED QUESTIONNAIRE

254. McElrath, Karen. "A Comparison of Two Methods for Examining Inmates' Self-Reported Drug Use." *International Journal of the Addictions* 29, no. 4 (1994): 517-24.

Two hundred inmates from two Pennsylvania state prisons and sixty inmates from a prison diagnostic center (the final sample consisted of 241 men and women) were used to compare the efficiency of face-to-face interviews with self-administered questionnaires (SAQs) for collecting drug use data. Extensive confidentiality assurances were made both verbally and in writing to increase the reliability of the self-reports and the validity of the data. The SAQs asked respondents whether they had used marijuana, cocaine, and heroin during the thirty-day period prior to incarceration. Using the drug and alcohol component of the Addiction Severity Index (ASI), follow-up face-to-face interviews were conducted within two to four weeks of the initial testing. The ASI required about forty minutes to complete as compared to eight minutes for the SAQ. Results

indicate that both collection modes produced high levels of agreement for the three categories of drugs. However, inmates were more likely to reveal drug use on the SAQs, leading McElrath to recommend that prison officials consider this format as a resource for screening drug users. The lack of valid comparison criteria is noted. (2 endnotes, 12 references)

255. Rogers, Susan M., Heather G. Miller, and Charles F. Turner. "Effects of Interview Mode on Bias in Survey Measurements of Drug Use: Do Respondent Characteristics Make a Difference?" *Substance Use & Misuse* 33, no. 10 (1998): 2179-2200.

According to the findings of two prior studies [Item Nos. 256 and 260] and a 1990 field test, the reporting of drug use in population surveys is improved by the use of self-administered questionnaires (SAQs) as compared to interviewer-administered questionnaires (IAQs), possibly due to the greater privacy and anonymity afforded respondents by the SAQ. Two of the studies cited found interview mode effects to vary significantly across gender, race/ethnicity, and age. To test for these interaction effects, the authors reanalyzed data from a randomized experiment embedded in the 1990 National Household Survey on Drug Abuse (NHSDA) field test. In order to achieve a population comparable to the other studies, the present analysis was limited to the 1,877 NHSDA respondents who were between 18 and 45 years of age. Independent variables included SAQs versus IAQs, gender, race/ethnicity, and age; dependent variables were self-reported cocaine, marijuana, and alcohol usage during three retrospective periods: the respondent's lifetime, the past year, and the past thirty days. The findings indicate the presence of mode-of-interview effects on the self-reporting of illicit drug use. There was increased reporting among respondents assigned to the SAQ group, especially for the two more recent time periods. However, "only weak evidence was found to support the hypothesis that the advantage of SAQs varies substantially by the gender, race/ethnicity, or age of the respondent" (p. 2179). The use of new technologies, such as audio computer-assisted self-interviewing, is recommended for investigating the interaction between mode effects and respondents' demographic characteristics. (10 endnotes, 14 references)

256. Schober, Susan E., M. Fe Caces, Michael R. Pergamit, and Laura Branden. "Effect of Mode of Administration on Reporting of Drug Use in the National Longitudinal Survey." Chap. 10 in *Survey Measurement of Drug Use: Methodological Studies*, edited by Charles F. Turner, Judith T. Lessler, and Joseph C. Gfroerer, 267-76. DHHS Publication no. (ADM) 92-1929. Washington, DC: U.S. Department of Health and Human Services, Public Health Service, Alcohol, Drug Abuse, and Mental Health Administration, 1992. 413p. [SuDocHE20.8002.S7/2]

The National Longitudinal Survey of Labor Market Experience Youth Cohort, sponsored by the Bureau of Labor Statistics, provided the data for comparing the effects of two different methods of questionnaire administration on the reporting

of marijuana and cocaine use among a nationally representative sample of young people between 14 and 21 years of age as of 1 January 1979. This cohort had been interviewed face-to-face on an annual basis from 1979 through 1991 (except for the 1987 telephone interviews). The surveys posed a variety of questions, but the 1980, 1984, and 1988 waves contained questions on illicit drug usage. The authors focus on an experiment embedded in the 1988 survey in which a total of 10,465 respondents had been randomly assigned to either a self-administered supplement or to interviewer-administered face-to-face interviews, either in private or with others present. The comparison yielded the following information: (1) the two interview mode groups were nearly identical in age and gender, but a higher percentage of African Americans was found in the face-to-face group; (2) reports of illicit drug use were significantly higher among respondents completing the self-administered format; (3) among respondents in the interviewer-administered group, higher usage rates were found for those interviewed in the presence of others; (4) Hispanics and non-African American/non-Hispanics in the self-administered group had more frequent reports of marijuana use in the past year and past month, and cocaine use in lifetime, past-year, and past-month periods; and (5) among African Americans, no differences in reporting marijuana and cocaine use were found by interview mode. (3 footnotes, 4 references)

257. Turner, Charles F., Judith T. Lessler, and James W. Devore. "Effects of Mode of Administration and Wording on Reporting of Drug Use." Chap. 7 in *Survey Measurement of Drug Use: Methodological Studies*, edited by Charles F. Turner, Judith T. Lessler, and Joseph C. Gfroerer, 177-220. DHHS Publication no. (ADM) 92-1929. Washington, DC: U.S. Department of Health and Human Services, Public Health Service, Alcohol, Drug Abuse, and Mental Health Administration, 1992. 413p. [SuDocHE20.8002:S7/2]

The purpose of the investigation was twofold: to describe the design of a 1990 methodological field test and to review estimates of the prevalence of self-reported nonmedical use of psychotherapeutic drugs. The research, based on the National Household Survey on Drug Abuse (NHSDA), utilized a multistage probability sample of approximately 4,000 individuals. The field test contained four versions of the survey instrument—two were interviewer-administered and two were self-administered. One of the questionnaires duplicated the 1990 NHSDA survey instrument. The methodology for the new wording formats included the use of (1) *anchoring* (establishing reference periods); (2) *branching* (skipping) instructions; (3) *decomposition* (breaking down) of questions; and (4) *reordering* some of the answer categories. Overall, the interviewer-administered questionnaires (without self-administered answer sheets) reduced the reporting of drug use, as did the lack of privacy during the interview for some age brackets—particularly respondents 12 to 17 years of age. The new question wording yielded no general findings; however, a negative effect was evident on the reporting of lifetime alcohol consumption and cocaine use during the past thirty days. An

outcome described as not conforming to “reasonable expectations” was the impact of interviewer experience on respondents self-reported past drug usage. Interviewers without prior experience in administering NIDA/RTI (National Institute on Drug Abuse/Research Triangle Institute) surveys obtained more frequent reports of drug use for both marijuana and cocaine. Although this pattern was consistent for illicit drugs, it was less dramatic for licit drugs. (24 footnotes, 10 references)

258. Turner, Charles F., Judith T. Lessler, Barbara J. George, Michael L. Hubbard, and Michael B. Witt. “Effects of Mode of Administration and Wording on Data Quality.” Chap. 8 in *Survey Measurement of Drug Use: Methodological Studies*, edited by Charles F. Turner, Judith T. Lessler, and Joseph C. Gfroerer, 221-43. DHHS Publication no. (ADM) 92-1929. Washington, DC: Department of Health and Human Services, Public Health Service, Alcohol, Drug Abuse, and Mental Health Administration, 1992. 413p. [SuDocHE20.8002:S7/2]

The authors examine the impact on data quality of four versions of a questionnaire embedded in a 1990 field test of the National Household Survey on Drug Abuse (NHSDA). In addition, two modes of administration were investigated. Among the aspects of survey quality examined were nonresponse rates, the extent to which *branching* (skipping) instructions could be followed, and the consistency of respondent-supplied drug use reports. The NHSDA field test sample consisted of approximately 4,000 respondents. Two versions of the survey instrument were administered by the interviewer and two were self-administered. The findings indicate the following: (1) response rates averaged 75.8 percent; (2) item nonresponse was highest during self-administered conditions, especially with the newly worded version; (3) respondents were found to be capable of answering a self-administered format and following branching instructions; (4) in general, the new wording facilitated respondents’ understanding of the questions, thereby improving data quality; (5) the new wording yielded more consistent responses but slightly higher nonresponse rates; and (6) when reference periods were *anchored* (that is, the attempt to clarify the boundary dates for respondents) response consistency increased. (14 footnotes, 4 references)

FACE-TO-FACE, SELF-ADMINISTERED QUESTIONNAIRE, AND TELEPHONE

259. Aquilino, William S. *Interview Mode Effects in Surveys of Drug and Alcohol Use: A Field Experiment*. CDE Working Paper 93-26. Madison, WI: University of Wisconsin-Madison, Center for Demography and Ecology, 1993. 37 pages plus 2 unnumbered pages.

The impact of three data collection approaches—telephone and face-to-face interviews, and self-administered questionnaires—on respondents’ willingness to reveal illicit or undesirable drug and alcohol use behavior is examined. A field

experiment was conducted with 2,417 adults, 18 to 45 years of age, to test hypotheses concerning the influence of response anonymity and social distance on interviewer-respondent relationships. The three groups of randomly assigned respondents had nearly identical demographic characteristics. The survey instrument, adapted from the 1990 National Household Survey on Drug Abuse, contained items on the use of crack, cocaine, marijuana, alcohol, and frequency of drunkenness. The same group of interviewers administered the telephone and face-to-face interviews. Response rates averaged 80.6 percent. Aquilino found that respondents were most likely to admit to drug and alcohol use with the self-administered format, slightly less likely with the face-to-face mode, and least likely with the telephone interviews. Differences were larger for African Americans and Hispanics than for whites, and among the more mistrustful respondents. The effect of greater social distance between interviewer and respondent is addressed. (30 references)

260. Aquilino, William S. "Interview Mode Effects in Surveys of Drug and Alcohol Use: A Field Experiment." *Public Opinion Quarterly* 58, no. 2 (Summer 1994): 210-40.

Three data collection methods—telephone, face-to-face, and self-administered questionnaires (SAQs)—were compared in order to ascertain respondents' willingness to reveal sensitive information, socially undesirable behaviors, and illicit drug usage. Aquilino discusses the theoretical perspectives on mode effects, reviews the prior empirical literature on such effects in sensitive surveys, and outlines seven hypotheses. The respondents consisted of 2,417 adults, 18 to 45 years of age, selected through a multistage area probability sample of dwelling units in the thirty-seven largest Standard Metropolitan Statistical Areas in the United States. All respondents were randomly assigned to one of the collection modes, with the same set of interviewers used for the telephone and face-to-face interviews. The questionnaire, adapted from the 1990 National Household Survey on Drug Abuse, concerned the use of crack, cocaine, marijuana, alcohol, and the frequency of drunkenness. Among the results are the following: (1) for the overall sample the SAQs yielded the highest estimates, the face-to-face mode lower estimates, and the telephone interviews the least; (2) the magnitude of mode effects varied positively with the degree of sensitivity of the questions; (3) social distance and response anonymity significantly affected the estimates; (4) mode effects were larger for African Americans but not for Hispanics; and (5) no evidence was found that the mode effects resulted only from differences in race/ethnicity between respondent and interviewer. Aquilino believes that the results "support the notion that response effects due to mode of interview derive, at least in part, from interview mode differences in ability to assuage respondents' confidentiality concerns" (p. 210), and that greater social distance in telephone interviews makes it more difficult for the interviewer to offer convincing confidentiality guarantees. Especially among racial and ethnic minorities, SAQs increased the willingness to reveal sensitive behavior. (6 footnotes, 30 references)

261. Scudds, Rhonda J., and Linda L. Pederson. "Phone, Paper and Pencil, In Person: Methods of Data Collection for the '90s." *American Journal of Health Behavior* 20, no. 6 (November-December 1996): 434-38.

The authors weigh the merits of three commonly used data collection methods: face-to-face, telephone interviews, and self-administered questionnaires. The primary advantages of the face-to-face mode are the interviewer's control of the interviewing environment—the questions, the clarification of difficult items, and the respondent—and the high response rates obtained. Negative factors are that interviewers either knowingly or inadvertently may bias the results, and the costs are the highest of the three approaches. Telephone interviews, an increasingly popular technique, are less costly, faster, and reduce or eliminate interviewer bias. Disadvantages include the inability to reach nontelephone households, and answering machines used to screen calls. Self-administered questionnaires permit respondents to take the time necessary to complete the form. In addition, respondents can be more candid about sensitive items, and interviewer bias is absent. However, response rates are frequently low, possibly generating nonresponse bias. Scudds and Pederson comment on how to select the best approach for one's needs, observing that it may be appropriate to combine methods [that is, the mixed-mode survey]. Computer technology and the Internet offer additional options for data collection. (19 references)

FACE-TO-FACE AND TELEPHONE

262. Aquilino, William S. "Telephone versus Face-to-Face Interviewing for Household Drug Use Surveys." *International Journal of the Addictions* 27, no. 1 (1992): 71-91.

Data for the face-to-face component were obtained from a drug use survey conducted in 1986-87 by the state of New Jersey. Collection procedures and the survey instrument were based on the 1985 National Household Survey on Drug Abuse (NHSDA). The substances investigated were tobacco, alcohol, and several illicit drugs, including marijuana and cocaine (and crack). Respondents were selected through a multistage area probability sample of the household population between 18 and 34 years of age. The survey required forty-five to sixty minutes and yielded 1,042 completed interviews. Answers were recorded by respondents on self-administered answer sheets that were sealed, anonymously, in the respondent's presence. Waksberg's random-digit-dialing procedure was employed to draw the telephone sample. The telephone survey involved a total of 2,075 respondents (only the results for the 864 respondents between 18 and 34 years of age are detailed in this article), required an average of twenty-five minutes to complete, and included a smaller number of drug categories. The 1985 NHSDA instrument was adapted for telephone administration. The results of the comparison indicate that the telephone survey achieved lower response rates, lower item nonresponse to sensitive drug questions, and significantly

lower drug use estimates on several indicators, a finding especially applicable to the African-American respondents. Drug use surveys conducted by telephone are viewed as less expensive, require a shorter data collection period, and have unit and item response rates similar to telephone surveys of less threatening topics. (2 endnotes, 35 references)

263. Aquilino, William S., and Leonard A. LoSciuto. "Effects of Interview Mode on Self-Reported Drug Use." *Public Opinion Quarterly* 54, no. 3 (Fall 1990): 362-95.

Aquilino and LoSciuto briefly review prior studies comparing response rates between two interviewing approaches, telephone and face-to-face, and conclude that comparisons of the two modes in these studies have not produced "unequivocal" evidence demonstrating the superiority of one method over the other for eliciting accurate reports of socially undesirable behavior. Using a set of highly threatening questions concerning heavy drinking, and tobacco, marijuana, and cocaine use from the National Household Survey on Drug Abuse, the authors investigated the effects of interview mode on a group of New Jersey residents between the ages of 18 and 34. The telephone survey, lasting about twenty-five minutes, used respondents drawn by means of Waksberg's random-digit-dialing (RDD) sampling procedure. There were 864 qualifying respondents in the telephone sample. The face-to-face interviews (in which respondents provided written responses on self-administered answer sheets) were approximately twice as long, and yielded 1,042 completed interviews. Area probability sampling generated the respondents for the face-to-face component of the research. Both the demographic characteristics due to nonresponse and the tendency of RDD to exclude nontelephone households were controlled for in the analysis. Racial differences and race-of-interviewer effects were also noted. In the face-to-face survey nearly all the white respondents and about half the African-American respondents were interviewed by white interviewers; African-American interviewers were primarily assigned to the telephone portion of the study. Among the findings are the following: (1) in comparison to the area probability sample, RDD techniques yielded a sample of African Americans and Hispanics higher in income and education, and currently employed; (2) whites also showed a higher socioeconomic status in the telephone sample, albeit to a lesser degree; (3) when controlling for demographic characteristics and nontelephone households, the telephone survey yielded significantly lower estimates of African-American respondents' alcohol consumption, and lifelong and recent marijuana use; (4) overall, white respondents' use of all substances was nearly identical for the two modes; (5) the significant mode differences were not attributed to sample coverage, demographic characteristics, or racial matching of interviewer and respondent; and (6) minorities, in general, appeared more prone than whites toward socially desirable responding. The authors suspect that some variable in the interview setting itself may impact the tendency toward socially desirable responding to

threatening or embarrassing survey items. An appendix reprints the drug use questions. (1 footnote, 42 references)

264. Casey, Patrick H., Susan L. P. Goolsby, Shelly Y. Lensing, Betty P. Perloff, and Margaret L. Bogle. "The Use of Telephone Interview Methodology to Obtain 24-Hour Dietary Recalls." *Journal of the American Dietetic Association* 99, no. 11 (November 1999): 1406-11.

The research was designed to compare two data collection approaches, telephone and face-to-face, for gathering information on how people remember what food and beverages they had consumed within the last 24 hours. The 24-hour dietary recall is the primary method used in most large-scale face-to-face nutrition surveys, such as the National Health and Nutrition Examination Survey and the Continuing Survey of Food Intakes by Individuals (CSFII), an ongoing, nationwide, food consumption survey. For this research the authors compared data from a subsample of 550 women between the ages of 20 and 49 from the 1994-96 CSFII (known as the "What We Eat in America" survey) with results from an original telephone survey of 700 women of similar age. A sixteen-item screener questionnaire was to select one eligible woman in the household. Consent forms, measurement aids, and other materials were sent to assist respondents in estimating food quantities without the presence of an interviewer. Respondents provided information on all food and beverages consumed during a 24-hour period from midnight to midnight the day prior to the interview. In addition, demographic, health-related, and socioeconomic questions were asked. Analysis indicates that food and beverage intake data collected by telephone were significantly higher than data reported in the 1994 and 1995 CSFII, a trend, however, that did not continue in the 1996 CSFII. The authors conclude that it is feasible (and far less expensive) to collect food intake data by telephone using procedures similar to those found in the 1996 CSFII. (36 references)

265. Dansky, Bonnie S., Michael E. Saladin, Kathleen T. Brady, Dean G. Kilpatrick, and Heidi S. Resnick. "Prevalence of Victimization and Posttraumatic Stress Disorder among Women with Substance Use Disorders: Comparison of Telephone and In-Person Assessment Samples." *International Journal of the Addictions* 30, no. 9 (1995): 1079-99.

According to the findings of prior research, crime victims, particularly those suffering posttraumatic stress disorder (PTSD), are at risk for substance abuse. In order to determine the prevalence of this relationship, the authors examined two groups of women. The first sample, consisting of seventy women who said they had received inpatient or outpatient treatment for a substance use disorder, was a subset of the 1989 National Women's Study (NWS), a longitudinal telephone survey with a household probability sample of 4,008 women over the age of eighteen. The second sample, consisting of seventy-three women admitted to the adult chemical dependency treatment program at a Charleston, South Carolina hospital, received face-to-face interviews. The instrument for

assessing PTSD in the telephone sample was the NWS PTSD module. Most of the questions were taken from the 1986 Survey of Drug and Alcohol Use in New York State. The face-to-face sample received nearly the same instrument as above to assess PTSD, but substance use disorder was evaluated by clinical interview, urine screening, and/or the Addiction Severity Index. Demographic data were also gathered for both samples. More than 80 percent of women in both samples had a history of sexual and/or physical assault, and approximately 25 percent had current PTSD. There were more African-American, unemployed, and single women in the face-to-face sample. Patterns of victimization, PTSD, and substance usage were similar across the two samples. In general, it appears that the diagnostic screening instrument is accurate in detecting both victimization and PTSD, and that structured telephone interviews are a valid method of collecting data on this topic. (37 references).

266. Douglas, Malinda Reddish, Sue Mallonee, and Gregory R. Istre. "Estimating the Proportion of Homes with Functioning Smoke Alarms: A Comparison of Telephone Survey and Household Survey Results." *American Journal of Public Health* 89, no. 7 (July 1999): 1112-14.

To determine the number of homes possessing working smoke alarms in a low-income area of Oklahoma City having a high rate of fire-related injuries, the authors conducted a telephone survey with a systematic random sample of 1,385 respondents selected from the target area. Volunteers administered the survey using protocols similar to those found in the Behavioral Risk Factor Surveillance System of the Centers for Disease Control and Prevention. Respondents were asked if the home had a smoke alarm and whether the device was working. Demographic data were also gathered. To validate the results of this survey, 1,615 on-site household interviews were conducted by firefighters who then determined whether the alarm was functioning properly. Response rates were 67 percent and 87 percent, respectively. The results from the telephone survey indicate that 71 percent of households reported having functioning smoke alarms, as opposed to 66 percent for the firefighters' household survey (when the alarms were actually tested, the latter figure dropped to 49 percent). The authors conclude that telephone surveys, noted for their potential for sampling bias due to the exclusion of nontelephone households, may overestimate the proportion of homes with functioning smoke alarms. The implications of the study for evaluating smoke-alarm giveaway programs are discussed. (20 references)

267. Johnson, Timothy P., James G. Hougland, Jr., and Robert W. Moore. "Sex Differences in Reporting Sensitive Behavior: A Comparison of Interview Methods." *Sex Roles* 24, nos. 11-12 (June 1991): 669-80.

Responses to face-to-face and telephone interviews were compared in a study of a group of randomly selected undergraduate, graduate, and professional students to determine if there were gender differences in self-reports of substance use

between survey collection modes. The data analyzed were collected as part of a survey of substance use on a university campus. It was hypothesized that males may be more reluctant to admit sensitive or stigmatized behaviors in telephone interviews due to “the lack of balanced exchange of identifying information between interviewer and respondent” (p. 669), as well as aspects of the male sex role which discourages self-revelation. In addition, the authors assumed that more extensive reporting of substance use would be an indicator of less response bias. The survey instrument contained eleven substance use questions previously found in national studies, and nine sociodemographic items. Trained and supervised student interviewers administered 322 telephone interviews (52.5 percent female, 47.7 percent male) and 458 face-to-face interviews (47.8 percent female, 52.2 percent male). The results indicate that differences in self-report usage of both legal and illegal substances by survey mode were greater for males than females, with males reporting more such involvement in face-to-face interviewing. Of the sociodemographic characteristics examined, there were no significant differences by survey mode. The study is believed to provide evidence of systematic differences in how females and males respond to questions of a sensitive nature under varying data collection approaches. When surveying males about sensitive or stigmatized behaviors, the face-to-face interview may elicit more responses. An appendix contains the questions used. (43 references)

268. Kaplan, Celia Patricia, and Sora Park Tanjasiri. “The Effects of Interview Mode on Smoking Attitudes and Behavior: Self-Report among Female Latino Adolescents.” *Substance Use & Misuse* 31, no. 8 (1996): 947-63.

The data collection methodologies compared were telephone and face-to-face interviews. The study population consisted of 670 female Latino adolescents who were recruited from two family planning clinics in Los Angeles County and randomly assigned to either the telephone group or the face-to-face group. Interviewers were female, and Spanish/English bilingual and bicultural, to match the ethnicity of the clinic patients. The survey instrument contained items relating to the respondents’ demographics and status of their smoking behaviors, attitudes, and beliefs. Response rates varied greatly by interview mode, with 94.8 percent for the face-to-face interviews and 65.2 percent for the telephone approach. (The latter mode’s low response rate is attributed to respondents’ not having a telephone, refusing at the interview site to be called, providing incorrect telephone numbers, and declining to be interviewed when reached by telephone.) The findings indicate the following: (1) there were no significant differences between the two interview groups in demographic characteristics or smoking-related behaviors; (2) respondents interviewed face-to-face were significantly more likely to express their dislike of smokers and to state that smoking cessation was easy; and (3) no differences were found in reported past smoking patterns for the two groups. Kaplan and Tanjasiri conclude that

telephone interviewing is an adequate and viable method for collecting data for the type of survey undertaken. (20 references)

269. LoSciuto, Leonard, Frederick C. Licari, and William S. Aquilino. "Interviewing Minority Youth about Drug Use: Telephone vs. In-Person Surveys." In *Etiology and Prevention of Drug Use: The U.S. National Institute of Drug Abuse Research Monographs: 1991-1994*, edited by Stanley Einstein. New York, NY: Marcel Dekker, 1997. Special issue of *Substance Use & Misuse* 32, nos. 12-13 (October-November 1997): 1955-60.

Two data collection approaches, face-to-face and telephone, were compared using a group of 18- to 25-year-olds who were sampled as part of larger drug use surveys conducted in New Jersey in 1986 and 1987. The comparison was made to determine if telephone interviews exhibited sampling bias due to their exclusion of households without telephones, as well as their susceptibility to certain response biases (such as underreporting and social desirability). Random-digit-dialing sampling procedures were utilized to achieve random sampling in the telephone portion of the survey; multistage area probability sampling techniques produced the sample for the face-to-face interviews. Respondents from nontelephone households were found to differ demographically, tending to be nonwhite, unemployed, lesser educated, and of low income. As for interview mode differences, African-American respondents reported significantly less alcohol and marijuana usage with face-to-face interviewing. Differences for white respondents were less dramatic. Mode effects were more evident as the sensitivity level of the questions increased. The authors conclude that the biases associated with telephone surveys may be "particularly confounding" for drug use surveys involving minority youth. (2 footnotes)

FOCUS GROUP AND MAIL QUESTIONNAIRE

270. Vicinanza, Nicole Caroline. "A Focus Group Investigation of Rape Survey Methods." Ph.D. diss., University of Virginia, 1994. 112 leaves. [*Dissertation Abstracts International* Order No. AAG9415577; *DAI* 54A, no. 12 (June 1994): 4610.]

Women's attitudes toward survey administration methods, and questioning techniques appropriate for studying rape, are investigated. Focus group interviews were conducted with University of Virginia classified staff. Vicinanza found that the participants favored mail surveys. Focus group members felt the mail approach permitted "emotional privacy, confidentiality, and adequate time to think through responses when filling out the survey" (p. ii-iii). Questions which provided behavioral descriptive language were preferred to those using the word "rape" because they avoided the negative aspects associated with the term, including the possibility that the victim was somehow to blame for the attack.

The recruitment of focus group participants, the procedures that were followed, and the outline of the discussions are provided in detail. The designation of rape as a crime may encourage respondents' willingness to answer, but it may also fail to obtain data from situations where the assailants are dating partners, spouses, relatives, or significant others. Members of the focus groups maintained that it is important for rape survey participants to know why the questions are being asked, by whom, and for what purpose. Appendixes include the record of attendance and dropouts, the informed consent letter, a sample rape survey, and the focus group guide—the procedures and questions asked. (22 references)

MAIL QUESTIONNAIRE AND TELEPHONE

271. Bowen, Gary L. "Estimating the Reduction in Nonresponse Bias from Using a Mail Survey as a Backup for Nonrespondents to a Telephone Interview Survey." *Research on Social Work Practice* 4, no. 1 (January 1994): 115-28.

The study participants were a random sample of low-income families residing in North Carolina, who had received benefits from the Aid to Families with Dependent Children (AFDC) program, and who had previously taken part in a multifaceted study of the relationship between the availability of subsidized child care and welfare independence. Some of the AFDC families either could not be reached by telephone or refused to participate in a telephone interview due to a number of reasons, such as residing in a nontelephone household, having a low level of education, and living below the poverty level. Bowen hypothesized that nonresponse might seriously bias sample estimates and that the addition of a mail survey as a supplemental data collection strategy might increase response rates. The mail survey packet contained a cover letter, a shortened version of the telephone questionnaire, and a self-addressed, prestamped, return envelope. The packet was sent to about half the families in a single-wave procedure. Four subgroups were specified for the analysis: 601 respondents in the experimental sample; 259 in the telephone sample; 147 in the mail sample; and the combined telephone and mail sample of 406 respondents. The results indicate that although the mail survey increased the response rate by 56 percent, this increase had only marginal effects on sample estimates. The implications of the findings for social work researchers and practitioners are discussed. (14 references)

272. Dillman, Don A., and John Tarnai. "Mode Effects of Cognitively Designed Recall Questions: A Comparison of Answers to Telephone and Mail Surveys." Chap. 5 in *Measurement Errors in Surveys*, edited by Paul P. Biemer, Robert M. Groves, Lars E. Lyberg, Nancy A. Mathiowetz, and Seymour Sudman, 73-93. Wiley Series in Probability and Mathematical Statistics, Applied Probability and Statistics. A Wiley-Interscience Publication. New York, NY: John Wiley & Sons, 1991. 760p.

Two data collection modes, mail questionnaires and telephone interviews, were used to investigate whether respondents' recall of the use of automobile seatbelts is improved by first asking them to remember details of each trip, such as destination, distance, and whether they were passengers or drivers. The study design involved samples of residents of the state of Washington, a location that had recently passed legislation requiring the device. There were 790 completed mail questionnaires and 526 completed telephone interviews. Cooperation rates were about the same (76 percent) for the two surveys. The experimental questions were embedded near the middle of a sixty-seven-item questionnaire which presented two question formats: quick recall and cognitively designed, the latter preceded by four other questions included to encourage accurate recall. Respondents were queried about seatbelt use in their three most recent trips. For both the mail and telephone surveys, the cognitively designed question sequence produced different and "presumably more accurate" responses than did the recall format. Overall, mode effects were minimal. There was no statistical support for the hypothesis that mode differences exist when the quick recall format is presented. Dillman and Tarnai conclude that it is as important to design cognitive questions for mail surveys as it is for surveys conducted by telephone or with face-to-face interviews. There are 822 cumulated references on pages 687-733.

273. Dillman, Don A., Roberta L. Sangster, John Tarnai, and Todd H. Rockwood. "Understanding Differences in People's Answers to Telephone and Mail Surveys." Chap. 4 in *Advances in Survey Research*, no. 70, edited by Marc T. Braverman and Jana Kay Slater, 45-61. *New Directions for Evaluation*, A Publication of the American Evaluation Association, edited by Lois-ellin G. Datta. The Jossey-Bass Education Series. San Francisco, CA: Jossey-Bass Publishers, 1996. 110p.

The authors review a number of research studies that focus on the differences in answers respondents sometimes provide to telephone and mail surveys. In an effort to integrate the seemingly "disparate, contradictory, and confusing" results from these studies, the authors describe seven types of mode effects. An attempt is made to demonstrate interconnections among the most plausible causes of mode differences and to explain not only what differences exist, but also how and why people respond differently across the data collection methods compared. A conceptual framework is presented, and the general mechanisms thought to contribute to mode differences are identified. Telephone interviews are perceived to be more likely than mail questionnaires to produce (1) socially desirable and acquiescent answers; (2) question order effects based on observance of a "norm of evenhandedness" and those based on nonnormative consistency and contrast effects; (3) quick answers that reflect a general standard held by the respondent; (4) extremeness on response scales; and (5) recency effects. The authors conclude that, other than for social desirability effects, evidence is rather slender about the existence of consistent and predictable differences in responses to the collection methods under review. (2 endnotes, 30 references)

274. Dillman, Don A., Tommy L. Brown, John E. Carlson, Edwin H. Carpenter, Frederick O. Lorenz, Robert Mason, John Saltiel, and Roberta L. Sangster. "Effects of Category Order on Answers in Mail and Telephone Surveys." *Rural Sociology* 60, no. 4 (Winter 1995): 674-87.

Prior research suggests that mail surveys encourage *primacy effects*, that is, the tendency for respondents to select the first answers from a list. Telephone surveys, by contrast, are thought to promote *recency effects*, that is, the tendency for respondents to select the last answers from a list. Based on an examination of these studies, the authors conclude that the presence of such effects is not consistent, nor has the impact of the number of answer categories and format options (nominal or ordinal) presented to respondents been addressed. Utilizing data from eighty-two new experiments conducted from 1990 through 1994 in twelve separate surveys in seven states (Arizona, Idaho, Iowa, Montana, New York, Oregon, and Washington), three comparisons were made: mail only using identical questions with the response categories reversed; telephone only using identical questions with the response categories reversed; and mail versus telephone using comparable questions with the response categories reversed in some cases. The questions focused on energy or natural resource issues. Both urban and rural populations were included. The analysis shows that only 4 of 33 mail survey comparisons revealed primacy effects, while only 5 of 26 telephone experiments exhibited recency effects. Of the cross-method comparisons, only 3 of 23 showed a significant primacy/recency effect "in the expected manner." In spite of these findings, the authors believe that category order effects "cannot be dismissed." A combination of factors can affect response behavior, a problem awaiting theoretical solutions. Three appendixes list the experiments. (2 footnotes, 16 references)

275. Farnworth, Margaret, Katherine Bennett, and Vincent M. West. "Mail vs. Telephone Surveys of Criminal Justice Attitudes: A Comparative Analysis." *Journal of Quantitative Criminology* 12, no. 1 (March 1996): 113-33.

The advantages and disadvantages of two commonly used data collection modes, mail questionnaires and telephone interviews, are reviewed in terms of sampling frames, locating targeted samples, response rates, self-selection bias, and completeness of the data gathered. For the present analysis five questions were addressed: (1) How great is the trade-off in cost and efficiency between the two methods? (2) Do the response rates differ? (3) Do the demographic characteristics of the selected samples differ? (4) Which technique produces the more complete responses? and (5) Do substantive responses differ by mode, and if so, does item 3 impact responses, thereby explaining response differences. Data for the analysis came from the Texas Crime Poll, an annual statewide mail survey. The 1992 poll asked over one hundred questions concerning respondents' views toward crime and criminal justice. An advance postcard, reminder postcards, and an additional copy of the questionnaire were sent to nonrespondents. There

were 1,147 respondents to the mail survey. A subset of five questions from the crime poll was replicated for the computer-assisted telephone survey which yielded 1,003 completed interviews (at least five call attempts were made to contact each respondent). Interviews were conducted in English or Spanish, with about 5 percent in Spanish. The results indicate that the mail option at \$7 per interview was less costly (but also less efficient) than the telephone survey at \$18 per interview. The response rates were 60 percent and 71 percent, respectively. More complete responses were obtained by telephone. Of the five attitude questions asked, all but one of the responses differed significantly across surveys. Although the two samples were very dissimilar in their demographic composition, the authors do not believe this explains the differences in the substantive findings between the two collection approaches. An appendix provides the five questions asked. (5 footnotes, 31 references)

276. Fowler, Floyd Jackson, Jr., Patricia M. Gallagher, and Shirley Nederend. "Comparing Telephone and Mail Responses to the CAHPS™ Survey Instrument." *Medical Care* 37, no. 3, Supplement (March 1999): MS41-MS49.

Telephone interviews and mail questionnaires were compared for their capability to obtain responses to the Consumer Assessment of Health Plans (CAHPS™) survey. The basic CAHPS™ survey instrument contains items designed to assess respondents' experiences with access to healthcare, their interactions with healthcare providers, and their experiences with health insurance plans. The authors report the methodology and results of three experiments designed to compare the quality of data collected by the two approaches. The first two experiments used a pretest instrument with parallel samples drawn from (1) a group of adults with chronic health conditions who were employed by the state of Washington and who had their insurance plans through the state; and (2) a population of Medicaid beneficiaries in California. The third experiment utilized a revised survey instrument with two parallel cross-sectional samples of individuals also enrolled in health plans through the state of Washington. Ninety-eight telephone interviews and 109 mail questionnaires were administered for the first group; 217 telephone interviews and 97 mail questionnaires for group two; and 446 telephone interviews and 609 mail questionnaires for the last group. Characteristics of the three sets of respondents differed in terms of educational attainment, gender (the Medicaid respondents were 92 percent female), and race. Response rates were about the same for the two protocols. Within each experiment the distribution of responses gathered by mail were compared with those obtained by telephone. Although the results from the first two tests were very similar, the telephone component identified many more people for whom the questions were nonapplicable. In addition, some ratings were more positive. In the third experiment, 9 of 58 comparisons differed significantly by collection approach, and the number of answers to nonapplicable questions was greatly reduced. The extent to which mode effects on data collection were minimized is viewed as the most important finding. (10 references)

277. McHorney, Colleen A., Mark Kosinski, and John E. Ware, Jr. "Comparisons of the Costs and Quality of Norms for the SF-36 Health Survey Collected by Mail versus Telephone Interview: Results from a National Survey." *Medical Care* 32, no. 6 (June 1994): 551-67.

Two data collection modes, telephone interviews and mail questionnaires, were compared for their ability to collect health status information. Data for the study were derived from the 1990 National Survey of Functional Health Status (NSFHS), a cross-sectional survey designed to gather national normative data for the SF-36 Health Survey. The 1989 and 1990 General Social Survey (GSS), an annual face-to-face survey of noninstitutionalized adults in the United States, provided the sampling frame. The final NSFHS sample consisted of 1,537 households from the 1989 GSS and 1,372 households from the 1990 GSS, with a supplemental oversample of 342 elderly persons. Due to the higher costs typically associated with face-to-face interviews, this sample was randomly assigned to either telephone (20 percent) or mail (80 percent) collection approaches. The telephone survey employed computer-assisted telephone interviewing (CATI) and was preceded by an introductory letter. The mail survey, administered in two waves, offered a \$2.00 prepaid incentive for participation. The NSFHS instrument contained 104 items relating to health status, overall quality of life, and associated social factors. The SF-36 survey of thirty-six items represented eight general health concepts. A standardized checklist of fourteen medical conditions was also administered. The findings indicate the following: (1) costs were \$47.86 per case for the telephone survey and \$27.17 per case for the mail survey; (2) the mail survey achieved a significantly higher response rate of 79.2 percent as compared to 68.9 percent for the telephone survey; (3) nonresponse bias was evident for both modes; (4) the rate of missing data was significantly higher with the mail approach; and (5) health ratings based on the SF-36 scales were less favorable, and there were more reports of chronic conditions for mail than telephone respondents. (71 references)

278. Tarnai, John, and Don A. Dillman. "Questionnaire Context as a Source of Response Differences in Mail and Telephone Surveys." Chap. 9 in *Context Effects in Social and Psychological Research*, edited by Norbert Schwarz and Seymour Sudman, 115-29. New York, NY: Springer-Verlag, 1992. 353p.

Respondents to mail and other self-administered surveys can view an entire set of questions, while respondents to telephone surveys lack this opportunity. Tarnai and Dillman hypothesized that some response differences between mail and telephone surveys can be explained by differences in the effect of context established by the mode of administration, with the self-administered format providing the respondent a context for answering the questions. The authors conducted an experiment that involved a group of university students who participated in one of three mode options: Group A—103 telephone interviews; Group B—115 telephone interviews with the respondent having a copy of the questionnaire; and Group

C-123 self-administered questionnaires. The twenty-eight-item instrument dealt with community problems and quality of the neighborhood. Approximately one month later all students completed the self-administered version of the questionnaire as a posttest. Comparisons were then made to a general population survey. The findings indicate that differences in responses between Group A and Groups B and C were even greater than those found in the general population survey, but the effects of context were not as strong as other mode differences. The response differences between Group A and Group B were not as great as the differences between Group B and Group C. With the additional context provided to Group B, respondents were less likely to select extreme response categories. There are 540 cumulated references on pages 325-53.

279. Vasu, Michael L., Laura J. Moriarty, and William V. Pelfrey. "Measuring Violent Crime in North Carolina Utilizing Mail and Telephone Surveys Simultaneously: Does Method Matter?" *Criminal Justice Review* 20, no. 1 (1995): 34-43.

The intended audiences are state legislators who allocate funds for state crime polls, as well as other state officials who need to conduct statewide victimization surveys. Due to the rising crime rate in North Carolina, the Governor's Crime Commission established the North Carolina Violent Crime Assessment Team. One objective of the group was to propose a methodology for collecting data on violent crime. Two surveys, telephone and mail, were conducted simultaneously in 1992, with victimization questions drawn from the National Crime Study, the Survey of Crime and Justice in Tennessee, the South Carolina Crime Poll, and the National Opinion Research Corporation. Both the telephone interview schedule and the mail questionnaires were extensively pretested. The mail survey was considerably longer and included a gift. There were 9,774 completed telephone interviews and 987 completed mail questionnaires, producing response rates of 82 percent and 58 percent, respectively. In analyzing the responses to six violent crime questions, the authors found that both collection approaches produced "comparable values," and accurate and reliable data for the crimes investigated (robbery, attempted robbery, assault, assault with a weapon, threat, rape, and attempted rate). The type of survey and the resources available should be considered when selecting the collection method. (8 footnotes, 14 references)

TELEPHONE

General

280. Anderson, John E., David E. Nelson, and Ronald W. Wilson. "Telephone Coverage and Measurement of Health Risk Indicators: Data from the National Health Interview Survey." *American Journal of Public Health* 88, no. 9 (September 1998): 1392-95.

To measure the potential impact of telephone coverage (ownership) on estimates from telephone surveys, the authors compared a number of health-related indicators for all persons residing in U.S. households with those living in households having telephones (approximately 95 percent of U.S. households had telephones according to 1990 decennial census). The comparison is based on data from the 1991 through 1994 versions of the National Health Interview Survey (NHIS), an ongoing, annual, nationally representative, household-based sample survey of the civilian, noninstitutionalized population. The NHIS is conducted with in-home face-to-face interviews administered by Census Bureau interviewers. Data from four NHIS supplements were analyzed: 1991 Health Promotion and Disease Prevention; 1992 Cancer Control; 1992 AIDS Knowledge and Attitudes; and 1994 Access to Health Care. The respondents for the supplements were adults, over the age of eighteen, living in sample households. Sample sizes ranged from 12,036 to 83,719. Response rates varied by supplement. NHIS results were found to be in agreement with census data. Differences in health-related indicators were small when comparing all households and those with telephones. Persons below the poverty level had 83 percent telephone coverage, leading the authors to suggest that there is a larger potential for noncoverage bias with this group. However, the results indicate that even for persons below the poverty level, "limiting attention to only those with phones does not seem to affect estimates very much" (p. 1393). Telephone survey methodology for health risk behavior surveillance with most population groups is supported. (18 references)

281. Chen, Peter Y. "Conducting Telephone Surveys." Chap. 11 in *The Psychology Research Handbook: A Guide for Graduate Students and Research Assistants*, edited by Frederick T. L. Leong and James T. Austin, 139-54. Thousand Oaks, CA: Sage Publications, 1996. 388p.

The reader is guided through the procedures necessary for conducting a telephone survey. These include (1) identifying the criteria for selecting this data collection approach; (2) choosing the appropriate techniques for sampling among households and within households; (3) writing the items and formatting the questionnaire; (4) establishing interviewer training requirements; and (5) determining supervision policies for reducing potential interviewer error. Chen emphasizes the interviewer's crucial role during the process of a telephone survey, recommending careful selection, orientation training, skill-building efforts, error training (such as how to probe for incomplete answers), and feedback and evaluation. Although telephone surveying is a very widely used technique, it faces numerous technological challenges, for example, answering machines, Caller-ID devices, touch-tone data entry and voice recognition options, call-forwarding capabilities, automobile and cellular telephones, and videophones. Some of the advantages and disadvantages of computer-assisted telephone interviewing are reviewed. (32 references)

282. Conklin, Karen A. "Community College Telephone Survey Research: An Overview of Methodology and Utility." *Community College Journal of Research and Practice* 23, no. 4 (June 1999): 423-33.

The telephone survey is described as "one of the dominant and most popular survey techniques in use today" (p. 423), providing advanced technology, timely and reliable data, high response rates, and population accessibility. Although more expensive than mail surveys, telephone surveys have the advantage of allowing the interviewer to clarify problematic questions as soon as they are encountered. Conklin reports on the use of telephone survey methodology at Johnson County Community College (JCCC) located in Overland, Kansas. The purpose of the survey was to collect data for a community perception study conducted in 1987 and again in 1992. Those surveyed included JCCC alumni; other individuals living in JCCC's service area; and local businesses and industries, the latter involving a telephone interview with a mail questionnaire follow-up. (Only 67 of the 582 businesses who responded to the telephone portion also completed the mail questionnaire.) Details are offered for (1) identifying the target population (purchased lists can facilitate this process); (2) selecting from among the sampling options (standard random sampling versus a random-number dialing scheme); (3) clarifying the goals and objectives of the study; (4) planning the design; (5) writing the questions (the addition of a disclaimer is advocated to distinguish the survey from telemarketing); (6) evaluating the merits of the various data collection approaches and choosing one, or a combination, to carry out the project; and (7) training and monitoring the interviewing staff. (5 references)

283. Corey, Christopher R., and Howard E. Freeman. "Use of Telephone Interviewing in Health Care Research." *Health Services Research* 25, no. 1, pt. 1 (April 1990): 129-44.

Increasingly, telephone interviewing has become the preferred data collection method for large-scale health services research surveys. Corey and Freeman investigate the consequences, if any, of excluding from a sample the nontelephone households whose social and demographic characteristics may differ from households with telephones (it is estimated that somewhat less than 8 percent of U.S. households do not have telephones). The effects of weighting to adjust for any telephone-exclusion bias are discussed. The data analyzed came from the National Health Interview Survey (HIS) [referred to by some as the NHIS], an annual survey conducted with face-to-face interviews. A random sample of 10,000 telephone households was selected from the HIS for the years 1982 through 1984 and compared to all households without telephones, yielding weighted samples of about 6 to 7 percent nontelephone households. The authors examined several measures: ambulatory visits, hospitalizations, and health insurance status. Regression analysis indicates that on one of the measures—health insurance—individuals living in households with and without telephones represented very different populations. In this case distorted parameter estimates

could not be adjusted to take into account nontelephone households. (3 endnotes, 5 references)

284. Fox, Tracy A., Jerianne Heimendinger, and Gladys Block. "Telephone Surveys as a Method for Obtaining Dietary Information: A Review." *Journal of the American Dietetic Association* 92, no. 6 (June 1992): 729-32.

The advantages of telephone surveys are greater cost savings; improved data collection, coding, and analysis due to computer-assisted telephone interviewing; the efficiency of random digit dialing for sample selection; and the ability to reach large numbers of individuals (in 1992, 97 percent of U.S. households had telephones). Noncoverage and nonresponse are discussed as two critical concerns. The increasing need to collect individual and group dietary information in a cost-effective manner has expanded the use of dietary telephone surveys, which traditionally have been reserved for follow-up of initial face-to-face interviewing. Two commonly administered instruments, the 24-hour recall and the food frequency questionnaire, are utilized by the Department of Agriculture's Continuing Survey of Food Intakes of [*sic*] Individuals, and the third National Health and Nutrition Examination Survey. Both surveys currently use telephone interviewing exclusively or as a follow-up. Several state-based dietary telephone surveys are discussed: the Behavioral Risk Factor Surveillance System (forty states participate), the California Department of Health Five-a-Day for Better Health Survey, and a study of the relationship between diet and breast cancer carried out at New York University. The authors conclude that telephone interviewing can be a comparable, or sometimes superior, approach for obtaining dietary information for nutrition research and intervention. (33 references)

285. Gfroerer, Joseph C., and Arthur L. Hughes. "Collecting Data on Illicit Drug Use by Phone." Chap. 11 in *Survey Measurement of Drug Use: Methodological Studies*, edited by Charles F. Turner, Judith T. Lessler, and Joseph C. Gfroerer, 277-95. DHHS Publication no. (ADM) 92-1929. Washington, DC: U.S. Department of Health and Human Services, Public Health Service, Alcohol, Drug Abuse, and Mental Health Administration, 1992. 413p. [SuDocHE20.8002:S7/2]

Data from two surveys—the Quick Response Survey (QRS) conducted in 1988 by Chilton Research Services, and the 1988 National Household Survey on Drug Abuse (NHSDA)—were analyzed to determine the feasibility of using telephone interviews to gather information on illicit drug usage. The NHSDA sample consisted of 3,095 respondents between 12 and 17 years of age and 5,719 respondents age 18 and older. For the QRS, 1,965 individuals in the older age category were selected by a random-digit-dialing sampling procedure. The QRS questions were a subset of NHSDA items that had been reformatted as a computer-assisted telephone interview survey. NHSDA interviewing protocols include both interviewer-administered and self-administered formats, the latter

reserved for questions of a sensitive nature. A comparison of NHSDA households with and without telephones indicated that households with telephones were different from nontelephone-owning households, with reported drug use significantly higher among the latter. When comparing QRS and NHSDA drug use estimates, those from the QRS were significantly lower. For sensitive questions, it was found that respondents were more willing to reveal illicit drug usage on a self-administered answer sheet than in either telephone or face-to-face interviews. The authors also compared data from a subset of the NHSDA sample in the state of Texas, with estimates from a 1988 telephone survey of 5,096 individuals residing in Texas. This survey was conducted by the Texas Commission on Alcohol and Drug Usage and the Public Policy Resources Laboratory of Texas A&M University. Differences in rates of drug usage were not as consistent as in the previous comparison. (5 footnotes, 20 references)

286. Gfroerer, Joseph C., and Arthur L. Hughes. "The Feasibility of Collecting Drug Abuse Data by Telephone." *Public Health Reports* 106, no. 4 (July-August 1991): 384-93.

Conducted in 1988 by Chilton Research Services, the Quick Response Survey (QRS) was a random-digit-dialed telephone survey of 1,965 adults. Data from the QRS were compared with findings from the 1988 National Household Survey on Drug Abuse (NHSDA), a face-to-face and self-administered survey of 5,719 respondents over the age of eighteen. The authors focus on the overall use of illicit drugs, the prevalence of drug usage among households with and without telephones, the impact of nontelephone households on the measurement of patterns and trends in drug use, and coverage errors in telephone surveys. The QRS questionnaire contained a subset of NHSDA questions which were reformatted and programmed into a computer-assisted telephone interviewing system. Unlike the NHSDA questionnaire, the QRS did not ask first about the use of legal drugs, and skip patterns were part of the protocol. Response rates for the two surveys were similar. The findings indicate that drug use decreased substantially between 1985 and 1988 in households having telephones (93 percent of households had telephones at the time). However, usage rates were substantially higher among households without telephones (for example, 24.9 percent as compared to 9.4 percent for marijuana). Comparisons also were made with estimates from a 1988 telephone survey conducted in the state of Texas. Underreporting was evident in this study as well. Gfroerer and Hughes offer explanations for a possible underreporting bias and suggest caution when conducting telephone surveys to generate illicit drug use estimates. (19 references)

287. Groves, Robert M. "Theories and Methods of Telephone Surveys." In *Annual Review of Sociology*, vol. 16, edited by W. Richard Scott and Judith Blake, 221-40. Palo Alto, CA: Annual Reviews, 1990. 544p.

The author traces the theoretical roots of the survey method, noting ties to the disciplines of statistics, psychology, and sociology. Factors associated with the

growth of this data collection approach in the United States include greater telephone ownership, cheaper long-distance communication, improved sampling techniques, and the development of computer-assisted telephone interviewing (CATI). Groves analyzes several theories relative to the understanding of mode effects. These are theories relevant to coverage error; psychological theories of compliance and persuasion relevant to nonresponse error; sociological theories relevant to telephone survey nonresponse error; and cognitive and social psychological theories relevant to measurement error. Four types of error are discussed: noncoverage, nonresponse, sampling, and measurement. These errors can arise from a variety of sources—the interviewer, the respondent, and/or the survey instrument. Groves reviews the current state of empirical research on error sources in telephone surveys; considers the effect of CATI on costs and errors; and provides summary comments and thoughts for the future, including the impact of telecommunications on all aspects of life, the rising costs for conducting survey research, and declining response rates. (52 references)

288. Lavrakas, Paul J. "Methods for Sampling and Interviewing in Telephone Surveys." Chap. 15 in *Handbook of Applied Social Research Methods*, edited Leonard Bickman and Debra J. Rog, 429-72. Thousand Oaks, CA: Sage Publications, 1998. 580p.

A comprehensive overview of the design and implementation of telephone surveys is presented. Lavrakas focuses on *total survey error (TSE)*, a concept that recognizes that all aspects of research are interrelated, and errors or weaknesses in one area will impact overall data quality. TSE as it applies to telephone surveys concerns the disparity that often exists between the sampling frame (that is, the list of telephone numbers from which a sampling pool is drawn) and the larger population the survey is intended to represent. Other potential sources of error are attributed to the survey instrument, the interviewers and/or the respondents, or as a result of nonresponse. Lavrakas provides a brief historical background of telephone surveys in the United States, reviewing the physical and social factors contributing to their development. Twelve steps are listed for conducting high-quality surveys. The discussion of sampling and coverage issues includes the following: commercial list vendors; random-digit-dialing sampling procedures; the Kish method of random selection; directory sampling; within-unit and the "birthday" method of respondent selection; mixed-mode survey sampling; and the role of computer-assisted telephone interviewing (CATI). Suggestions are offered for the reduction of nonresponse. Measurement issues, such as interviewer selection and training, the survey instrument, and how CATI can help minimize error, are considered. (57 references)

289. Lavrakas, Paul J. *Telephone Survey Methods: Sampling, Selection, and Supervision*. 2^d ed. Applied Social Research Methods Series, vol. 7. Newbury Park, CA: Sage Publications, 1993. 181p.

The second edition (first edition, 1987) has been augmented by approximately twenty-four pages of new material, with Lavrakas stating that the 1993 edition strengthens the guiding theme of the original volume: the reduction of error in order to achieve valid data. The organizing theme for the book is the concept of *total survey error*. The book's approach is applied, seeking to provide the reader with specific details needed for planning and implementing a telephone survey. Although Lavrakas acknowledges the importance and greater frequency of mixed-mode surveys, a telephone survey is to be preferred whenever appropriate and possible. This methodology offers greater opportunities for quality control throughout the survey process. Chapters 1 and 2 cover such topics as the basic steps in the telephone survey process; the applications of computer-assisted and paper-and-pencil telephone interviewing; the selection of a sampling design; and the advantages and disadvantages of random digit dialing. The processing of sampling pools and the selection of respondents are the subjects of chapters 3 and 4. In the final two chapters, the author examines interviewer recruiting, hiring, training, and supervision. Each section concludes with exercises. Lavrakas provides an historical note, reminding readers that prior to the 1960s the number of homes with telephones did not allow for appropriate telephone sampling methods. The book has a seven-page glossary. (119 references)

290. Lawlor, Mary C. "Development of a Standardized Telephone Interview Instrument." *Occupational Therapy Journal of Research* 14, no. 1 (Winter 1994): 38-52.

The application of telephone interview methodology to occupational therapy research and program evaluation studies remains limited, with no evidence that the approach is being adopted by practitioners in the field. Questionnaire evaluation is viewed as a critical design issue. Lawlor reports on both a survey instrument designed to assess clinical practice patterns in pediatric occupational therapy and a pilot study conducted to evaluate the revised format. The sample population consisted of fifty-six therapists whose names were drawn from membership rosters of the American Occupational Therapy Association. An introductory letter and two work sheets were mailed prior to the survey. A total of 221 telephone calls resulted in twenty completed interviews. The mean number of attempts per completed interview was eleven, a figure said to diminish the cost-effectiveness of the study. There were no refusals. Instrument items were found to be clearly worded and highly salient, with the answers provided meeting the objectives of each question. The problems with the dataset from which the sample was drawn are discussed. An appendix lists ten guidelines for assessing standardized interview instruments. (29 references)

291. McAuliffe, William E., Stephanie Geller, Richard LaBrie, Susannah Paletz, and Elizabeth Fournier. "Are Telephone Surveys Suitable for Studying Substance Abuse? Cost, Administration, Coverage and Response Rate Issues." *Journal of Drug Issues* 28, no. 2 (Spring 1998): 455-82.

Although telephone surveys that collect data on drug and alcohol abuse have become increasingly more common since the early 1980s, some researchers question the suitability of this methodology. The authors attempt to reach more moderate conclusions concerning the effectiveness of telephone surveys by weighing the advantages and disadvantages, and comparing them to face-to-face substance-abuse surveys. The primary attraction of telephone surveys is their substantially lower cost, with numerous examples cited to support this claim. In addition, there are important administrative advantages: a smaller staff is required, interviewer performance can be closely monitored, more anonymity can be afforded the respondent, and greater security is provided the research staff which must reach such individuals as heroin addicts and cocaine abusers. Some of the criticisms include noncoverage of nontelephone households, administrative disadvantages, and lower response rates, thereby reducing the validity of the data. Further, telephone surveys do not provide an easy mechanism for establishing rapport and increasing respondent motivation; visual cues cannot be displayed; and the use of self-administered answer sheets is not possible. Existing evidence indicates that noncoverage bias is minimal in most cases due to the fact that about 95 percent of U.S. households have telephones. (It is noted that although both telephone and face-to-face surveys share the potential for nonhousehold coverage, it has little impact on the choice between modes.) In addition, the extent of nonresponse bias is generally small and may be further reduced by using enhanced models and mixed-mode surveys. The authors conclude that telephone surveys seem to have more advantages than disadvantages, but nevertheless require additional work in the design phase in order to reap the full benefits of the approach. Additional comparative studies are needed for the field of substance-abuse epidemiology. (2 endnotes, 106 references)

292. Malysa, Lani Lee. "Creating the Capacity for Telephone Survey Analysis." *PS: Political Science and Politics* 31, no. 4 (December 1998): 857-60.

The establishment of survey analysis telephone banks for political science academicians is advocated. Such a facility can be used by faculty members to attract grant money by conducting surveys, as well as for furthering their own research interests; by students as a learning laboratory; and by college and university administrators for fund-raising and conducting surveys. Malysa provides details of the expenses associated with creating the unit—setting up a computer network, purchasing hardware and software, buying or renting telephones and headphones, and so forth. In addition, there are long-term maintenance expenses and other costs for conducting surveys, such as purchasing random telephone numbers from a vendor and paying personnel. Suggestions are given for purchasing hardware and software packages, the latter for designing the questionnaire, conducting the survey, and recording and analyzing the data. (The author's first choice is "Survey Said" by Marketing Masters.) Security issues are discussed. (2 endnotes, 13 references)

293. Remington, Todd D. "Telemarketing and Declining Survey Response Rates." *Journal of Advertising Research* 32, no. 3 (May-June 1992): RC6-RC7.

To demonstrate the growth of the telemarketing industry, the following figures are cited: telemarketing expenditures have reached "\$60 billion from \$1 million just 10 years ago"; the industry trade group has more than 1,000 members (there were 23 members in 1983); and the number of telemarketing agents is about 300,000 (a fourfold increase since 1984). In order to determine the frequency of sales solicitations calls, as well as how such calls are perceived by the public, Remington contacted 1,000 respondents. Of these, 58 percent said they had participated in a telephone survey, and 73 percent acknowledged having received at least one telemarketing sales call, with older, better-educated, and more affluent Americans being the primary targets. Remington believes that since many individuals do not distinguish between sales calls and telephone surveys, their willingness to participate in the latter is declining. Response rates are then reduced for surveys conducted by legitimate research organizations. Telemarketing calls are often perceived as harassment, leading people to counter with unlisted telephone numbers and answering machines. The author states, "at best, we consider the findings troublesome; at worst, perhaps frightening" (p. RC-6).

Answering Machines and Caller-ID

294. Harlow, Bernard L., Elizabeth C. Crea, Marie A. East, Beth Oleson, Cameron J. Fraer, and Daniel W. Cramer. "Telephone Answering Machines: The Influence of Leaving Messages on Telephone Interviewing Response Rates." *Epidemiology* 4, no. 4 (July 1993): 380-83.

The study sample was a subset of a larger group of women between 45 and 54 years of age who resided in two Boston suburbs and who failed to return a mailed questionnaire dealing with menopausal status, and demographic and life-study characteristics. A mechanical pencil was included as a gift for participation. From an initial sample of 3,047 women, 191 met the study requirements. Eighty-eight women were assigned to the "message" group, and 103 were assigned to the "no message" group. For the first group, a prescribed, detailed message was left on two occasions on the telephone answering machines of eligible nonrespondents. For the second group, interviewers left no message for four calls that reached only an answering machine, and the outcome of "unable to make household contact" was noted. Completed interviews were obtained for 70 percent of respondents in the message group as compared to 55 percent in the nonmessage group (after adjustments were made for age, interviewer, and place of residence). The messages also increased the rate of household contact by approximately 15 percent. (5 references)

295. Link, Michael W., and Robert W. Oldendick. "Call Screening: Is It Really a Problem for Survey Research?" *Public Opinion Quarterly* 63, no. 4 (Winter 1999): 577-89.

The authors examine whether telephone answering machines (TAMs) and telephones with caller-identification (Caller-ID) capabilities contribute to the rising level of nonresponse in telephone surveys, thereby undermining the representativeness of the sample. To ascertain the role of these devices in nonresponse, data were pooled from two surveys conducted with a sample of South Carolinians. There were a total of 2,458 respondents, reflecting an average interview completion rate of 67.3 percent. A minimum of six calls were made to the household before a final disposition was assigned. Respondents who acknowledged having either TAMs (64.9 percent) or Caller-ID (26.7 percent) were asked how often the devices were used to screen unwanted calls. Demographic differences were apparent for the two groups. Younger respondents, African Americans, households with three or more adults, and households with children under age eighteen were more likely to say they rely solely on Caller-ID to screen unwanted calls. White respondents and those with higher levels of education were more likely to say they use TAMs for call screening. For those respondents who indicated the use of both devices, age was the distinguishing characteristic, with younger respondents significantly more likely to use both methods to screen calls. Link and Oldendick also investigated the types of listings displayed on Caller-ID units to determine their impact on respondents' willingness to answer the telephone. Many people with Caller-ID either did not use the service or disregarded the listing displayed. Also examined were the effects of screening practices on attempts to obtain an interview. Three measures of nonresponse were used—the number of callbacks required, the number of days before completion of the interview, and the likelihood of refusal. The authors conclude that, in general, the new call-screening technologies do not appear to significantly affect survey researchers' efforts to complete a telephone interview. (4 footnotes, 7 references)

296. Oldendick, Robert W., and Michael W. Link. "The Answering Machine Generation: Who Are They and What Problem Do They Pose for Survey Research?" *Public Opinion Quarterly* 58, no. 2 (Summer 1994): 264-73.

The questions posed in the title are in relation to potential sources of error in surveys, especially those that threaten sample representativeness. Traditional factors affecting the latter are noncoverage, refusals, and other forms of nonresponse. The prevalence, trends in usage, and possible bias generated when answering machines are used to screen calls are the foci of the research. Oldendick and Link analyzed six demographic correlates of answering machine ownership and use for call screening. Data came from nine statewide (South Carolina) random-digit-dialed telephone surveys conducted from 1989 to 1992. The results indicate that, at most, 2 to 3 percent of households may be using answering machines to screen calls. Other data are cited that found that self-reported ownership in

South Carolina increased from 25 percent in 1989 to approximately 40 percent in 1992; 38 percent of respondents in 1989 and 48 percent in 1992 reported that the machine was sometimes used to screen calls. Ownership was found to be more prevalent among certain subgroups: households having higher family incomes, residents of suburbs and urban areas, higher-educated individuals, those who are younger, and white people. Call screening was related primarily to age, with younger respondents more likely to screen calls. The authors are of the opinion that while call screening does not affect sample representativeness at present, the challenge will increase as machine ownership and call screening options increase. In addition to incidence and demographics, survey researchers must be aware of the impact messages have on reaching the answering machine generation. Potential bias from this source is viewed as a growing threat to survey reliability and validity. (8 footnotes, 9 references)

297. Piazza, Thomas. "Meeting the Challenge of Answering Machines." *Public Opinion Quarterly* 57, no. 2 (Summer 1993): 219-31.

Piazza's research is based on two questions which have arisen as the result of the increasing use of telephone answering machines: What are the chances that successive calls to a household using an answering machine will result in completing an interview, and when is the best time to call in order to minimize the chances of encountering an answering machine? The data analyzed came from the calling records of the 1990 California Disability Survey, a large random-digit-dialed [RDD] telephone survey conducted by the Survey Research Center at the University of California, Berkeley. RDD generated about 330,000 calls and completed interviews at over 24,000 households. Computer-assisted telephone interviewing was used to conduct the interviews, and CASES software permitted preservation of a record for each call. Any adult in the household reached could participate in the interview. In response to the first question, analysis indicates that 21 percent of the 330,839 calls were answered by machines (many of these were repeated calls). Only 4 percent of the calls were answered by a machine if a machine had not been encountered at that number before. On subsequent calls, an answering machine was reached 38 percent of the time. Overall, 23 percent of the calls resulted in contact with a person in a household. Once an individual was reached, the chances were fairly constant that an interview could be completed. In response to the second question, the optimal times for reaching a person were on Saturdays before noon or on Sunday through Thursday evenings between 6:00 and 10:00 P.M. The author believes the analysis shows "convincingly what really does happen when 10, 20, 30 or even more callbacks are attempted" (p. 220). Comments are made on the costs, response rates, implications of the study, and refinements needed for further research. (5 references)

298. Tuckel, Peter S., and Barry M. Feinberg. "The Answering Machine Poses Many Questions for Telephone Survey Researchers." *Public Opinion Quarterly* 55, no. 2 (Summer 1991): 200-17.

As of 1988-89, estimates of U.S. households possessing a telephone answering machine ranged from 20 to 26 percent—a figure likely to underestimate the actual incidence of ownership. The authors pose three questions concerning if, and how, the growing prevalence and use of the machines have an impact on the data-gathering efficiency of telephone surveys: (1) How do the machines affect the establishment of contact with potential respondents? (2) To what degree are respondents with answering machines who are reachable likely to participate in a survey? and (3) What is the extent of variability in answering machine disposition as a function of calling time and respondents' place of residence? The sample consisted of 2,981 telephone numbers that were part of a continuous tracking study (conducted by Audits & Surveys) of 4,884 individuals. The Waksberg procedure was used for selecting telephone numbers. In the final sample there were 1,061 respondents who completed the interview, of whom 300 completed a longer questionnaire. Among the findings are that (1) a significant number of the answering machine owners were both reachable and willing to participate in a survey; (2) answering machines were used more frequently on weekends than on weekday evenings; and (3) answering machines were utilized more in urbanized areas than in locations with fewer inhabitants, a finding "consistent with the pattern of diffusion" of electronic technology in this country. (8 footnotes, 8 references)

299. Tuckel, Peter, and Harry W. O'Neill. "Screened Out: New Telephone Technologies Erect Barriers to Researchers, But It's Nothing Personal." *Marketing Research* 8, no. 3 (Fall 1996): 34-43.

The new technologies referred to in the title are telephone answering machines and telephones with caller-identification (Caller-ID) capabilities. Although both options may make contact with potential respondents more difficult in telephone surveys, Caller-ID is seen to pose the greater challenge, since interviewers are unable to leave a message that could lead to respondent participation. Tuckel and O'Neill report on a study whose goals were to (1) profile Caller-ID subscribers; (2) identify their reasons for subscribing to this service; (3) examine their attitudes toward telephone survey participation; (4) measure the extent to which they use call screening; and (5) investigate certain attributes and practices of telephone answering machine owners. Face-to-face interviews were conducted with a national representative sample of 1,980 individuals eighteen years of age and over. The subscribers to Caller-ID (about 10 percent of households with telephones in 1996) were found to be younger, separated or divorced, African American, and employed full time. In addition, they resided in the Midwest or South, were more actively involved in political and social activities, and had children living at home. Several reasons were given for subscribing to such a service: to have a record of calls, to identify the telephone numbers of unwanted calls, and to screen calls when at home. A surprising outcome is that the sample studied was "more positively disposed" toward telephone survey participation than nonusers. The findings, in general, are thought to be encouraging for survey researchers. An appendix provides the sampling strategy. (6 endnotes)

300. Tuckel, Peter, and Trish Shukers. "The Answering Machine Dilemma." *Marketing Research* 9, no. 3 (Fall 1997): 4-9.

Several questions form the basis for the research: (1) Are the owners of telephone answering machines (a figure estimated at between 60 and 70 percent of U.S. households) accessible to survey researchers? (2) Should interviewers leave a message, or multiple messages, on these devices? (3) If so, what constitutes an effective message and survey introductory statement? and (4) What impact, if any, do messages have on a respondent's willingness to participate in a survey? Quality Controlled Services, a division of Marwitz Marketing Research, Incorporated, conducted a national, two-wave, random-digit-dialed telephone survey of the general population in November 1996 and April 1997. Of the households that yielded an answering machine response on the first call attempt, 75 percent were reachable on subsequent attempts. Only 56 percent of the numbers that produced a "no answer" response at the initial call attempt were reached at the end of the calling period. Of the 984 respondents who completed the second wave of the study, 63 percent acknowledged ownership of an answering machine. Tuckel and Shukers conclude that a substantial proportion of answering machine owners still are reachable by telephone and willing to participate in surveys. There was little difference in contact rate when interviewers left a message and when they did not, and leaving two messages did not increase (or possibly decreased) the chances of reaching potential respondents. Brevity and an unambiguous identification statement (as opposed to a sales solicitation) characterized the most effective introductions.

301. Xu, Minghua, Benjamin J. Bates, and John C. Schweitzer. "The Impact of Messages on Survey Participation in Answering Machine Households." *Public Opinion Quarterly* 57, no. 2 (Summer 1993): 232-37.

As of 1991, industry estimates indicated that over 43 percent of households in the United States owned telephone answering machines. Individuals use the machines in two primary ways: as a call-screening device or as a means of improving communication. The authors examined the impact on telephone survey participation of three different messages: a basic version, one with the addition of the name of the university sponsor, and one containing an appeal for participation. The experiment was carried out during three random-digit-dialed surveys conducted in the Lubbock, Texas, area in 1991. Interviewers used the first call attempt to determine the initial status of the household. For each telephone answering machine household encountered, one of four experimental conditions was randomly selected, and the appropriate message left on the machine. There were 2,394 successful initial call attempts and 1,802 unsuccessful initial call attempts. Three callback attempts were made before the household was designated a nonrespondent household. As compared to no-answer households, households having the machines were more likely to be contacted (66.0 percent versus 59.5 percent), more likely to finish the interview (42.7 percent versus 34.3 percent), and less likely to refuse to participate in the

survey (34.9 percent versus 41.1 percent). The average response rate across the message options was 46 percent as compared to 33 percent when no message was left. The authors believe that survey researchers can increase response rates by leaving messages on telephone answering machines reached during initial contacts. These messages serve to introduce and personalize the researcher, distinguish the call from telemarketing requests, and promote the importance and legitimacy of the survey. Although the study indicates that messages can have a positive impact on survey participation, there were no significant differences among the types of messages tested. (8 references)

Callbacks

302. Arrowhead #12 Committee. *The Effect of Interview Attempts on Survey Results: A Project of the ARF Research Quality Council*. New York, NY: Advertising Research Foundation, 1992. 55p.

The Research Quality Council of the Advertising Research Foundation is dedicated to identifying problems and seeking solutions to issues which may affect the quality of research. The series, titled "Arrowhead Studies," explores recurrent industry research problems. The Arrowhead #12 Committee, chaired by Lorna Opatow, focused on whether the number of interview attempts (telephone callbacks) influences survey results; whether respondents reached after multiple attempts differ from those contacted on the initial call; and how these differences affect the final results. Four existing surveys that had used probability samples were cross tabulated and analyzed by specific interview attempt: the 1986 Product/Media Survey of Mediamark Research, Incorporated; the 1986 Opatow Consumer Satisfaction Index Survey; the 1987 Simmons-Scarborough National Newspaper Study; and the 1989 Television Ownership Survey of Statistical Research, Incorporated. The methodological details of each of the surveys are given. Although there were differences among the studies, all measured purchase, use, and demographic characteristics, rather than opinions and attitudes. The committee found that some variables—demographics, magazine readership, and product and survey usage—differed significantly among respondents reached with one to four callbacks and those requiring five or more. Successive callbacks were required for younger respondents, those residing in urban areas, and individuals possessing higher socioeconomic status. Thus, these categories were significantly underrepresented with only one call attempt. A chronologically arranged annotated bibliography of seventeen citations is found on pages 47-53. These same titles are presented in alphabetical order on pages 54-55.

303. Kristal, Alan R., Emily White, Julie R. Davis, Gayle Corycell, Trivellore Raghunathan, Susan Kinne, and Ting-Kwong Lin. "Effects of Enhanced Calling Efforts on Response Rates, Estimates of Health Behavior, and Costs in a Telephone Health Survey Using Random-

Digit Dialing." *Public Health Reports* 108, no. 3 (May-June 1993): 372-79.

The authors evaluate three levels or stages of enhanced calling efforts for increasing response rates (a figure said to be declining in the past decade) in a random-digit-dialed telephone survey of residents of the state of Washington. The first level involved up to eleven call attempts to a household during a one-month period. Eleven more call attempts were made one month later for the second stage. The third level required recalling in six months those individuals who were either unable or unwilling to participate initially. The samples for levels one and two consisted of 2,100 telephone numbers each that had been selected by a modified two-stage Waksburg procedure. The Cancer Behavior Risk Survey questionnaire required about twenty-five minutes to complete and was administered by computer-assisted telephone interviewing. Enhanced calling efforts increased the overall response rate by 11 percent, of which 9 percentage points were attributable to callbacks. Although demographic differences were found among the respondents reached at the different levels of calling, there were no consistent associations of calling effort with health behavior related to alcohol use, smoking, diet, or health screening. Callback costs were about 50 to 64 percent higher than interviews obtained during the initial calling effort. Inclusion of hard-to-reach populations had little impact on the results. (18 references)

304. Schwager, S. J., C. M. Crawford, C. C. Chavez, M. Wells, D. Gibbs, C. Howard, K. Kordziel, B. Mellone, A. Okurowski, A. Porter, J. Reem, and T. Spargo. *The Effect of Telephone Follow-Up Calls on Sensitive Survey Non-Respondents*. Cornell University, Population and Development Program, 1989, Working Papers Series 2.24. Ithaca, NY: New York State College of Agriculture and Life Sciences, Department of Rural Sociology, 1990. 12p.

A sample of 1,878 undergraduate students at Cornell University was asked to participate in the Cornell Undergraduate Social and Sexual Patterns survey. Following a mailed introductory letter, the students were asked to pick up a questionnaire which focused on sexual behavior. A small incentive was offered, and complete anonymity was assured. The goals of the research were to assess how accurately sexual behavior among college students could be measured, and to investigate the comparative effects of asking questions of a sensitive nature. For the 1,226 students who failed to participate in the first week of the mail survey, telephone calls were made in an attempt to determine if callbacks significantly increased or decreased response rates. Calls were made by student volunteers or faculty survey directors. A total of 205 students were contacted in this manner. The results of the study support the view that telephone follow-up calls can increase response rates—even when dealing with sensitive topics under difficult data collection conditions. Response rates were higher when faculty made the calls. (24 references)

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Respondents

CHARACTERISTICS

305. Keenan, Kevin Lee. "Polls in the Media and the Spiral of Silence: Some Points for Consideration and a Test of Effects." Ph.D. diss., University of Georgia, 1990. 199 leaves. [*Dissertation Abstracts International* Order No. DA9117306; *DAI* 52A, no. 1 (July 1991): 0011.]

The history of polls in the media is reviewed in terms of three distinct periods of development, noting the major criticisms and concerns. Keenan discusses the types of effects that polls can have on an audience, citing relevant literature on opinion expression and media impact. Considerable discussion centers on the work of Elisabeth Noelle-Neumann and other researchers who have contributed to the development of alternative hypotheses concerning the effects of poll exposure. Central to Noelle-Neumann's "spiral of silence" theory is the premise that people have an innate fear of social isolation and therefore will alter their behaviors to avoid disapproval and ostracism. Keenan utilizes components of the spiral of silence theory, primarily the expression construct, on which to base a prestudy survey and a controlled field experiment, both administered by telephone interviews. A total of 115 adults were randomly assigned to one of five groups and exposed to a television newscast in which poll stories had been embedded for four of the groups. Two issues—legalized horse racing and nuclear power plants—were selected for the study. The findings indicate that the most common reason given for not expressing an opinion was fear of social isolation. Exposure to polls generated a significant shift in attitude on the issue of horse racing, but not for nuclear power plants. Opinion expression is viewed as a complex construct—one deserving attention as a variable and potential effect of mass communication. Four appendixes provide the prestudy instrument, the pretest and posttest instruments, and the experiment scripts. (204 references)

306. Ross, Catherine E., and John R. Reynolds. "The Effects of Power, Knowledge, and Trust on Income Disclosure in Surveys." *Social Science Quarterly* 77, no. 4 (December 1996): 899-911.

Two approaches to survey response behavior are examined. The first, the *respondent-as-subject* perspective, regards respondents as active, thinking, and participatory—those holding positions of power both inside and outside the household. The *respondent-as-object* perspective, "common among survey practitioners," considers respondents as pawns to be manipulated into answering threatening questions through various compliance-gaining tactics. The authors hypothesized that powerlessness in the household, and in society in general, would be associated with nonresponse because it lessens knowledge (the ability to report) and trust (the willingness to report). Ross and Reynolds analyzed exact income nonresponse and complete income nonresponse in the Work, Family, and Well-Being Survey, a 1990 telephone survey of a national probability sample of 2,031 respondents. The response rate was 82.3 percent. If exact income figures were not obtained, a series of probes of approximate income followed. The authors found that several categories of respondents (38 percent of the total) did not report an exact income: homemakers; African Americans; those with low levels of education; individuals who felt powerless; and those who were older and unmarried. Respondents with a mistrust of others were less likely to report any income. It is concluded that "counter to expectations, the odds of both types of income nonresponse increase with economic advantage" (p. 899). The authors recommend that survey researchers find ways to help people communicate what they are willing to reveal and not pressure them to reveal what they wish to keep private. (14 references)

COGNITIVE PROCESSES

307. Bickart, Barbara, and E. Marla Felcher. "Expanding and Enhancing the Use of Verbal Protocols in Survey Research." Chap. 6 in *Answering Questions: Methodology for Determining Cognitive and Communicative Processes in Survey Research*, edited by Norbert Schwarz and Seymour Sudman, 115-42. San Francisco, CA: Jossey-Bass Publishers, 1996. 469p.

Verbal protocols (or reports) are used to assist researchers in understanding how individuals formulate their responses to survey questions. The technique involves asking respondents to "think aloud" as they answer each question, thus offering clues to their underlying thought processes. Bickart and Felcher provide a selective review of the general use of verbal protocols as they apply to behavioral frequency questions; report the development of a theoretical coding scheme that can be imposed on the protocols so that the data gathered can be analyzed and comprehended; and discuss the details of an experimental study. The categories selected for the coding scheme follow the four stages of the process respondents use to report activities about themselves and others: (1) preparation—

includes clarification, thinking, and restating the question; (2) preanswer production—includes episode recall, qualitative frequency assessment, normative behavior, and trait knowledge; (3) frequency elicitation—includes direct retrieval, counting, and estimation; and (4) postfrequency evaluation—includes social desirability assessment and certainty assessment. The authors acknowledge that perhaps no single coding scheme is appropriate for every survey research environment. The choice depends on the goal of the research and the types of questions asked. The primary contribution of the chapter is to demonstrate that respondents often “construct” rather than “directly retrieve” their responses to behavioral frequency questions. There are 534 cumulated references on pages 403-41. (2 endnotes)

308. Bishop, George F. “Qualitative Analysis of Question-Order and Context Effects: The Use of Think-Aloud Responses.” Chap. 11 in *Context Effects in Social and Psychological Research*, edited by Norbert Schwarz and Seymour Sudman, 149-62. New York, NY: Springer-Verlag, 1992. 353p.

The technique of having respondents “think aloud,” “think out loud,” or “talk aloud” as they formulate answers to questions is advocated. Bishop’s purpose was threefold: (1) to determine if think-aloud protocols can help explain how responses are affected by the order or context in which a question appears; (2) to generate, if possible, alternative hypotheses about question order and context effects; and (3) to identify the cognitive processes respondents use to answer questions about subjective phenomena, such as beliefs, attitudes, and opinions. An experiment was conducted which involved various personnel from the University of Cincinnati: undergraduate and graduate students, clerical and maintenance staff, and others, for a total of sixty-one respondents who were asked not only to think aloud as they answered a question, but also to report on what they were thinking about as they replied. All interviews were tape-recorded and transcribed verbatim. Respondents were asked their views on abortion, their interest in politics, and whether Communist and American newspaper reporters should be allowed into each other’s country. The interviews required thirty- to forty-five minutes to complete. Three examples based on the above topics demonstrate context effects (depending on question sequence) and provide additional hypotheses about the psychological factors “that mediate order and context effects.” The think-aloud protocol is recommended for pretesting new survey items as well as for reassessing established questions. Appendix A lists the instructions for the think-aloud sessions. There are 540 cumulated references on pages 325-53.

309. Bolton, Ruth N., and Tina M. Bronkhorst. “Questionnaire Pretesting: Computer-Assisted Coding of Concurrent Protocols.” Chap. 3 in *Answering Questions: Methodology for Determining Cognitive and Communicative Processes in Survey Research*, edited by Norbert Schwarz and Seymour Sudman, 37-64. San Francisco, CA: Jossey-Bass Publishers, 1996. 469p.

The authors' experiences as members of the technical staff at GTE Laboratories, Incorporated, led to the development of a pretesting methodology designed to identify the cognitive difficulties respondents experience as they strive to provide answers to challenging survey questions. (GTE has utilized this methodology to improve questionnaire design in various consumer satisfaction surveys.) The technique is based on electronically coding the content of responses collected in face-to-face interviews. The pretest, administered in a laboratory setting rather than in the field, involves the use of *concurrent verbal protocols*, that is, instructing the respondent to "think aloud" as s/he formulates the answers. The interviewing protocol involves practice questions, *back channeling* (that is, a scenario in which the interviewer nods and provides encouraging sounds to indicate attentiveness), feedback, prompts, and debriefing questions. Automatic coding then determines the occurrence of prespecified verbal and nonverbal cues found within the answers obtained. Bolton and Bronkhorst believe that electronic coding provides specific criteria for identifying question defects on the basis of quantitative measures of respondents' cognitive difficulties. There are 534 cumulated references on pages 403-41. (6 endnotes)

310. Brewer, Marilyn, and Layton N. Lui. "Use of Sorting Tasks to Assess Cognitive Structures." Chap. 15 in *Answering Questions: Methodology for Determining Cognitive and Communicative Processes in Survey Research*, edited by Norbert Schwarz and Seymour Sudman, 373-85. San Francisco, CA: Jossey-Bass Publishers, 1996. 469p.

Sorting procedures, although infrequently utilized in survey research, are seen as an efficient method for gaining insight into the cognitive structures used by respondents to answer survey questions. Brewer and Lui examine how the sorting of objects into subjectively meaningful groups or clusters can generate a measure of "psychological proximity between pairs of objects within that domain" (p. 373). By then analyzing the structure of the data, researchers obtain information about respondents' thought processes. The advantages of sorting are that large numbers of objects can be categorized quickly, any form of stimulus can be utilized (for example, verbal statements and photographs), and the accuracy of the data produced is not dependent on respondents' ability or inability to verbalize their assessments of similarity. The primary disadvantage of the technique is that it generates cumbersome datasets, a problem solved by the use of computers. The authors describe several data analysis methods, including exploratory and confirmatory factor analyses and comparative analyses. Examples are provided of how the procedure assisted with categorizing a chronic condition checklist and a photography task. Suggestions are offered for applying nonverbal sorting procedures to survey methodology. There are 534 cumulated references on pages 403-41.

311. Dovidio, John F., and Russell H. Fazio. "New Technologies for the Direct and Indirect Assessment of Attitudes." Chap. 11 in *Questions about Questions: Inquiries into the Cognitive Bases of Surveys*, edited

by Judith M. Tanur, 204-37. New York, NY: Russell Sage Foundation, 1992. 306p.

The differences between *spontaneous responses* and *deliberate responses*, and techniques designed to encourage respondents' use of one or the other, are discussed primarily in terms of unobtrusively assessing respondents' socially undesirable attitudes, such as racism. The distinction is based on the MODE model (motivation and opportunity as determinants of the processing mode) that divides attitude-behavior processes into two types, with the basic difference being the extent to which a behavioral decision involves conscious deliberation versus spontaneous reaction. The implications of MODE for attitude measurement are explored, noting in particular the difficulties in predicting behavior thought to stem from the spontaneous behavior process. Dovidio and Fazio discuss the following: minimizing social-desirability concerns during attitude assessment; measuring automatic attitude activation (with priming and latency procedures) for indirect assessment; and enhancing the predictive value of direct attitude measurement procedures. Computers, touch-tone telephones, and other technologies can assist in implementing the assessment procedures advocated, although the authors believe that some of the techniques have not yet been sufficiently clarified to be employed immediately and easily in survey research. (64 references)

312. Forsyth, Barbara H., and Judith T. Lessler. "Cognitive Laboratory Methods: A Taxonomy." Chap. 20 in *Measurement Errors in Surveys*, edited by Paul P. Biemer, Robert M. Groves, Lars E. Lyberg, Nancy A. Mathiowetz, and Seymour Sudman, 393-418. Wiley Series in Probability and Mathematical Statistics, Applied Probability and Statistics. A Wiley-Interscience Publication. New York, NY: John Wiley & Sons, 1991. 760p.

The thought processes used by respondents to interpret and answer survey questions are the foci of the chapter. The phrase *cognitive laboratory methods* refers to "a set of tools for studying these thought processes and for identifying the errors that may be introduced during the response process" (p. 394). Forsyth and Lessler briefly review the cognitive laboratory protocols currently practiced by the Bureau of the Census, the National Center for Health Statistics, the Bureau of Labor Statistics, the Research Triangle Institute, and Westat, Incorporated. The research techniques discussed include expert evaluation, expanded interviews, targeted methods, and group interview formats. Using the Ericsson-Simon taxonomy as a point of departure, a general theoretical framework was developed which includes an attention hypothesis. The authors distinguish four levels of task timing, and discuss attention filters, verbal and nonverbal tasks, active and passive attention, directed filter specificity, and external attention filters. The authors discuss seven hypotheses relative to the applicability of the various methods and for testing the theoretical framework. There are 822 cumulated references on pages 683-733.

313. Groves, Robert M. "How Do We Know What We Think They Think Is Really What They Think." Chap. 16 in *Answering Questions: Methodology for Determining Cognitive and Communicative Processes in Survey Research*, edited by Norbert Schwarz and Seymour Sudman, 389-402. San Francisco, CA: Jossey-Bass Publishers, 1996. 469p.

Groves provides the concluding chapter for this collection of cognition studies designed to improve standardized measurement in surveys. The author (1) describes a mapping of the ten research methodologies discussed in the volume onto the main features of the question-answer process; (2) evaluates costs versus benefits for the different techniques; and (3) suggests ways that the methods described might improve survey data. Both a narrative and a tabular critique of the techniques are presented. The methodologies are sorting; exemplar generation; concurrent protocols; retrospective protocols; paraphrasing; conversational analysis; text analysis of responses; behavioral coding; expert forms appraisal; and response latency. Although survey practitioners have applied many of the laboratory practices of cognitive and social psychologists, Groves believes that additional evidence is needed that these practices can provide accurate insights into the cognitive processes that occur when respondents are faced with survey questions asked by real interviewers in actual survey settings. There are 534 cumulated references on pages 403-41.

314. Petty, Richard E., and W. Blair G. Jarvis. "An Individual Differences Perspective on Assessing Cognitive Processes." Chap. 10 in *Answering Questions: Methodology for Determining Cognitive and Communicative Processes in Survey Research*, edited by Norbert Schwarz and Seymour Sudman, 221-57. San Francisco, CA: Jossey-Bass Publishers, 1996. 469p.

The authors discuss the impact and implications of two individual differences variables, or "constructs," on survey response. The first construct measures an individual's need for cognition, that is, "the extent to which people tend to engage in and enjoy effortful cognitive activity" (p. 222). The "need-for-cognition" scale was developed by Petty and others in the early 1980s. The second construct, also developed by Petty and others, measures the degree to which individuals tend to engage in the evaluation of people, objects, and issues. Petty and Jarvis extensively review some of the basic research on the topic, and then, on the basis of the studies, group survey respondents into four categories: (1) Respondents who are low on need for cognition and low on need to evaluate will be least likely to have opinions while being most likely to be subject to context and mood effects, as well as to low effort biases. (2) Respondents who are low on need for cognition and high on need to evaluate will be most likely to form "real" opinions about a variety of topics, but arrive at their views through nonthoughtful means. Members of this group don't like to think, but do like to evaluate. (3) Respondents who are high on need for cognition and low on need to evaluate tend to form their opinions at the time of the interview, rather than retrieving them from memory. These respondents like to think, but not to evaluate. (4)

Respondents who are high on both need for cognition and need to evaluate will be most likely to express opinions that are a combination of those “thoughtfully retrieved” and “thoughtfully constructed.” There are 534 cumulated references on pages 403-41. (6 endnotes)

315. Schwarz, Norbert. “Self-Reports: How the Questions Shape the Answers.” *American Psychologist* 54, no. 2 (February 1999): 93-105.

Self-reports are a primary tool used by psychologists and social scientists for determining people’s thoughts, feelings, and behaviors, as well as for monitoring many societal trends. Schwarz initially focuses on how respondents attempt to understand survey questions, with the crucial issue being whether this understanding corresponds to the intentions of the researcher. The challenges respondents face both before and after they have determined the intended meaning of a question are reviewed. Schwarz states that “question comprehension is not solely an issue of understanding the literal meaning of an utterance. Rather, question comprehension involves extensive inferences about the speaker’s intentions to determine the pragmatic meaning of the question” (p. 96). Respondents use preceding questions and the response alternatives offered to make these inferences. Contributions from the field of cognitive psychology are acknowledged, such as conversational inference, interviewer probes, “think-aloud” protocols, and survey instrument pretesting. The author discusses the ways that individuals respond to behavioral questions, and then relates these questions to issues of autobiographical memory and estimation strategies. These techniques include the presentation of frequency response alternatives, the decomposition of the behavior, and the application of subjective theories of stability and change over time “as a framework for reconstructing one’s personal history.” Attitude questions are discussed in terms of the conditions that promote context effects in attitude measurement, the theoretical models developed to counter such effects, and the nature of assimilation and contrast. Schwarz maintains that features of the survey instrument shape the answers that respondents provide, thereby impacting the quality of the data obtained. (87 references)

316. Schwarz, Norbert, and Seymour Sudman. “Introduction.” Chap. 1 in *Answering Questions: Methodology for Determining Cognitive and Communicative Processes in Survey Research*, edited by Norbert Schwarz and Seymour Sudman, 1-12. San Francisco, CA: Jossey-Bass Publishers, 1996. 469p.

Since the early 1980s, numerous collaborative efforts have taken place between cognitive and social psychologists and survey methodologists, with the goal of understanding and improving how respondents provide answers to survey questions. Researchers have used psychological theories from language comprehension, memory, and judgment to formulate models of the question-answering process and to develop and refine techniques for identifying and measuring respondents’ cognitive and communicative processes. Schwarz and

Sudman observe that numerous major survey research centers and government agencies, both in the United States and Europe, have established cognitive laboratories to assist in questionnaire design and pretesting. Detailed chapter overviews are provided. There are 534 cumulated references on pages 403-41.

317. Schwarz, Norbert, and Seymour Sudman, eds. *Answering Questions: Methodology for Determining Cognitive and Communicative Processes in Survey Research*. San Francisco, CA: Jossey-Bass Publishers, 1996. 469p.

This volume is an outgrowth of an interdisciplinary conference attended by cognitive psychologists, social psychologists, and survey methodologists. The meeting focused on the cognitive and communicative processes underlying how respondents answer survey questions, an area that has received increasing attention in this country since the early 1980s. The book contains sixteen chapters which are arranged in four main parts: (1) "Interactional Analysis"; (2) "Verbal Protocols"; (3) "Other Methods for Determining Cognitive Processes"; and (4) "Conclusion." The chapters represent the efforts of thirty-four researchers. The editors direct the volume to both students and researchers in survey methods and cognitive psychology. There are 534 cumulated references on pages 403-41. The following entries have been selected from the volume, with individual annotations found at the indicated item numbers:

- Chapter 1: "Introduction." [Schwarz and Sudman - Item No. 316].
- Part 1, Chapter 2: "Using Behavioral Coding to Identify Cognitive Problems with Survey Questions." [Fowler and Cannell - Item No. 124].
- Chapter 3: "Questionnaire Pretesting: Computer-Assisted Coding of Concurrent Protocols." [Bolton and Bronkhorst - Item No. 309].
- Chapter 4: "From Paradigm to Prototype and Back Again: Interactive Aspects of Cognitive Processing in Standardized Survey Interviews." [Schaeffer and Maynard - Item No. 195].
- Part 2, Chapter 5: "The Validity and Consequences of Verbal Reports about Attitudes." [Wilson, LaFleur, and Anderson - Item No. 440].
- Chapter 6: "Expanding and Enhancing the Use of Verbal Protocols in Survey Research." [Bickart and Felcher - Item No. 307].
- Chapter 7: "Integrating Questionnaire Design with a Cognitive Computational Model of Human Question Answering."

[Graesser, Bommareddy, Swamer, and Golding - Item No. 121].

- Part 3, Chapter 8: “Cognitive Interviewing Techniques: In the Lab and in the Field.” [DeMaio and Rothgeb - Item No. 196].
- Chapter 9: “Cognitive Techniques in Interviewing Older People.” [Jobe, Keller, and Smith - Item No. 237].
- Chapter 10: “An Individual Differences Perspective on Assessing Cognitive Processes.” [Petty and Jarvis - Item No. 314].
- Chapter 11: “A Coding System for Appraising Questionnaires.” [Lessler and Forsyth - Item No. 83].
- Chapter 14: “Implicit Memory and Survey Measurement.” [Banaji, Blair, and Schwarz - Item No. 320].
- Chapter 15: “Use of Sorting Tasks to Assess Cognitive Structures.” [Brewer and Lui - Item No. 310].
- Part 4, Chapter 16: “How Do We Know What We Think They Think Is Really What They Think?” [Groves - Item No. 313].
318. Willis, Gordon B. “The Use of Strategic Processes by Survey Respondents.” Chap. 11 in *Basic and Applied Memory Research: Practical Applications*, vol. 2, edited by Douglas J. Herrmann, Cathy McEvoy, Christopher Hertzog, Paula Hertel, and Marcia K. Johnson, 153-65. Mahwah, NJ: Erlbaum Associates, 1996. 501p.

Mental tasks are considered to be of two types: *strategy free* or *strategy intensive*. According to Willis, the choice of these results in fundamentally different intervention approaches when applied to the field of survey methodology. With the strategy-free approach (the traditional view), the survey designer strives to simplify a task by providing clearly written questions, straightforward phrasing, short reference periods, and direct retrieval cues. The strategy-intensive perspective emphasizes the importance of strategies as underlying the response process, as well as intervention from the survey administrator to encourage respondents to use optimal cognitive procedures. The ramifications of each perspective as related to the survey response tasks of encoding, retrieval, and decision/response are considered. The author concludes that respondents employ different types of strategies at different points in the response process, and that the effectiveness of teaching these techniques has not been demonstrated. (37 references)

CONSENT

319. Beauvais, Fred. "Obtaining Consent and Other Ethical Issues in the Conduct of Research in American Indian Communities." *Drugs and Society* 14, nos. 1-2 (1999): 167-84.

For the past two decades, the Tri-Ethnic Center for Prevention Research (TEC) at Colorado State University has conducted substance abuse research with two communities: American Indian and Mexican American. The focus of this research is young American Indians' history of drug use and associated characteristics. Beauvais discusses the social, political, and historical events impacting research with this population and addresses an ethical issue of particular concern—that of obtaining parental consent for their children's participation in survey research. The pros and cons of requiring informed consent are reviewed. Until recently, TEC found it unnecessary to obtain written permission as long as certain protocols were followed. With new pressures and restrictions arising from social and legal environments, the author maintains that the primary effect of written permission requirements will be to undermine researchers' ability to collect valid data pertinent to drug prevention efforts. To counter the possibility of producing seriously biased data, Beauvais suggests (1) mailing letters to parents offering three drawings of \$100 for return; (2) obtaining signatures at parent/teacher conferences (an approach deemed "not very promising"); (3) securing parents' signatures at the schools' formal registration process; and (4) contacting parents in person (described as being both difficult and costly). A number of strategies are suggested for overcoming barriers to good research, such as understanding and responding to issues of a lack of sovereignty, overlapping jurisdictions, scarce resources, and a "well-founded skepticism" about the value of research and the motivations of researchers. (15 references)

MEMORY/RECALL

General

320. Banaji, Mahzarin R., Irene V. Blair, and Norbert Schwarz. "Implicit Memory and Survey Measurement." Chap. 14 in *Answering Questions: Methodology for Determining Cognitive and Communicative Processes in Survey Research*, edited by Norbert Schwarz and Seymour Sudman, 347-72. San Francisco, CA: Jossey-Bass Publishers, 1996. 469p.

The concept of *implicit memory* (that is, mental events that reside in the unconscious), has been of keen interest to psychologists for the last two decades. The defining characteristic of this type of memory is that prior experiences can influence judgments and decisions in a way not "introspectively" known to the respondent. A review of relevant research indicates that although respondents

frequently may be unable to retrieve relevant information during tests of *explicit memory* (that is, conscious), or fail to recognize what mental processes they used to retrieve such information, they are thought to make use of information that is not consciously accessible. In addition to past experiences, implicit measures of memory can reveal unconscious perceptions, attitudes, and beliefs. Such measures appear to be sensitive to the method of presentation as well as to the physical or structural properties of information. The authors consider the role of *phenomenal experience*, or mood and emotion, in memory and judgment, noting that one's judgments are not always based on what comes to mind, but that judgments can reflect subjective experiences that accompany thought processes. Survey researchers are urged to recognize the important role of unconscious memory in survey research methodology. There are 534 cumulated references on pages 403-41. (1 endnote)

321. Bodenhausen, Galen V. "Information-Processing Functions of Generic Knowledge Structures and Their Role in Context Effects in Social Judgment." Chap. 18 in *Context Effects in Social and Psychological Research*, edited by Norbert Schwarz and Seymour Sudman, 267-77. New York, NY: Springer-Verlag, 1992. 353p.

The discussion centers around the concept of *generic knowledge structures (GKSs)*, defined as "organized sets of beliefs about the social environment that summarize, in a general (abstract) and functional way, previous direct and vicarious experience with the stimuli encountered in this environment" (p. 267). GKSs, a theoretical construct commonly found in cognitive and social psychology, reside in long-term memory and provide a basis for "making sense of the world" by supplying information about elements in the environment and what they mean to the perceiver. Bodenhausen identifies and describes four of the primary functions performed by GKSs: information acquisition, information interpretation, information retrieval, and inference generation. Examples are provided for pre- and post-information effects in the social-psychological literature. The author discusses the relevance of GKSs for the survey researcher, such as the role they may play in context effects and how they might bias responses if activated prior to asking a particular target question. There are 540 cumulated references on pages 325-53.

322. Bradburn, Norman M., Janellen Huttenlocher, and Larry Hedges. "Telescoping and Temporal Memory." Chap. 13 in *Autobiographical Memory and the Validity of Retrospective Reports*, edited by Norman Schwarz and Seymour Sudman, 203-15. New York, NY: Springer-Verlag, 1994. 360p.

The term *telescoping* refers to the tendency of some respondents to recall an event as having occurred later ("forward" telescoping) or earlier ("backward" telescoping) than was actually the case. Telescoping frequently has been reported in the survey research literature. Although there is no "generally agreed-on" explanation for the phenomenon, the authors attribute its origins to the psychological

processes involved in recalling the times of events. A theoretical model is presented that offers an explanation for the displacement of events in time. The model assumes that dates from temporal memory are unbiased but inexact, with bias coming from the recall process. In addition, respondents' uncertainty (or variance) increases with greater elapsed time between the event and recall. Telescoping is due to this greater variance for more remote events. With greater uncertainty, time reports will be rounded to "prototypical" units or values. The authors discuss how the retrieval of information produces telescoping; the role of *reference periods* [that is, a period of time or interval specified in survey questions]; the technique of *bounded recall* (that is, a method of asking the same questions of the same respondent during successive interviews); the magnitude of bias effects; and ways to reduce overreporting. The use of shorter reference periods, bounded-recall methods, and "landmark" dates is recommended. There are 518 cumulated references on pages 335-60.

323. Burton, Scot, and Edward Blair. "Task Conditions, Response Formulation Processes, and Response Accuracy for Behavioral Frequency Questions in Surveys." *Public Opinion Quarterly* 55, no. 1 (Spring 1991): 50-79.

Two studies are reported that examine the following: the processes respondents use to formulate answers to behavioral frequency questions; how respondents make mistakes; and how more accurate responses might be obtained. Burton and Blair tested six hypotheses concerning the effects of task conditions on response formulation processes, the relationship between formulation processes and task variables, and the effects of response time and question structure variations on accuracy. The first study involved 188 junior- and senior-level business majors. The students were asked to complete a self-administered questionnaire in which the response formulation times were manipulated into time slots of 10, 20, 35, 50, or 70 seconds, or an unspecified amount. The questions focused on the number of nonbusiness courses taken and the number of "B" grades received. The participants for the second study were 160 bank customers who had checking accounts and were active ATM users. In tape-recorded telephone interviews, these respondents were questioned as to how many checks they had written and the number of ATM withdrawals. The findings indicate that (1) respondents frequently used a variety of mental processes when asked behavioral frequency questions; (2) certain task conditions (such as the number of events to be reported and the time required to generate a response) affected the processes used; and (3) the accuracy of frequency reports was "distressingly" low at the individual level. The authors speculate that cognitive processes other than episode omission and episode telescoping contribute to response error. (7 footnotes, 46 references)

324. Croyle, Robert T., and Elizabeth F. Loftus. "Improving Episodic Memory Performance of Survey Respondents." Chap. 5 in *Questions about Questions: Inquiries into the Cognitive Bases of Surveys*, edited

by Judith M. Tanur, 95-101. New York, NY: Russell Sage Foundation, 1992. 306p.

Croyle and Loftus emphasize the need for validation sources for self-reports, an area viewed as critical in both federally sponsored health-related surveys and in voting surveys that attempt to gain an understanding of voters' candidate preferences. A major challenge for the survey researcher is the scarcity of reliable verification data. If documentation does exist, it may be limited in scope, difficult to interpret, and raise confidentiality issues. Several studies are cited that present strategies for addressing the verification problem, such as the use of medical and voting records, large samples, and multiple measures. The differences between *episodic memory* (that is, recollecting) and *semantic memory* (that is, knowing) are explored. Additional research is needed with respect to the methodologies applicable for testing the utility of cognitively informed survey methods. Topics requiring attention are the cognitive dynamics of proxy reporting, the role of emotion in memory, the storage of health-related experiences, and the identification of effective recall cues. (12 references)

325. Croyle, Robert T., and Elizabeth F. Loftus. "Recollection in the Kingdom of AIDS." Chap. 7 in *Methodological Issues in AIDS Behavioral Research*, edited by David G. Ostrow and Ronald C. Kessler, 163-80. AIDS Prevention and Mental Health Series, edited by David G. Ostrow and Jeffrey A. Kelly. New York, NY: Plenum Press, 1993. 354p.

The role of memory in the task of recalling AIDS-related information is described as one of the least understood areas of sex research. Croyle and Loftus review some of the prior literature on memory, commenting on such concepts as *episodic memory* (that is, events or life experiences), *semantic memory* (that is, general factual knowledge), telescoping, over- and underreporting, and techniques to improve recall. Emphasis is placed on health-related memories, specifically the unique challenges respondents experience in recalling AIDS-related behaviors. Some of these difficulties are that (1) the sexual patterns of gay men tend to be more complex than those of the heterosexual population; (2) respondents' memory of recurrent and similar events have a tendency to "meld together" in the mind; (3) the recent emphasis on AIDS has produced a backlog of AIDS-related questions requiring research validation; (4) the virus itself can lead to dementia or memory impairment; and (5) the reliability and validity of life stress reports may be suspect. Effective verification procedures (for example, biological tests) are not in place at present, and the recall of everyday events has been shown to be better for pleasant memories than for unpleasant ones. The authors explore some of the ethical issues arising from the study of AIDS-related memory (such as the effects on the respondent of uncovering repressed emotions). (48 references)

326. Croyle, Robert T., Elizabeth F. Loftus, Mark R. Klinger, and Kyle D. Smith. "Reducing Errors in Health-Related Memory: Progress and

Prospects." Chap. 12 in *Information and Behavior*, 255-68. Vol. 4 of *Between Communication and Information*, edited by Jorge R. Schement and Brent D. Ruben. New Brunswick, [NJ]: Transaction Publishers, 1993. 537p.

Prior studies on health-related memory have concentrated on three topics: doctor-patient communication, dietary behavior, and health events. The authors observe that the research findings for all three areas indicate substantial problems in memory performance. The difficulties involved in verifying the accuracy of respondents' self-reports are reviewed. These include missing, incomplete, or inaccurate medical records, and the tendency of researchers to focus on how memories are organized and retrieved "without worrying about how that structure relates to past reality." Some of the ways in which health-related memory errors can be minimized are described, with the authors noting that traditional approaches have focused primarily on sample size and/or statistical analysis. Time frame procedures are advocated as an effective means for reducing telescoping, namely, the tendency of respondents to remember an event as having occurred more recently than was actually the case. Another memory-enhancement strategy involves retrieval order—namely, varying the order in which memories can be recalled. The accuracy of health-related self-reports is viewed as a goal that requires continuing collaboration between survey methodologists and experimental psychologists. (37 references)

327. Jobe, Jared B., Andrew A. White, Catherine L. Kelley, David J. Mingay, Marcus J. Sanchez, and Elizabeth F. Loftus. "Recall Strategies and Memory for Health-Care Visits." *Milbank Quarterly* 68, no. 2 (1990): 171-89.

As part of the National Health Interview Survey/National Medical Expenditure Survey Linkage Field Test, an experiment was conducted to determine the effect of recall order on respondents' accuracy in remembering the number of medical-provider visits they had had during the previous six-month period. The sampling plan, based on the Census Bureau's eight primary sampling units, generated 628 respondents, yielding 507 completed interviews for the experimental portion of the field test. Face-to-face interviews were conducted with random assignment to one of three order conditions: forward, backward, or no particular order (that is, "free" recall). Respondents were asked to remember the month and day for all visits as well as the reason(s) for the visitation. A total of 337 respondents reported having had at least one visit in the time frame specified. The data were then compared with providers' records for 130 of the respondents (one significant loss of data is attributed to physician nonresponse). Among the results are the following: (1) respondents underreported the number of healthcare visits by 20 percent; (2) for the completeness-of-recall variable, free recall was "marginally superior" to forward or backward ordering; and (3) for the accuracy variable, free recall proved superior to the other two conditions. Details are provided for additional variables such as gender, self-reported health status, age, race, level of

education, and income. The authors support the view that the application of cognitive psychology methodology can improve the recall processes of survey respondents. (18 references)

328. Loftus, Elizabeth F., Kyle D. Smith, Mark R. Klinger, and Judith Fiedler. "Memory and Mismemory for Health Events." Chap. 6 in *Questions about Questions: Inquiries into the Cognitive Bases of Surveys*, edited by Judith M. Tanur, 102-37. New York, NY: Russell Sage Foundation, 1992. 306p.

The accuracy of respondents' health memories was investigated by comparing those recollections with data obtained from medical records. The authors focus on the types of errors made as well as on techniques to improve recall. The research was carried out in collaboration with a large health-maintenance organization (HMO) that regularly conducts telephone surveys, one of which was utilized for this study. Of the 950 respondents in the survey, 94 percent granted access to their medical records. The HMO questionnaire contained approximately fifty questions, with those pertinent to this experiment embedded near the beginning. Respondents were randomly assigned to one of twenty versions. Four different manipulations were tested: order of retrieval (beginning in a forward or backward direction); order of retrieval and proxy recall (information about the respondent provided by some other person); landmarks (highly salient events); and two time frames (asking respondents about what occurred in a longer reference period before asking about a shorter one). The results indicate that respondents dramatically underreported the number of medical visits while overreporting the number of specific procedures performed during those visits. Possible causes for the findings are discussed, and suggestions are made for reducing error, such as using backward order (reverse chronological order) and the two-time-frame procedure. (31 references)

329. Menon, Geeta. "The Effects of Accessibility of Information in Memory on Judgments of Behavioral Frequencies." *Journal of Consumer Research* 20, no. 3 (December 1993): 431-40.

Menon examines the psychological processes that underlie respondents' reports of how often they participate in a certain behavior. Those who conduct consumer surveys employ these types of frequency judgments for determining market-size and brand-share forecasts. Menon maintains that two factors—regularity (the frequency of occurrences), and similarity (the degree of idiosyncrasy associated with the target behavior in terms of where, with whom, and what happened during each occurrence)—affect the degree of accessibility of information stored in memory. Both the strategies that respondents use to retrieve data, as well as the accuracy of their reports, were examined through three experiments. The first pertained to how respondents formulate their judgments. Twenty-nine undergraduate students taking business administration courses were presented with twelve behaviors and asked to respond to an open-ended format. In the

second experiment, the cognitive effort required to arrive at a frequency judgment was assessed using the same target behaviors with twenty-eight undergraduate students who responded via a self-administered computer survey. The third experiment was designed to determine the accuracy of the reports. In this scenario, twenty-four students kept diaries of their behaviors for a period of one week. Menon found that both the regularity and similarity of a frequently occurring behavior affected the judgment formulation strategy, the cognitive effort imparted, and the accuracy of the behavioral frequency judgments. The implications for consumer researchers are considered. (8 footnotes, 32 references)

330. Pearson, Robert W., Michael Ross, and Robyn M. Dawes. "Personal Recall and the Limits of Retrospective Questions in Surveys." Chap. 4 in *Questions about Questions: Inquiries into the Cognitive Bases of Surveys*, edited by Judith M. Tanur, 65-94. New York, NY: Russell Sage Foundation, 1992. 306p.

The chapter serves as a thematic overview to part III, "Memory," and provides a theoretical framework relative to the processes that can introduce error into retrospective (memory-based) self-reports. Suggestions are offered for evaluating the validity of such reports. The authors emphasize that responses to retrospective questions are influenced by the respondent's psychological and environmental state, as well as by "the explicit or implicit theories which consist of schemata, narratives, or scripts they hold about themselves and society" (p. 67). Major topics discussed include a theory of personal recall, implicit theories of stability and change, and the degree of bias in recall. Research is reviewed that supports the hypothesis that people exaggerate the similarities between the present and the past if a theory of consistency in the face of actual change is adopted. Other research findings, however, indicate that people may overestimate change when they hold a theory of change in a context of actual stability. The implications of the research for survey measurement are considered. Two solutions for reducing error and bias are to ask retrospective questions in ways that reduce the use of implicit theories, or to avoid using retrospectively based methods altogether. (5 footnotes, 86 references)

331. Smith, Eliot R. "New Connectionist Models of Mental Representation: Implications for Survey Research." Chap. 16 in *Cognition and Survey Research*, edited by Monroe G. Sirken, Douglas J. Herrmann, Susan Schechter, Norbert Schwarz, Judith M. Tanur, and Roger Tourangeau, 251-64. Wiley Series in Probability and Statistics, Survey Methodology Section, edited by Robert M. Groves, Graham Kalton, J.N.K. Rao, Norbert Schwarz, and Christopher Skinner. A Wiley-Interscience Publication. New York, NY: John Wiley & Sons, 1999. 395p.

Smith, a proponent of the *connectionism* perspective within the field of social psychology, provides an introduction to this concept and discusses its implications for survey research. In contrast to traditional models of mental representation,

connectionist models, developed in the 1970s and 1980s, propose a different memory system—one in which memories are distributed across a large number of simple processing units as patterns superimposed in a single set of connection weights. Smith summarizes the models' characteristics by stating that "mental representations are *constructed* on the perceiver's interpretation of the available information, and are stored in a common set of weights, so that no one representation can be stored, accessed, or changed independent of all others" (p. 254). Some of the limitations of the models are noted, for example, that connectionist memories are unable to acquire new information quickly within the same system as preexisting information. Suggestions are offered as to how survey researchers can best utilize the approach to tap the desired information. (25 references)

Autobiographical

332. Back, Kurt W. "Accuracy, Truth, and Meaning in Autobiographical Reports." Chap. 3 in *Autobiographical Memory and the Validity of Retrospective Reports*, edited by Norbert Schwarz and Seymour Sudman, 39-53. New York, NY: Springer-Verlag, 1994. 360p.

Autobiographical memories serve different functions, with the distinguishing feature being whether respondents report about themselves or about others, and whether the questions primarily concern the impact of society on the individual or of the individual on society. The role of the respondent and the autobiographical content differentiate the collection of biographical data in survey interviews from that gathered in other environments. Back creates a typology of autobiography that categorizes and describes varying biographical interviewing situations. The typology contains four elements: the survey interview, literary biography, the psychotherapeutic interview, and the heroic myth. In the survey interview, researchers use respondents as "informants" about society, collecting facts about common events and utilizing them to describe social units. The task is to question precisely in order to generate the desired data. Literary biography emphasizes the uniqueness of the individual. These descriptions concentrate on the entire life, ignoring the existence of isolated facts. The purpose of the psychotherapeutic interview is to gather data to better understand the impact of society on the individual. In heroic myth, retrospective data are transformed into the cultural stereotype of the hero. The chapter ends with a discussion of how the meanings of truth and accuracy can vary for each of the typologies. There are 518 cumulated references on pages 335-60.

333. Banaji, Mahzarin R., and Curtis Hardin. "Affect and Memory in Retrospective Reports." Chap. 5 in *Autobiographical Memory and the Validity of Retrospective Reports*, edited by Norbert Schwarz and Seymour Sudman, 71-86. New York, NY: Springer-Verlag, 1994. 360p.

Three approaches to the study of the influence of affective factors on memory in retrospective reports are identified and discussed: *affect as mood state*, *affect as arousal state*, and *affect as evaluation*. Banaji and Hardin focus on two long-standing and controversial questions in psychology: "What are the influences of the affective properties of an experience on memory for that experience? [and] Do we remember pleasant events with greater facility than we do unpleasant events, or are events associated with greater affective intensity, both pleasant and unpleasant, remembered better?" (p. 72). Two variables, valence and intensity, are examined in terms of if and how they impact respondents' memorability of an event. The role of affect on explicit and implicit measures of past events is explored. The authors review both retrospective and current research and provide an historical perspective for the development of the three methodologies. The conclusion reached is that affect does influence memory. Affect is viewed as a critical variable in the retrospective report process because such reports frequently involve memory for events to which affect is associated. Commentary is provided concerning how these findings can assist survey researchers. (1 footnote) There are 518 cumulated references on pages 335-60.

334. Brewer, William F. "Autobiographical Memory and Survey Research." Chap. 1 in *Autobiographical Memory and the Validity of Retrospective Reports*, edited by Norbert Schwarz and Seymour Sudman, 11-20. New York, NY: Springer-Verlag, 1994. 360p.

Brewer introduces a classification scheme that organizes the various types of autobiographical memories in terms of frequency of exposure to some event or behavior, the types of input, and different forms of memory representation. Also considered are the types of data found in memory research. Survey researchers are encouraged to include a wider range of questions in survey instruments. The author discusses the concept of *absolute time* and its role in autobiographical memory. This theory holds that when respondents are asked about the absolute date of an event, they generate their answers from other types of information stored in memory or from generic memory, rather than from particular episodic information. Two studies are cited which suggest a fairly substantial rate of forgetting over time. Another area of research has attempted to ascertain which characteristics of an event (such as frequency, location, or time) enhance recall ability. The role of accuracy in memory is discussed, with existing theories covering a broad range of positions. The basic literature in each of the areas is summarized, and comments are made on the implications for survey research. Brewer maintains that theoretical and empirical interchange can benefit both cognitive psychologists and survey methodologists. There are 518 cumulated references on pages 335-60.

335. Clark, Leslie F., James E. Collins II, and Susan M. Henry. "Biasing Effects of Retrospective Reports on Current Self-Assessments." Chap. 18 in *Autobiographical Memory and the Validity of Retrospective*

Reports, edited by Norman Schwarz and Seymour Sudman, 291-304. New York, NY: Springer-Verlag, 1994. 360p.

The authors examine the impact of autobiographical memories on respondents' assessment of their current lives—their life satisfaction, happiness, or well-being. The consequences of two methods of describing autobiographical events are reviewed. *Episodic recounting tasks* provide instructions to focus respondents' attention on the details of a past event (such as time, location, and what was said), while *abstract recounting tasks* attempt to obtain respondents' perceived causes and reasons for a past life event's occurrence. The impact of past life events on respondents' current judgments of well-being were found to depend on how vivid or "pallid" (emotionally uninvolved) the descriptions were. The authors conclude that "respondents who give detailed, vivid accounts of past life events later produce judgments of current life that assimilate to the valence of the event retrospectively reported. Respondents who give descriptions of the causes and reasons for the past event's occurrence...tend to contrast subsequent judgments away from the valence of the past event" (p. 304). The further back in time memories must be recalled, the fewer episodic details are provided and the more abstract the recounting becomes. Explanations are offered for the assimilation and contrast effects found, and examples are provided for the ways retrospective recounting can impact the survey research process. There are 518 cumulated references on pages 335-60.

336. Eisenhower, Donna, Nancy A. Mathiowetz, and David Morganstein. "Recall Error: Sources and Bias Reduction Techniques." Chap. 8 in *Measurement Errors in Surveys*, edited by Paul P. Biemer, Robert M. Groves, Lars E. Lyberg, Nancy A. Mathiowetz, and Seymour Sudman, 127-44. Wiley Series in Probability and Mathematical Statistics, Applied Probability and Statistics. A Wiley-Interscience Publication. New York, NY: John Wiley & Sons, 1991. 760p.

The respondent is investigated as a source of invalid or questionable information in her/his recollection of autobiographical events. The encoding of information is described as the initial step in the interview process. The *schema theory* and other approaches to memory, and the effects of respondent rules, that is, self-reports versus proxy reports, are examined. The authors discuss four components that influence recall. The first, comprehension, asks, "Does the question convey the concept(s) of interest?" Comprehension involves the researcher, the interviewer, and the respondent. Factors impacting respondent comprehension are her/his impression of the purpose of the interview, the context of the question, the behavior of the interviewer, and the respondent's knowledge of particular words and phrases appearing in the survey instrument. The second step in the process, retrieval, involves the respondent's attempt to recall stored information, with the authors discussing the effects of intervening events, the time period involved, the salience of the event, and the respondent's psychological state. To complete the third step, judgment, the respondent may need to integrate the information at

her/his disposal, a difficult cognitive process that may require inference and judgment strategies. The respondent's final task involves communicating to the interviewer the results of the previous processes. The role of cognitive psychology in survey methodology is highlighted, with the authors observing that "the largest void in the research at the present time concerns respondent's retrieval strategies" (p.144). There are 822 cumulated references on pages 687-733.

337. Felcher, E. Marla. "Estimating the Frequency of Autobiographical Events in Response to Survey Questions: Reliability, Validity, and Process." Ph.D. diss., Northwestern University, 1992. 109 leaves. [*Dissertation Abstracts International* Order No. AAT9229904; *DAI* 53A, no. 6 (December 1992): 2013.]

These questions form the basis for the research: (1) How do survey respondents store autobiographical event information in memory? and (2) How does this memory structure impact the reliability and accuracy of their answers? Behavioral frequency questions, common throughout survey research, ask respondents to recall how many times s/he has engaged in a particular activity for a specified period of time. Felcher conducted three studies to demonstrate the importance of memory structure in understanding how respondents arrive at their answers to frequency questions. In each of the studies the respondents were female staff members at a midwestern university, with 72, 33, and 79 women, respectively. Payment for participation was in the form of names entered into a lottery with the chance to win cash prizes as well as a direct cash payment of \$5 each. The lottery awarded five cash prizes. In the first study, poor memory structure was found to impact the reliability of frequency judgments. A new protocol was introduced in the second study. Respondents' retrieval strategies varied significantly between question types, with memory structure shown to be an influential factor. In the third study the author addresses the issue of response accuracy, with three interventions tested. Results indicate that all three cues improved recall accuracy. Felcher explains the *directed memory search model*, whose primary principles are that (1) search proceeds through memory structure to locate categories of events; (2) event accessibility can be improved by increasing the number of categories searched; (3) search can be extended by accessing categories at the same or lower levels; and (4) some categories may be more "taxonomic" than others. Implications for questionnaire design are discussed. (6 endnotes, 75 references)

338. Huttenlocher, Janelle, Larry V. Hedges, and Norman M. Bradburn. "Reports of Elapsed Time: Bounding and Rounding Processes in Estimation." *Journal of Experimental Psychology* 16, no. 2 (March 1990): 196-213.

Three studies were carried out to determine (1) how temporal information is represented in autobiographical (episodic) memory; (2) the processes respondents

use in answering questions about when events occurred; and (3) the possible sources of bias that may arise in reports of elapsed time—in memory, in reporting, and in estimation (namely, *bounding effects* in which respondents may set an upper limit on their reports, and *rounding effects* in which respondents use rounded values to estimate when events took place). The bounding process reflects respondents' notion of what would constitute a reasonable answer, while with the process of rounding, respondents' values "actually represent larger temporal categories." The intent of *reference periods* is to impose an upper bound or limit on reports (for example, only reports after a certain stated time period are wanted). The studies reported were conducted over a three-year period with respondents drawn from a larger probability sample. The first study was concerned with respondents' ability to answer questions about elapsed time versus dates, and the presence of rounding. Of the 112 respondents, 65 were asked for the date of the interview, and 47 were asked how many days ago the interview occurred. The second study, involving 149 respondents, included only questions about elapsed time, but utilized stronger probes if necessary. In the third study, the validation call period was extended from thirty to sixty days with 629 respondents. A general temporal question was added prior to the elapsed days question. The results of each study are presented in detail. The overall finding is that reported times are less than actual times. However, this "forward bias" is not a result of misrepresentation of elapsed time in memory, but rather reflects two factors, bounding and rounding, that arise when reports are constructed from inexact information in memory. An appendix provides the mathematical model for the processes examined. (1 footnote, 18 references)

339. Means, Barbara, Gary E. Swan, Jared B. Jobe, and James L. Esposito. "The Effects of Estimation Strategies on the Accuracy of Respondents' Reports of Cigarette Smoking." Chap. 7 in *Autobiographical Memory and the Validity of Retrospective Reports*, edited by Norbert Schwarz and Seymour Sudman, 107-19. New York, NY: Springer-Verlag, 1994. 360p.

Four different methods—the standard question, episodic recall, availability, and decomposition—were tested in an attempt to obtain recall information on the number of cigarettes respondents had smoked within a particular time frame. The authors sought to identify the estimation strategies employed, as well as to assess the accuracy of the different methods. Two experiments were conducted. In the first, twenty-five respondents were given an initial face-to-face interview and then asked to collect for four or five days each day's cigarette butts and to keep a record of each time they had smoked. A monetary incentive of \$50 was offered for participation. A second face-to-face interview was then administered in which a question was asked about the number of cigarettes smoked on one specific day. Depending on their treatment group, respondents answered with one of the frequency estimation strategies, or without any of these (the "free strategy/think-aloud" condition). There was a high level of agreement between the number of cigarette butts saved and the respondents' self-reports of cigarette

smoking. In the second study, involving 128 respondents, the think-aloud requirement was deleted. Respondents used handheld computers to record each smoking incident. At the end of the five-day record-keeping period, a saliva sample was taken to measure cotinine, a biochemical marker for nicotine. Although self-reports were higher than the number of cigarettes recorded by computer, the deviations were not large. The authors conclude that methods closely resembling the standard fast-paced interview resulted in the most error, while the think-aloud protocol improved reporting with "large, beneficial" effects on estimate accuracy. There are 518 cumulated references on pages 335-60.

340. Schwarz, Norbert, and Seymour Sudman, eds. *Autobiographical Memory and the Validity of Retrospective Reports*. New York, NY: Springer-Verlag, 1994. 360p.

The twenty chapters in this volume are based on papers presented at a conference held at the University of Illinois in Urbana-Champaign in November 1990. Support was provided by the Walter Stellner Endowment in the Department of Business Administration at the University of Illinois at Urbana-Champaign, the Survey Research Laboratory at the University of Illinois, and the Zentrum für Umfragen, Methoden und Analysen (ZUMA) in Mannheim, Germany. This conference was the third in a series designed to encourage collaboration between cognitive psychologists and survey methodologists, with the goal of sharing information concerning a wide range of issues relating to autobiographical memory and the validity of retrospective reports. In the introduction and overview, Schwarz and Sudman describe *autobiographical memory* as an area of research that systematically explores people's memory for events in their lives—how they encode, organize, code, store, and retrieve information about their past. Since the 1970s, there has been renewed interest in the topic—following nearly "a hundred years of silence." The editors write, "Presumably, the better we understand the cognitive processes involved, the better we shall be able to design questionnaires that facilitate respondents' performance and thus, we hope, increase the validity of the obtained reports" (p. 2). There are six-and-one-half pages of chapter summaries. The chapters are arranged in five main parts: (1) "Perspectives on Retrospective Reports"; (2) "Retrospective Reports of Behaviors"; (3) "Event Dating and Time Estimation"; (4) "Comparisons of Self and Proxy Reports"; and (5) "Memories of the Past and Judgment of Personal and Social Change." There are 518 cumulated references on pages 335-60. The following entries have been selected from the volume, with individual annotations found at the indicated item numbers:

- Part 1, Chapter 1: "Autobiographical Memory and Survey Research." [Brewer - Item No. 334].
- Chapter 3: "Accuracy, Truth, and Meaning in Autobiographical Reports." [Back - Item No. 332].

- Chapter 5: "Affect and Memory in Retrospective Reports." [Banaji and Hardin - Item No. 333].
- Part 2, Chapter 7: "The Effects of Estimation Strategies on the Accuracy of Respondents' Reports of Cigarette Smoking." [Means, Swan, Jobe, and Esposito - Item No. 339].
- Chapter 9: "Errors of Experience: Response Errors in Reports about Child Support and Their Implications for Questionnaire Design." [Schaeffer - Item No. 380].
- Chapter 10: "Judgments of Behavioral Frequencies: Memory Search and Retrieval Strategies." [Menon - Item No. 344].
- Part 3, Chapter 13: "Telescoping and Temporal Memory." [Bradburn, Huttenlocher, and Hedges - Item No. 322].
- Part 4, Chapter 16: "The Effect of Participation Level on Reports of Behavior and Attitudes by Proxy Reporters." [Sudman, Bickart, Blair, and Menon - Item No. 349].
- Part 5, Chapter 18: "Biasing Effects of Retrospective Reports on Current Self-Assessments." [Clark, Collins, and Henry - Item No. 335].
341. Shum, Michael S., and Lance J. Rips. "The Respondent's Confession: Autobiographical Memory in the Context of Surveys." Chap. 7 in *Cognition and Survey Research*, edited by Monroe G. Sirken, Douglas J. Herrmann, Susan Schechter, Norbert Schwarz, Judith M. Tanur, and Roger Tourangeau, 95-109. Wiley Series in Probability and Statistics, Survey Methodology Section, edited by Robert M. Groves, Graham Kalton, J.N.K. Rao, Norbert Schwarz, and Christopher Skinner. A Wiley-Interscience Publication. New York, NY: John Wiley & Sons, 1999. 395p.

Current theories of autobiographical memory are reviewed, with the authors noting that survey methodology has been partially responsible for increased research on the topic. Most theories maintain that people store their personal history information as representations of past events, and that they retrieve such information by cue building, that is, by establishing a partial description of an event that corresponds to the stored representation. Three concepts are seen to contribute to retrieval: the distinctiveness of the original memory, the specificity of the cue, and the faithfulness of the cue to the stored representation. Shum and Rips demonstrate how these concepts apply to the design of survey questions, with the question providing the initial cue. Specifically worded questions will assist respondents with the retrieval task. An example illustrates that, in the absence of sufficient or overt cues, individuals search memory by relying on

schedules and calendars that offer partial information about an occurrence. The importance of an event was not sufficient to explain the pattern selected, but the more accurate and detailed the stored information, the more likely retrieval was. (6 footnotes, 46 references)

Models

342. Jobe, Jared B., and Douglas J. Herrmann. "Implications of Models of Survey Cognition for Memory Theory." Chap. 14 in *Basic and Applied Memory Research: Practical Applications*, vol. 2, edited by Douglas J. Herrmann, Cathy McEvoy, Christopher Hertzog, Paula Hertel, and Marcia K. Johnson, 193-205. Mahwah, NJ: Lawrence Erlbaum Associates, 1996. 501p.

Seven cognitive or information-processing models of how respondents answer questions about autobiographical events are discussed. Jobe and Herrmann point out the similarities and differences among the models and compare and contrast them for the number of stages, the kinds of stages, and some general attributes of information processing. The models of survey responding evaluated are as follows: respondent's question-answering model; four-stage model; autobiographical question-answering model; forms appraisal model; flexible processing model; information exchange theory; and survey interaction model. The authors distinguish between basic laboratory-based memory models that focus on processes intrinsic to memory, and survey models that assume recall is influenced by a number of external social factors, such as whether an answer will please or meet the goals of the interviewer [namely, the social desirability factor]. The authors conclude that memory and survey models, "are special cases of a general model, yet to be developed, that may be adapted to the laboratory or interview contexts" (p. 203). Basic researchers are urged to pay greater attention to outside processes if they are to assist applied researchers to the fullest degree. (29 references)

343. Menon, Geeta. "Judgments of Behavioral Frequencies: An Information Processing Perspective." Ph.D. diss., University of Illinois at Urbana-Champaign, 1991. 257 leaves. [*Dissertation Abstracts International* Order No. DA9210916; *DAI* 52A, no. 11 (May 1992): 4006.]

The foci of the dissertation are the judgment strategies utilized by respondents to arrive at their answers to behavioral frequency questions, especially those about very frequently occurring behaviors (for example, those occurring at least once a week). The responses to "How often..." or "How many times..." can place tremendous processing demands on the respondent, thereby contributing to response effects. The question of *how*, rather than *where*, response effects occur in the survey process is discussed. Menon's goals were to add to the body of knowledge concerning the cognitive processing of autobiographical information, and to examine how different questioning strategies may improve the accuracy of

behavioral frequency judgments. The author hypothesized that two components of the target behavior—regularity and similarity—determine the way the requested information is stored in memory. The strategies tested included verbal protocols, cuing, decomposition, and stability bias evaluation. The study participants were 193 students enrolled in business and marketing courses at the University of Illinois. The first experiment used face-to-face interviews; in the second experiment the questionnaire was administered on computers programmed to record response times. In the final experiment students were asked to maintain a diary as part of the protocol—half before completing a self-administered questionnaire and half afterwards. The results of the study indicate a fair amount of support for the memory model proposed. Cuing strategies failed to contribute to the accuracy of the reports. Appendixes provide the pretest and questionnaires for the first and second experiments. (77 references)

344. Menon, Geeta. "Judgments of Behavioral Frequencies: Memory Search and Retrieval Strategies." Chap. 10 in *Autobiographical Memory and the Validity of Retrospective Reports*, edited by Norbert Schwarz and Seymour Sudman, 161-72. New York, NY: Springer-Verlag, 1994. 360p.

Two factors were hypothesized to impact the storage and retrieval of behavioral frequency information: the regularity and the similarity of the behavior. A model of autobiographical memory is proposed to explain how information about different types of behavior is stored, as well as the retrieval strategies (counting versus estimation) that respondents employ when formulating answers to behavioral frequency questions. To test the model, two experiments were conducted with a sample of fifty-seven university students who were asked to answer questions about twelve different behaviors engaged in by a large majority of the population (for example, how often they brushed their teeth, had dinner, and attended class). The major dependent variables were concurrent verbal protocols for the first experiment and response time for the second experiment. Menon found that estimation strategies were most likely to be used for regular behaviors of high similarity, and least likely to be used for irregular behaviors of low similarity. A high degree of similarity made it difficult for respondents to recall separate episodes, thereby forcing them to use estimation rather than counting. Counting strategies were used more frequently when the behavior was dissimilar than when it was similar. The time required to report a frequency about a regular behavior was less than that taken for an irregular behavior. Menon states, "The manner in which information about mundane, frequent behaviors is organized and stored in memory seems to have a significant impact on the manner in which such information is retrieved and ultimately used in formulating a judgment" (p. 172). Extreme care must be taken when designing items in which the purpose is to determine "How many times did you...?" There are 518 cumulated references on page 335-60.

POLL IMPACT

345. West, Darrell M. "Polling Effects in Election Campaigns." *Political Behavior* 13, no. 2 (June 1991): 151-63.

Believing that the impact of preelection polls (other than exit polls) on the voting public has not received adequate analysis, West investigates whether exposure to polls taken during a campaign influences how the public votes, as well as whether the electoral context of referendum versus candidate elections differs in terms of polling effects. Referenda settings may be particularly problematic because they do not involve party identification on the ballot and require more knowledge on the part of the voter. To support these claims the author compares a cross-section of two electoral settings: the 1980 presidential election (Anderson/Carter/Reagan) and the 1986 Rhode Island right-to-life referendum which asked voters to add a strong pro-life amendment to the state constitution and to eliminate state funding for abortions. Reagan led in many of the preelection polls and won the election by a "decisive" 50.7 percent. Only 34 percent of voters favored the amendment, a number supported by most of the preelection polls. One question from the 1980 National Election Study and one from a statewide Rhode Island survey were chosen to gauge respondents' exposure to actual polls publicized by the media. Of the 951 voters in the first sample, 77 percent acknowledged having heard poll results about the presidential race. On the Rhode Island issue, 46 percent of 218 voters said they had been exposed to polls. In general, weak effects were evident in the presidential general election, with poll results being much less influential than party identification and candidate qualities. Significant effects were evident for the referendum, primarily due to other factors such as press coverage and polling data. (9 endnotes, 27 references)

PROXY

346. Blair, Johnny, Geeta Menon, and Barbara Bickart. "Measurement Effects in Self vs. Proxy Responses to Survey Questions: An Information-Processing Perspective." Chap. 9 in *Measurement Errors in Surveys*, edited by Paul P. Biemer, Robert M. Groves, Lars E. Lyberg, Nancy A. Mathiowetz, and Seymour Sudman, 145-66. Wiley Series in Probability and Mathematical Statistics, Applied Probability and Statistics. A Wiley-Interscience Publication. New York, NY: John Wiley & Sons, 1991. 760p.

The findings of prior literature examining the validity of self- versus proxy responses are described as lacking consistency. Although most survey research has relied primarily on self-reporting, proxy designs have been adopted for reasons of cost and respondent availability. The authors focus on whether information processing differs between the two methods, with the effects of question topic and the relationship between the respondent-proxy pairs reported.

The goals of the research were to determine the judgment strategies “naturally” employed by respondents; to investigate the factors that increase the likelihood of their using certain strategies; and to examine reporting errors under alternative conditions. The survey instrument contained a wide range of demographic, attitudinal, and behavioral items. In a laboratory setting, 50 pairs of respondents were asked identical questions about themselves and about the other person. In the field portion of the research, 200 pairs of respondents were interviewed in a random-digit-dialed telephone survey. Among the findings are the following: (1) respondents did not utilize the same reporting strategies for self- and proxy reports; (2) self-reporters used more event cues; (3) proxy respondents applied estimation techniques much more frequently; (4) some features of the questionnaire were found to impact the strategies employed; and (5) certain characteristics of the respondent pairs, such as the number of years living together, seemed to affect convergence, a measure of reporting accuracy. The role of convergence is an underlying theme for the research. There are 822 cumulated references on pages 687-733.

347. Gilpin, Elizabeth A., John P. Pierce, Shirley W. Cavin, Charles C. Berry, Nicola J. Evans, Michael Johnson, and Dileep G. Bal. “Estimates of Population Smoking Prevalence: Self- vs. Proxy Reports of Smoking Status.” *American Journal of Public Health* 84, no. 10 (October 1994): 1576-79.

Numerous large, ongoing national surveys, such as the Current Population Survey, typically seek information on all household members from a proxy respondent who represents the others. The authors analyzed data from the California Tobacco Surveys, a random-digit-dialed telephone survey (called the “screener” interview) in which one adult provides demographic information and smoking status for each resident of the household. Additionally, some adults who had had their smoking status reported by proxy were selected for in-depth interviews that also queried smoking habits. Data gathered from proxies and self-reporters were then compared, and smoking status discrepancies between the 2,930 matched pairs were evaluated. The findings are as follows: (1) the number of discrepancies between proxy reports and self-reports was 4.3 percent; (2) discrepancies increased when the self-reporters reported nondaily or recent smoking cessation; (3) 26.4 percent of self-reported recent “quitters” were reported by the proxy to be smoking; (4) the discrepancy rate was unrelated to the smoking status of the proxy or to the amount of time between the screener and in-depth interviews; (5) spouses and children tended to provide more accurate data than either relatives or unrelated individuals; and (6) the net bias was that the screener survey overestimated smoking prevalence by 0.3 percent in 1990 and 0.1 percent in 1992. The authors conclude that smoking-status questions can be added to ongoing surveys; that proxies can provide accurate information; and that proxy reporting is both cost-effective and minimally biased. (23 references)

348. Menon, Geeta, Barbara Bickart, Seymour Sudman, and Johnny Blair. "How Well Do You Know Your Partner? Strategies for Formulating Proxy-Reports and Their Effects on Convergence to Self-Reports." *Journal of Marketing Research* 32, no. 1 (February 1995): 75-84.

Proxy reporting, that is, asking one member of a household the opinions or preferences of the other members, is a frequently used, timesaving, and cost-effective technique. The authors provide a theoretical framework for the study, observing that memory structure for information about oneself versus that for other individuals could vary as a function of how information is acquired, encoded, stored, and retrieved. These factors then impact the strategies respondents use to form self- versus proxy reports. The authors discuss the findings of two studies conducted to investigate these strategies and to determine whether couples who participate jointly in a behavior, or discuss an issue together, provide more convergence (that is, similarities) in their reports. In the first study, carried out in a laboratory setting, face-to-face interviews were administered to 50 couples. In the second study, 201 couples participated in a telephone survey in which the telephone numbers had been selected by random-digit-dialing methods. The couples in both studies were either married or living together, were interviewed separately, and were asked to report first for themselves and then for their partner. All respondents were asked behavioral frequency questions (such as how often books and newspapers were read, the number of sick days taken, and the frequency of alcohol consumption), and attitude questions (such as how they felt about labor unions, the National Rifle Association, the truthfulness of politicians, and the effectiveness of President Bush). The results indicate that the more couples discussed or participated jointly in an activity, the greater the convergence was between self- and proxy reports, and the more specific the information was about their partner. In addition, the strategies used to arrive at the reports became more similar. (5 footnotes, 33 references)

349. Sudman, Seymour, Barbara Bickart, Johnny Blair, and Geeta Menon. "The Effect of Participation Level on Reports of Behavior and Attitudes by Proxy Reporters." Chap. 16 in *Autobiographical Memory and the Validity of Retrospective Reports*, edited by Norman Schwarz and Seymour Sudman, 251-65. New York, NY: Springer-Verlag, 1994. 360p.

In order to determine whether the accuracy of proxy reports increases with the proxy's degree of familiarity with the target individual's behavior, 250 pairs of partners were interviewed in two research environments. It was hypothesized that reporting accuracy would be higher if the proxy and the target engaged in the same activity, and if the target frequently discussed her/his activities with the proxy. Also investigated were how cognitive processes might differ for self- and proxy reporting. The study samples included 50 pairs of partners residing in the same household who received "think-aloud" face-to-face interviews in a cognitive laboratory, and 200 pairs of partners residing in the same household who were interviewed by telephone. The nonidentical questionnaires dealt with

behavior, demographic characteristics, and attitudes toward labor unions, women's rights, abortion, and other topics. The authors found that on most of the comparisons made, greater participation led to higher correlations between self- and proxy reports. On 13 of 16 behavior comparisons and 16 of 23 attitude comparisons, correlations were higher for couples who discussed activities to a greater extent. The perceived importance of the topic failed to increase convergence. There are 518 cumulated references on pages 335-60.

REFUSALS

350. Landler, Mark. "How Good Are Polls? We Refuse to Answer: Their Usefulness Is under Attack As Consumers and Voters Clam Up." *Business Week*, no. 3273 (6 July 1992): 29-30.

Comments are made concerning the varying poll results in the Bush/Clinton/Perot presidential race of 1992. Although two polls had Perot leading Bush, with Clinton running third, another poll placed Bush ahead of Perot. The polls for Campaign '92 are perceived to be "muddy and contradictory." Andrew Kohut, director of surveys for the *Times Mirror*, describes the variation in voter opinion as being "more fickle" than usual. Landler believes that poll validity is under suspicion for several reasons. More voters are refusing to participate because they have been inundated in each successive election with increasing requests for participation. The growing numbers of polls extend to market research as well, with one firm estimating that 36 percent of people contacted in 1990 declined to respond to consumer-product telephone surveys, a 12 percent increase over 1986. Pollsters are evaluating respondents' answers with caution, arguing that "fierce antipolitical sentiment" is prompting many voters to say they support Perot even though they will probably vote for Bush or Clinton. Undecided voters also contribute to the uncertainty.

351. Maynard, Douglas W., and Nora Cate Schaeffer. "Keeping the Gate: Declinations of the Request to Participate in a Telephone Survey Interview." *Sociological Methods & Research* 26, no. 1 (August 1997): 34-79.

Transcripts of fifty-three telephone calls were analyzed to determine how and at what point people refuse to participate in a telephone survey interview. [Maynard and Schaeffer prefer the term *declinations* to the word *refusals* and use it throughout the article.] A *conversation-analytic approach* was used to examine the declinations that occurred when call recipients were asked to participate in an interview. In addition, the differences between polite and impolite declinations were investigated. Emphasis was on the calls that resulted in a designation of "no interview for the present." The tape-recorded calls, conducted with a sample described as "haphazard," were collected at the Letters and Science Survey Center at the University of Wisconsin. The findings indicate

that about half the call recipients (28) responded very early in the call, shortly after the interviewer stated the reason for the call. The others (25) responded later, after s/he heard what was required for survey participation. Call recipients were either polite (for example, claiming "bad timing" or "not interested") or impolite (for example, abruptly hanging up the telephone), with the overwhelming percentage falling into the former category. The authors distinguish between *minimalist* declinations (those involving no questioning or preamble) and *expressive* declinations (those containing some question about the nature or length of the interview). A large majority of the declinations (79 percent) were of the minimalist variety. Research implications for survey design and data quality are explored. The first appendix provides the transcribing conventions; the second is a partial list of the introductory and respondent selection questions or statements. (26 endnotes, 42 references)

352. Maynard, Douglas W., Nora Cate Schaeffer, and Robert M. Cradock. *Declinations of the Request to Participate in the Survey Interview*. CDE Working Paper 93-23. Madison, WI: University of Wisconsin-Madison, Center for Demography and Ecology, 1993. 48p.

Tape recordings and transcripts of telephone conversations between interviewers and respondents were used to examine calls in which respondents, referred to as "recipients," declined to participate in the survey "for the present." The goal of the research was to better understand refusals by identifying patterns of interaction according to participants' own delayed meanings, categories, and understandings—that is, the interactional dynamics, social action, and organization of the brief encounter with the interviewer in the opening portions of the exchange. A total of fifty-eight declinations were analyzed according to several factors: (1) whether they occurred earlier or later in the opening remarks; (2) whether the declination was *minimalist* (for example, recipients hang up, express bad timing, say they are not interested, or offer a polite statement to "disable" the interview) or *expressive* (for example, recipients ask a question or a series of questions that display some genuine interest about the interview); and (3) how the declination functioned to end the encounter. Among the findings are that the declinations occurred at precise times and places in the call. Of the declinations analyzed, 83 percent were minimalist, and 17 percent were expressive. Recipients usually agreed to callbacks, a practice that appears to be declining. (33 references)

353. Mishra, Shiraz I., David Dooley, Ralph Catalano, and Seth Serxner. "Telephone Health Surveys: Potential Bias from Noncompletion." *American Journal of Public Health* 83, no. 1 (January 1993): 94-99.

One source of noncompletion in surveys is attributed to *passive refusals*, that is, potential respondents who repeatedly request callbacks or who use an answering machine to screen calls. Two other types of noncompletion are noncooperation (refusal to be interviewed) and noncontact (failure to reach not-at-home respondents). All categories can contribute to noncompletion bias due to the elimination of eligible

respondents. The goals of the research were to review and evaluate the different methods of estimating noncompletion rates; to “operationalize” the three potential sources of bias; and to determine if and how they affect health surveys. The data analyzed were collected through the Orange County (California) Health Surveys which were conducted semiannually between fall 1988 and spring 1991. The surveys were designed to monitor risk factors, vulnerability to illness (both physical and mental), health enhancement behaviors, and the physical and mental health status of the residents. The six surveys averaged 454 questions and required about one-half hour to complete. Random digit dialing was utilized to draw a sample of 4,893 respondents who were interviewed by computer-assisted telephone interviewing. Specially trained interviewers administered the questionnaire during optimal calling times. Passive refusals were found to have a substantial impact on completion rates and bias due to noncompletion. After demographic and socioeconomic factors were controlled, few noncompletion biases were evident on selected health indicators. (24 references)

354. Pharr, Steven W., Randall M. Stuefen, and Molly Wilber. “The Effects of Non-Monetary Incentives upon Survey Refusal Tendencies of the Affluent Consumer Population.” *Journal of Applied Business Research* 6, no. 3 (1989-1990): 88-97.

An inexpensive digital clock pen and a chance of winning a one-half-ounce South Dakota Bison gold coin valued at \$220 were used to test the effects of nonmonetary incentives on the refusal to respond to a sample survey. The authors’ hypothesized that the gift of the pen should have no significant effect on completion rates, but the high value (a probabilistic or lottery-type) incentive should have a significant positive effect in increasing response rates, thus reducing nonresponse bias. The control group was not offered an incentive. The target population was a sample of affluent households having a purchasing power of \$75,000 or above and homes valued at \$100,000 or more, with the owners employed in white-collar occupations. The survey instrument, designed to assess attributes of new product concepts, had two components: mail questionnaires and telephone interviews. The authors found that the no-incentive control group and those who had received the pen had nearly identical completion rates. The data for the probabilistic incentive, however, failed to support the second hypothesis, with the higher value gift actually having a negative impact on completion rates. A brief follow-up survey of refusers produced a response rate of only 30 percent. A large proportion of the affluent population believed that the coin was not worth the time and effort required to participate in the survey, and that their chances of winning were very poor. The authors conclude the following: “To increase the attractiveness of the offer, one must increase the odds of winning, the value of the reward, or both” (p. 95). Additional research is needed to understand the affluent, upscale market and what is required to motivate potential respondents. (24 references)

355. Turner, Heather A. "Participation Bias in AIDS-Related Telephone Surveys: Results from the National AIDS Behavioral Survey (NABS) Non-Response Study." *Journal of Sex Research* 36, no. 1 (February 1999): 52-58.

Surveys that focus on sexual behavior are believed to be more susceptible to participation bias than those on most other topics, due primarily to the sensitive nature of the questions, respondents' hesitancy to discuss their sexual behaviors and attitudes with a stranger, and the potential stigma associated with the AIDS epidemic. Participation bias is the extent to which nonrespondents (namely, refusers or noncontacts) differ from respondents, so that statistics based solely on respondent data will produce biased estimates of risk behaviors. Turner examined the characteristics of a group of nonrespondents from the National AIDS Behavioral Survey (NABS), a study designed to identify AIDS-related risk behaviors in a population-based sample of individuals between 18 and 75 years of age living in the contiguous United States. The NABS sample had three major components: a national sample of 2,673, a central city sample of 8,263, and a Hispanic listing sample of 3,060. Telephone survey methodology was used to conduct all interviews, with a minimum of seventeen call attempts made before the number was retired. A choice of English or Spanish was offered. The response rate was 66 percent for the total sample. An additional survey was conducted of 1,545 recruited NABS nonrespondents: 668 individuals who twice refused to participate in the main survey (the refusers), and 877 people who could only be reached after eighteen or more callbacks (the difficult-to-contact respondents). The response rates were 27.1 percent and 40.4 percent, respectively. Demographic and social-psychological characteristics of these two samples were compared with those of main-study participants. The data indicate that the individuals who refused to participate were older, attended church more often, were skeptical of survey confidentiality, and had lower sexual self-disclosure. The particularly difficult-to-contact respondents were overrepresented among males and African Americans, had more sex partners, and spent more time away from home. Turner concludes that the characteristics of refusers tend to be related to lower sexual risk behavior; however, the attributes of difficult-to-contact respondents are related to higher risk behavior. The importance of nonresponse bias in AIDS-relevant telephone surveys is highlighted. The use of traditional measures may underrepresent higher risk respondents. (2 footnotes, 15 references)

Models

356. Lin, I-Fen, and Nora Cate Schaeffer. *Using Survey Participants to Estimate the Impact of Nonparticipation*. University of Wisconsin-Madison, Institute for Research on Poverty, Discussion Papers DP no. 1024-93. Madison, WI: University of Wisconsin-Madison, Institute for Research on Poverty, 1993. 47p.

Two methods, the *continuum-of-resistance model* and the *classes model*, were compared for their ability to estimate how participants and nonparticipants differ from each other. Lin and Schaeffer used the models to estimate the size and direction of nonparticipation bias in survey estimates of means and proportions. The continuum model places individuals who were interviewed at the initial contact on one end of the continuum, with nonparticipants on the other. It assumes that difficult-to-interview respondents are similar, and that they are more like nonparticipants than are respondents interviewed with fewer calls. The classes model is based on the assumption that there are underlying groups of nonparticipants, and that similar classes can be found among those who choose to participate. This model seeks to identify groups of participants thought to be like nonparticipants and then use the participants as “proxies” to estimate nonparticipant characteristics. Data were analyzed from three sources: the Court Record Database, the Parent Survey, and documentation of field procedures from survey calling sheets. The issue was child support owed and paid in twenty Wisconsin counties. Neither model provided a dependable answer to the question of how nonparticipation might bias estimates of means from a given sample. There are three appendixes. (21 references)

357. Lin, I-Fen, and Nora Cate Schaeffer. “Using Survey Participants to Estimate the Impact of Nonparticipation.” *Public Opinion Quarterly* 59, no. 2 (Summer 1995): 236-58.

In order to estimate the impact of nonparticipation on survey estimates and to determine the characteristics of those who choose not to participate, two related methods were examined. The authors view the methods as variants of weighting schemes, and offer this summation: “The idea that people who are difficult to interview differ from those who are easy to interview—and are like those who are never interviewed—has considerable intuitive appeal” (p. 237). The first method, the *continuum of resistance model*, positions individuals who require only one contact for an interview on one end of the continuum and nonparticipants on the other. The model assumes that the difficult-to-interview people are all similar, and that they are closer to nonparticipants than are the people who were interviewed after fewer calls or contacts. The second method, the *classes model*, assumes that there are different classes of nonparticipants, with similar classes of people found among participants. Lin and Schaeffer investigated the applicability of the models by analyzing data from three sources: the Court Record Database, the Parent Survey, and documentation of field procedures from survey calling sheets. The topic concerned child support awards and payments made in twenty Wisconsin counties between 1984 and 1986. Neither model was found to be successful in predicting how nonparticipation might affect estimates of means from a given sample—perhaps due to the specialized study design, the nature of the sample, or the low response rate. The role of response error is discussed. The authors conclude that nonparticipants appear to be somewhat distinct from participants. Three appendixes provide the question wording; the number of cases for each figure, by the number of calls; and estimates of means adjusted for nonparticipation bias. (13 footnotes, 31 references)

UNDECIDED

358. Daves, Robert P., and Sharon P. Warden. "Methods of Allocating Undecided Respondents to Candidate Choices in Pre-Election Polls." Chap. 7 in *Presidential Polls and the News Media*, edited by Paul J. Lavrakas, Michael W. Traugott, and Peter V. Miller, 101-19. Boulder, CO: Westview Press, 1995. 279p.

Daves and Warden describe the practice of assigning undecided respondents to one candidate or another in preelection polls as "chancy," and a perennial problem facing public opinion researchers. Four experimental methods for allocating the undecided and "no opinion" groups were calculated: "(1) repercentaging major candidate votes after taking out undecided and 'no opinion' and allocating them proportionately to the trial heat support that candidates received in the poll; (2) repercentaging major candidates' support after removing undecideds and 'no opinion' and allocating these respondents equally between or among the major candidates; (3) allocating all undecided and 'no opinion' respondents to the challenger; [and] (4) allocating undecided and 'no opinion' respondents using discriminant analysis assignments" (p. 105). The results of the four methods were then compared in five statewide and national polls to determine which produced the most accurate data as compared to actual election outcomes. The authors found that method number three resulted in the most error, and that the "Incumbency Rule" generally prevailed. There were substantial differences among the proportional, equal, and discriminate methods. Two of the statewide polls had more percentage points of error for all allocation techniques than did the nationwide polls. Time, resources, the use of multiple methods, and then disseminating a best estimate will help alleviate the complexities of election polling. There are 169 cumulated references on pages 267-75.

359. Mathiowetz, Nancy A. "Respondent Expressions of Uncertainty: Data Source for Imputation." *Public Opinion Quarterly* 62, no. 1 (Spring 1998): 47-56.

The relationship between certain response behaviors and actual behavioral experience is investigated, along with the feasibility of using response behavior as a covariate in imputation models. The behavior examined was respondents' qualifying remarks such as "I'm not sure" and "I think"—indications that the respondent is unsure of the information s/he is providing. Mathiowetz is of the opinion that although subsequent discussions or actions based on the conversation frequently take these qualifying statements into account, they are not or cannot be recorded as part of the response in most survey interviews. Replacement of the missing data rarely takes into account the fact that the behavioral experience of such respondents may differ significantly from the behavioral experience of those who could provide a response. Data for the investigation were derived from face-to-face interviews with a total of 2,009 respondents to the Health Field Study (HFS), a product of the National Center for Health Statistics. (This discussion is

limited to the 1,648 respondents who reported using a health maintenance organization for their last outpatient visit.) The HFS consists of a health interview survey and a subsequent retrospective medical record check study among a sample of participants from a large health maintenance organization. The questionnaire items concerned outpatient health services utilization. Respondents were categorized as “exact,” “qualified,” “successful probe,” or “unsuccessful probe” reporters. The results suggest that qualifying remarks are related to levels of respondents’ actual behavioral experience (in this case the number of outpatient visits). In addition, restricting the pool of donors for imputation models to respondents exhibiting behavior similar to respondents unable to provide a response improved the quality of the estimates over models based solely on substantive characteristics. (4 footnotes, 13 references)

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Responses

BIAS

360. Catania, Joseph A., David R. Gibson, Barbara Marin, Thomas J. Coates, and Ruth M. Greenblatt. "Response Bias in Assessing Sexual Behaviors Relevant to HIV Transmission." *Evaluation and Program Planning* 13, no. 1 (1990): 19-29.

Most prior methodological research on human sexual behavior has dealt with vaginal intercourse and masturbation, with little information produced on the degree of response bias associated with questions that address such topics as the number of sexual partners, anal and oral intercourse, condom use, and the use of sex toys. Further, the majority of sex research has been conducted with white, middle-class respondents, college students, heterosexuals, and, to a lesser extent, African-American adolescents, rather than with non-English-speaking people, subpopulations of interest to AIDS investigators (for example, intravenous drug users and prostitutes), and individuals having low socioeconomic status and different ethnic backgrounds. The AIDS epidemic has focused attention on the problems faced by researchers in collecting highly sensitive data. The authors review the literature on response bias in sex research, discussing (1) test-retest reliability that can be influenced by nonresponse bias, memory difficulties, and random error; (2) nonresponse rates and nonrespondents; (3) the impact of various task, interviewer, and respondent motivation variables; (4) the validity of self-reports; (5) the selection of workable terminology for different sexual behaviors; (6) wording and format issues with sex questions; and (7) the data collection methods currently used—namely, face-to-face and telephone interviews, self-administered questionnaires, or various combinations of the three. Some approaches to controlling response bias may be less threatening, more cost-effective, provide additional anonymity and confidentiality, and increase honesty in reporting. (47 references)

361. Catania, Joseph A., Heather Turner, Robert C. Pierce, Eve Golden, Carol Stocking, Diane Binson, and Karen Mast. "Response Bias in Surveys of AIDS-Related Sexual Behavior." Chap. 6 in *Methodological Issues in AIDS Behavioral Research*, edited by David G. Ostrow and Ronald C. Kessler, 133-62. AIDS Prevention and Mental Health Series, edited by David G. Ostrow and Jeffrey A. Kelly. New York, NY: Plenum Press, 1993. 345p.

Measurement issues related to response bias fall into the categories of participation bias, systematic measurement error, and the effect of attrition in longitudinal surveys. The authors maintain that measurement error is of critical concern to AIDS research since high levels of this type of error may distort estimates of high-risk sexual behaviors, falsely identify at-risk populations, bias estimates of the statistical relationships between variables, and, subsequently, weaken behavioral epidemiological research. Four general indices of measurement error in assessing sexual behavior are discussed: item refusal, overreporting, underreporting, and test-retest reliability. Most of the chapter covers how these measures are influenced by the interviewer, the respondent, the survey instrument, and the data collection mode. Certain demographic characteristics and behaviors of the interviewer can impact error. Respondent variables include elements of recall, self-presentation bias (the over- or underreporting of a particular sexual behavior depending on its perceived social value), their degree of motivation, and how well the question is understood. Instrument variables include issues of terminology for different sex behaviors, and question wording and context effects. Collection mode effects (that is, face-to-face and telephone interviews, self-administered questionnaires, and diaries) are evaluated, but are deemed to be poorly understood for gathering information about AIDS-related sexual activities. (89 references)

362. Johnson, Robert A., Dean R. Gerstein, and Kenneth A. Rasinski. "Adjusting Survey Estimates for Response Bias: An Application to Trends in Alcohol and Marijuana Use." *Public Opinion Quarterly* 62, no. 3 (Fall 1998): 354-77.

The authors advocate the use of a repeated cross-sectional design as a cost-effective alternative to reinterviews for evaluating retrospective self-reporting error. The study is based on data from nine administrations of the National Household Survey on Drug Abuse (NHSDA), a face-to-face survey (with a self-administered component) of individuals age twelve and older. The surveys selected for analysis were those conducted between 1982 and 1995—years in which the self-administered answer sheets were similar. The NHSDA variables analyzed were taken from respondents' retrospective reports of their age when they first used alcohol or marijuana. The results indicate that NHSDA estimates were biased downward by response error, a finding especially true during early adolescence. The estimates declined as the "retention interval" (the difference between age at interview and first use) increased. An *exponential decay model* is applied to adjust NHSDA-estimated trends in order to demonstrate how bias

distorts usage figures. Three kinds of response error—recall decay, forward telescoping, and intentional concealment—are identified. A cohort study suggests that forward telescoping accounts for most underreporting of early alcohol use, while intentional concealment accounts for most underreporting of marijuana use. The authors speculate that NHSDA declines in estimated alcohol and marijuana incidence rates as individuals age may be due to several factors: changes in the surveyed population, respondents' unwillingness in the early 1990s to report previous drug use, and the tendency of some adolescents to exaggerate their involvement with illegal substances. An appendix provides the possible sources of coverage bias. (12 footnotes, 57 references)

EFFECTS

363. Aquilino, William S. "Effects of Spouse Presence during the Interview on Survey Responses Concerning Marriage." *Public Opinion Quarterly* 57, no. 3 (Fall 1993): 358-76.

A brief review of prior research in the area suggests that the presence of the spouse in the interview environment may influence responses to survey questions of a sensitive nature. Aquilino's primary hypothesis was that respondents interviewed with their spouse present will respond with more "positive subjective assessments" of their marriage than if interviewed in private. Further, respondents will be less likely to reveal information that is deemed sensitive and factual if accompanied or overheard by their spouses. The study data were derived from the 1987-88 National Survey of Families and Households, a multistage area probability survey conducted with face-to-face interviews with 13,017 respondents nineteen years of age or older. There was also a self-administered questionnaire component. A subsample of 6,882 respondents, all married, was selected for the present analysis. Interviews took place in the respondent's home. Interviewers were instructed to conduct all sessions in private, but were told to document if, and to what extent, a spouse was present or able to overhear the interview. Spousal presence (for a period of more than fifteen minutes) occurred in 36 percent of the interviews; for 25 percent of the time the spouse was present for the entire interview. The findings indicated that (1) men were much more likely to have their spouse present in the same room; (2) African Americans and Mexican Americans were less likely to have their spouse present; (3) when the spouse was present there were more positive subjective evaluations of the marriage; (4) spousal presence was a function of marital companionship, the couple's employment and socioeconomic status, and type of housing, as well as age, race, and gender of the respondent; (5) there was a greater willingness to report sensitive factual information; and (6) self-reported levels of marital conflict were higher. Aquilino is of the view that the findings partially support the first hypothesis, but the second is unsupported. The author concludes that variation in interview privacy can be a source of response effects in survey data on marriage. (17 references)

364. Aquilino, William S. "Privacy Effects on Self-Reported Drug Use: Interactions with Survey Mode and Respondent Characteristics." In *The Validity of Self-Reported Drug Use: Improving the Accuracy of Survey Estimates*, edited by Lana Harrison and Arthur Hughes, 383-415. NIDA Research Monograph 167; NIH Publication No. 97-4147. Rockville, MD: U.S. Department of Health and Human Services, National Institutes of Health, National Institute on Drug Abuse, Division of Epidemiology and Prevention Research, 1997. 508p. [SuDocHE20.3965:167]

Aquilino examines the effects of third-party presence (such as a spouse, child, parent, relatives, and others) on respondents' willingness to report lifetime illicit drug usage. Other foci of the study were whether privacy effects differed according to the identity of the individual present, the interview mode, and/or characteristics of the respondent. The study sample was a group of 2,417 adults, between 18 and 45 years of age, obtained through a multistage area probability sample of the thirty-seven largest Standard Metropolitan Statistical Areas in the United States. African Americans and Hispanics were double-sampled. The questionnaire administered was adapted from the 1990 National Household Survey on Drug Abuse. Respondents participated in one of three data collection approaches: self-administered, face-to-face, or telephone. The results indicate that a third party's presence significantly impacted respondents' willingness to reveal illicit drug use, in that higher reporting was evident when a spouse was present, lower reporting when adults other than a spouse were present, and significant decreases in truthful responses in the parent-present group. Presence effects were associated with the extent of the third party's knowledge of the information requested and the degree of "personal stake" this individual may have had in the respondent's answers. There was no significant linkage between privacy effects and interview mode, a finding the author terms "unexpected." (17 references)

365. Bishop, George F. "Issue Involvement and Response Effects in Public Opinion Surveys." *Public Opinion Quarterly* 54, no. 2 (Summer 1990): 209-18.

The author briefly reviews prior research in the area, bringing the "counter-intuitive" results to the readers' attention. In the present study Bishop investigated whether response effects will be greatest among respondents whose views regarding a particular issue tend to be not well "crystallized" (that is, not held with much conviction), or who are uninvolved with the issue. The response effects examined are variations in the manner in which a question is worded, the form of presentation, the context or order in which the question is arranged on the survey instrument, and the effects of counterarguments or middle response alternatives. In total, eighteen experiments and replications were carried out as part of an ongoing series of surveys conducted with the adult population of Greater Cincinnati, who were queried over a five-year period by means of random-digit-dialed telephone surveys. Some of the experiments used split-ballot designs while others were part of larger factorial designs. Item content

centered around issues of wage and price controls, the U.S. budget, social security, defense spending, nuclear power, and abortion. The results of the study include the following: (1) some types of response effects may be a function of issue involvement; (2) counterargument effects were significantly greater for respondents less involved with an issue; and (3) the effects of question order and response order were largely unrelated to respondents' involvement level. The results presented are said to "extend and replicate" many of those found by Jon A. Krosnick and Howard Schuman ["Attitude Intensity, Importance, and Certainty and Susceptibility to Response Effects." *Journal of Personality and Social Psychology* 54 (1988): 940-52.] who concluded that differences in attitude crystallization do not generally explain why some respondents are susceptible to response effects while others are not, and that a unique psychological variable may determine each type of response effect. Bishop concludes that the "really surprising" finding is the relatively weak and inconsistent effects of involvement, and "not the fact that some do occur." (7 footnotes, 15 references)

366. Carlson, John E., Robert Mason, John Saltiel, and Roberta Sangster. "Assimilation and Contrast Effects in General/Specific Questions." *Rural Sociology* 60, no. 4 (Winter 1995): 666-73.

Previous research indicates that the way in which people respond to an initial question influences how they respond to a second question in a related pair. *Assimilation effects* take place when responses to the second question concur with responses to the first question; *contrast effects* occur when responses to the second question shift in the opposite direction from responses to the first question. To test for these types of context or order effects, the authors analyzed data from five studies in which split-ballot experiments had been incorporated: (1) a 1990 Idaho study of 763 respondents contacted by telephone; (2) a 1994 Idaho mail survey of 358 farmers; (3) a 1990 Oregon telephone survey of 913 adults; (4) a Washington State University study of 732 students, with half contacted by mail and half by telephone; and (5) a Montana survey of 392 crop producers surveyed by mail questionnaire. Both specific and general questions were asked about a variety of topics—the overall economy, farm economy, student cheating, and price supports. Significant patterns were found to emerge when the question types were paired. Correlations were very different when the specific question was followed by the general question, as compared to the general/specific order, a finding consistent across all five surveys. Assimilation effects occurred in only one of the surveys, but varying degrees of contrast effects were present in the other four. The authors conclude that when specific and general questions on the same topic appear in a survey instrument, researchers should be alert to potential bias. (6 footnotes, 13 references)

367. Clark, Herbert H., and Michael F. Schober. "Asking Questions and Influencing Answers." Chap. 2 in *Questions about Questions: Inquiries into the Cognitive Bases of Surveys*, edited by Judith M. Tanur, 15-48. New York, NY: Russell Sage Foundation, 1992. 306p.

According to Clark and Schober, “it is a common misconception that language use has primarily to do with words and what they mean. It doesn’t. It has primarily to do with people and what *they* mean” (p. 15). Further, language is essentially about speakers’ intentions. When applied to the survey environment, one cannot comprehend what happens in the survey interview without understanding the role of intentions. Respondents bring to the interview the principles they would normally apply when using language, and proceed as they would in ordinary conversation. They look for such cues as the speaker’s intent and perspective, and a common ground (that is, information they believe they share) and common purpose (that is, mutually accepted direction). The role of language as a contributor to response effects is discussed. Respondents consider the interviewer as an intermediary—an individual with little authority acting on behalf of the survey researcher. The authors offer the following generalizations: (1) so-called knowledge filters can suppress opinions to questions asked later in the interview; (2) respondents use their prior answers as evidence for their subsequent judgments; (3) unless otherwise instructed, respondents interpret successive questions as related in topic; and (4) when a general question follows a specific one on the same topic, the general question may receive an exclusive or inclusive interpretation, depending on the circumstances. Survey interviews should be viewed as a type of discourse—a specialized area of language use. (1 footnote, 79 references)

368. Colasanto, Diane, Eleanor Singer, and Theresa F. Rogers. “Context Effects on Responses to Questions about AIDS.” *Public Opinion Quarterly* 56, no. 4 (Winter 1992): 515-18.

This study is based on research by Eleanor Singer, Theresa F. Rogers, and Max B. Glassman [“Public Opinion about AIDS Before and After the 1988 U.S. Government Public Information Campaign.” *Public Opinion Quarterly* 55, no. 2 (Summer 1991): 161-79.] who examined changes in public opinion about AIDS between 1987 and 1988. Although the findings from this study revealed that the public’s knowledge of AIDS transmission was more accurate among some demographic subgroups, there was a significant increase in misinformation on one item—namely, whether it was possible to contract AIDS through blood donation. By November 1989, 43.5 percent of the respondents surveyed believed they could get AIDS by donating blood (a telephone survey), as compared to 28.9 percent in October 1988 (a face-to-face survey). Colasanto and others explore the possibility that a change in question context in the 1989 survey could have contributed to the increase, since the question about donating blood traditionally had been asked following the question on blood transfusion. In a split-ballot experiment conducted as part of a Gallup monthly telephone survey, 1,010 respondents were randomly selected. Half the respondents were queried first about transfusion; the other half were asked the donation question first. There was nearly a 9 percentage point difference depending on question context. Respondents who were asked first about donation were more likely (51.5 percent) to say that transmission of the virus is possible via donation than

were respondents who were asked about donation following the transfusion question (42.8 percent). There was a total increase from 34.5 percent (October 1988) to 47.2 percent (December 1989). The authors attribute the difference to a form effect—that is, a confusion factor contributed by the context in which the question was asked, as well as to an increase in misinformation from October 1988 to December 1989 (34.5 percent to 42.8 percent). An appendix provides a list of the six survey questions. (3 footnotes, 4 references)

369. Czaja, Ronald F., Deborah H. Trunzo, and Patricia N. Royston. "Response Effects in a Network Survey." *Sociological Methods & Research* 20, no. 3 (February 1992): 340-66.

Since the late 1950s, researchers at the National Center for Health Statistics have been utilizing network survey methods to estimate the prevalence of certain illnesses. Network sampling, described as a more efficient general population frame methodology, is applicable for locating, studying, and/or estimating the size of rare, geographically unclustered, or skewed populations. The fundamental difference between network and traditional general population surveys is that in the former respondents can identify members in the household having a certain characteristic, as well as designated relatives with the characteristic who reside elsewhere. These relatives can then be integrated into the sample and interviewed. Although network sampling does not necessarily lessen response bias, it does avoid the potential biases of list samples while increasing the number of eligible respondents. The authors report the results of a series of field experiments designed to determine the response effects of network sampling for locating a rare population, specifically to study cancer diagnoses and the date of diagnosis. Face-to-face interviews were conducted with three types of sample households: 325 households of known cancer patients; 210 households of the children or siblings of the cancer patients; and 427 general population households. The questionnaire administered was based on the National Health Interview Survey; a supplemental set of questions was also included. High rates of cancer reporting were found in both patient and relative households. Females and whites were more likely to be reported than males and nonwhites. A significant amount of variation and error in reporting the date of diagnosis was found in both patient and relative households. Backward telescoping was more in common with the date of diagnosis. (7 endnotes, 37 references)

370. Krosnick, Jon A. "The Impact of Cognitive Sophistication and Attitude Importance on Response-Order and Question-Order Effects." Chap. 14 in *Context Effects in Social and Psychological Research*, edited by Norbert Schwarz and Seymour Sudman, 203-18. New York, NY: Springer-Verlag, 1992. 353p.

Two studies were conducted to investigate the impact on response-order and question-order effects of respondent characteristics, such as their cognitive sophistication and the importance to them of their attitudes. The concept examined

is called *condition-seeking*, that is, a way of understanding why a phenomenon occurs based on when it does not occur. The first study focused on response-order effects with a representative sample of 396 Ohio State University undergraduate students interviewed by telephone. The students were randomly assigned to one of two versions of the questionnaire which consisted of one hundred questions (primarily dealing with political attitudes and beliefs) and four target questions (dealing with oil supply, divorce, housing, and child qualities). Response effects were found for the oil supply and child quality questions, depending on the ordering of the response categories. These effects were greater among those with less cognitive sophistication, lending support for the claim that effects are due to inadequate memory search and superficial evaluation of the response alternatives. The focus of the second study was the *false-consensus effect*, an environment in which a respondent overestimates the proportion of others who share one's own attitude, or overestimates the similarities between one's attitude and that of others. Study two used the same sample and data collection approach. Approximately two-thirds of the way through the study, respondents were asked nine questions. For three of the questions, respondents were first asked how important the issue was to them. Two forms of the questionnaire were used: one in which self-reports preceded reports of perceptions of others, and one which reversed the two. Krosnick found that the magnitude of the false-consensus effect depended on both the importance of the attitude to the respondent as well as the order in which the self-perception and others-perception questions were asked, a finding inconsistent with some explanations of the effect. There are 540 cumulated references on pages 325-53.

371. McClendon, McKee J. "Acquiescence and Recency Response-Order Effects in Interview Surveys." *Sociological Methods & Research* 20, no. 1 (August 1991): 60-103.

A split-ballot design was used to examine the impact of both *acquiescence* and *recency response-order effects* on attitudes toward lawyers. Acquiescence refers to respondents' tendency to agree with the statements presented. It was speculated that acquiescence may not be limited to the agree-disagree form but also may occur for questions requiring "yes/no" and "true/false" responses, thus making it a function of the one-sided nature of the attitudes rather than a product of the agree-disagree form itself. McClendon also tested the concept of "satisficing," in which respondents expend the minimum amount of effort necessary to generate what they perceive to be a satisfactory answer. In this case respondents select the first response alternative presented that seems acceptable, instead of evaluating all the alternatives. The experiments reported were part of the 1984 and 1986 Akron Area Surveys, an annual telephone survey. The design called for three sets of attitude items: original questions, Srole's Anomia Scale, and Rosenberg's self-esteem scale. Six versions were administered. There were 799 completed or partially completed interviews in 1984 (59.2 percent of the total contacted) and 759 in 1986 (54.8 percent of the total contacted). Both acquiescence and response-order effects were found to be widespread—especially the recency effects noted in a theory developed by Jon A. Krosnick and Duane F. Alwin. This theory

postulates that effects of this type are much more likely to be found in telephone interviews, whereas primacy-order effects are more frequent in face-to-face interviews and self-administered questionnaires. The author states that no single theory can explain the response effects noted. (7 endnotes, 30 references)

372. Pollner, Melvin, and Richard E. Adams. "The Effect of Spouse Presence on Appraisals of Emotional Support and Household Strain." *Public Opinion Quarterly* 61, no. 4 (Winter 1997): 615-26.

The authors hypothesized that (1) respondents would provide more positive thoughts of household and marital relations when their spouses were present at the interview, since respondents sometimes seek to avoid embarrassment and obtain approval by offering socially desirable answers; and (2) the effects of spousal presence would be conditioned by a number of respondent demographic and cultural characteristics such as gender, emotional attitudes, employment status, education, income level, and ethnicity. The Epidemiological Catchment Area Program (ECA), a series of five epidemiological research studies conducted by independent research teams in collaboration with the National Institute of Mental Health, provided an opportunity to examine the hypotheses outlined. At the Los Angeles site of ECA, a household sample of 3,131 respondents was selected from a predominately Hispanic and a predominantly Anglo mental-health catchment area. Two sets of items covering the respondent's satisfaction with the spouse's emotional support, household roles, and division of labor were administered. Interviewers were also asked to indicate whether they thought respondents' answers were influenced by the presence of others. The results indicate that in approximately 48 percent of all the ECA interviews a third party was present, albeit briefly. Higher-income, Anglo, and male respondents reported significantly higher levels of spousal emotional support than did their lower-income, Hispanic, and female counterparts. A large number of higher-income, educated, and male respondents reported less strain in household arrangements than females and respondents with less education and lower income. Respondents who were frequently irritated by their spouses reported less support and more dissatisfaction. Overall, however, spousal presence at the interview did not produce "discernible" effects on respondents' answers. The "unsettling" aspects of the findings are discussed. (4 footnotes, 21 references)

ERROR

373. Cox, Brenda G., Michael B. Witt, Mark A. Traccarella, and Angela M. Perez-Michael. "Inconsistent Reporting of Drug Use in 1988." Chap. 5 in *Survey Measurement of Drug Use: Methodological Studies*, edited by Charles F. Turner, Judith T. Lessler, and Joseph C. Gfroerer, 109-53. DHHS Publication No. (ADM) 92-1929. Washington, DC: U.S. Department of Health and Human Services, Public Health Service,

Alcohol, Drug Abuse, and Mental Health Administration, 1992. 413p.
[SuDocHE20.8002:S7/2]

A partially edited data file of 8,814 interviews from the 1988 National Household Survey on Drug Abuse (NHSDA) served as the basis for the study. The intent was to locate and measure the extent of faulty data—specifically the inconsistent responses provided by respondents about their drug usage within and among various sections of the NHSDA questionnaire—and to identify problematic components of the survey instrument. The questions involved either multiple choices, or asked the respondent about her/his age at first use of a substance. Responses were coded to facilitate the identification of inconsistent answers. Of the total, 7,009 respondents (79.52 percent) said they had used at least one drug in their lifetime; 1,677 of these provided contradictory answers to items about lifetime use of the same drug. Thus, 23.93 percent of the 7,009 respondents answered at least one question on lifetime drug use inconsistently (19.03 percent of the total sample). Most of the inconsistencies occurred on the alcohol question form. Inconsistent responses for drug use during the previous year indicated similar patterns. Overall, 5,846 respondents (66 percent) acknowledged having used at least one drug in the past year; 1,805 of these (30.88 percent) provided inconsistent responses (20.48 percent of the total sample). Younger respondents provided more consistent reports. To reduce discrepancies in future NHSDA survey instruments, the authors suggest clarifying the time periods asked for, adding skip options more frequently, and instructing interviewers to emphasize time periods. (20 footnotes)

374. Dutka, Solomon, and Lester R. Frankel. "Measuring Response Error." *Journal of Advertising Research* 37, no. 1 (January-February 1997): 33-39.

The reduction of survey response error is the focus of the research. Dutka and Frankel identify the problems associated with response error, an area described as having received far less attention than sampling error. Response error minimization is discussed within the context of *total survey error* and its components. The authors believe that response error, like sampling error, may be detected and, "to varying degrees," controlled with existing statistical techniques. Five examples illustrate how to detect this portion of total error, the statistical procedures available to assess its magnitude, and the methods that can be utilized for its reduction. The authors present a *response error model* which involves weighting responses by using a respondent's own measure of certainty about the degree of accuracy of her/his answer to a survey question. The model allows the researcher to categorize respondents by their perceived level of "sureness," to assign a quantitative measure to this degree of sureness, and to devise a series of weights reflecting respondents' degree of certainty. Response error is viewed as an "inherent" and "critical" part of both sample surveys and censuses.

375. Huffnagel, Ellen M., and Christopher Conca. "User Response Data: The Potential for Errors and Biases." *Information Systems Research* 5, no. 1 (March 1994): 48-73.

If respondents fail to correctly interpret or answer questions about information systems (IS) and the impact of IS on specific work activities, faulty data and inappropriate conclusions can result. Huffnagel and Conca provide a framework for understanding the cognitive processes, errors, and biases in judgment that can occur when users are asked to categorize an IS, explain its effects, or predict their own future actions and preferences about a specific system. Survey researchers are advised to avoid vague wording, unfamiliar terms, difficult response categories, and unclear frequency expressions. Other factors such as relevance, recency, salience, emotional interest, lack of knowledge, and nonattitudes can influence response quality. Based on examples drawn from the IS literature, the authors discuss possible sources of systematic bias. A table provides a list of the cognitive activities involved in predicting the behavior of prospective IS users. (1 footnote, 113 references)

376. Martin, Elizabeth. "Who Knows Who Lives Here? Within-Household Disagreements as a Source of Survey Coverage Error." *Public Opinion Quarterly* 63, no. 2 (Summer 1999): 220-36.

Martin challenges the assumption made in surveys that household residents "reliably and consistently" report the number of people living in the household, noting that nationally nearly four million people may be at risk of omission. Five hypotheses were tested, the primary one being that disagreements among individuals in the household as to who lives there may cause omissions when determining residence. The analysis is based on data from the Living Situation Survey (LSS), an experimental pilot study in which face-to-face interviews were conducted in 999 households oversampled in locations with high concentrations of minorities and renters. The study was designed to test expanded roster cues and extensive probes to identify individuals with marginal, tenuous, and uncertain attachments to the household. The response rate was 79.5 percent. A subsample of 452 persons listed on the household rosters were followed up and interviewed in order to collect additional information about their living arrangements. These reports were then compared with those provided by the original household respondent. Among the results are that (1) household respondents may not be knowledgeable about the living arrangements of all individuals staying in the household; (2) respondents can draw incorrect inferences based on their observation of an individual's lifestyle; (3) coverage error may result because unrelated individuals tend not to be always present in the household; (4) individuals who spent more than one week away from the household during a two-month period were less likely to be reported as usual residents, with disagreements among individuals being more common; and (5) as compared to census data, a 38 percent increase in the number of people listed

on rosters per household was reported, but only a 5 percent increase in the number of usual residents per household. (3 footnotes, 24 references)

377. Mathiowetz, Nancy A. "Errors in Reports of Occupation." *Public Opinion Quarterly* 56, no. 3 (Fall 1992): 352-55.

Four questions concerning respondents' current and prior (one year ago) occupations were used to highlight the relatively high rates of error found in reports of occupation. Errors can arise from several sources including the interviewer, the respondent, and coding and keying practices. Mathiowetz compares self-reports of occupation obtained in interviews with 382 employees of a large manufacturing company with actual company records. The questionnaire, administered by telephone, was similar to that used in the Panel Study of Income Dynamics. There was a 78.3 percent response rate. The results of the comparison indicate that a significant number (13 percent) of respondents could not describe their current occupations in such a manner that would allow experienced coders to match the descriptions to company records. There was nearly a 50 percent disagreement for independently coded occupations classified at the three-digit level. Additionally, nearly half the occupation codes based on household interview codes did not correctly represent the respondents' true occupations as detailed in company records. (Company records are perceived as an unlikely source of the discrepancy due to industry requirements for accurate job descriptions, which are monitored by a union for hourly wage determination.) The author attributes the discrepancies to problems in either the measurement of occupation or the classification of occupations based on the current classification scheme. The author maintains that an assessment of the present occupational classification scheme for use with household survey data needs to be made. An appendix lists the four questions used in the study. (3 references)

378. Moore, Jeffery C., Linda L. Stinson, and Edward J. Welniak, Jr. "Income Reporting in Surveys: Cognitive Issues and Measurement Error." Chap. 10 in *Cognition and Survey Research*, edited by Monroe G. Sirken, Douglas J. Herrmann, Susan Schechter, Norbert Schwarz, Judith M. Tanur, and Roger Tourangeau, 155-75. Wiley Series in Probability and Statistics, Survey Methodology Section, edited by Robert M. Groves, Graham Kalton, J.N.K. Rao, Norbert Schwarz, and Christopher Skinner. A Wiley-Interscience Publication. New York, NY: John Wiley & Sons, 1999. 395p.

Several cognitive factors are seen to contribute to the poor quality of respondents' self-reports of income. These include problems with (1) understanding terminology; (2) retrieving accurate information from memory, with respondents' often lacking knowledge; (3) reconstructing information not readily available in memory; (4) confusing income category labels; and (5) responding to sensitive questions about income (social desirability concerns). The authors review research dealing with the quality of data produced by income surveys. Estimates of

income from these sources were then compared to independent benchmarks (for example, employers' records, tax forms, and agency records), with the authors noting ongoing and large shortfalls in survey estimates across a wide variety of income types. In addition, research is cited relative to response error in income source reports which indicate the existence of both bias and random error effects. However, the propensity for such problems was found to vary significantly across different types of income. For wage and salary income (total family income), bias and error were quite low. In survey reports of income from government transfer programs (for example, social security payments), bias and error were severe. Data on asset income (interest and dividend income) suggest substantial random error, with less clear indicators of consistent bias. (52 references)

379. Rodgers, Willard L., Charles Brown, and Greg J. Duncan. "Errors in Survey Reports of Earnings, Hours Worked, and Hourly Wages." *Journal of the American Statistical Association* 88, no. 424 (December 1993): 1208-18.

In order to provide information relating to the extent and patterns of measurement error found in survey reports of labor earnings, the number of hours worked, and hourly wages, the authors compared self-reports with what is termed "true values," that is, documentation obtained from company payroll and "activity" records. The correlation between the two sources was then used as the criteria for determining the presence of measurement error for the variables examined. The data described were collected as part of a validation study for the Panel Study of Income Dynamics (PSID), an annual survey conducted since 1968 with a national sample of 5,000 families. In 1983, telephone interviews were conducted with a sample of 275 employees of a large manufacturing company. The instrument administered was similar to that of the PSID core questionnaire. A second wave of interviewing took place in 1987 with some of the same respondents, as well as with a supplemental sample of 151 hourly workers. There were 492 completed interviews in wave 2, yielding a total response rate of 79.9 percent. The 1983 and 1987 reports were compared to data from two sources: the PSID and the Current Population Survey. The results indicate that for nearly half the variables examined, "the average reported value differed at a statistically significant level from the average true value..." (p. 1217). These findings contradict assumptions drawn from traditional measurement error models. (15 references)

380. Schaeffer, Nora Cate. "Errors of Experience: Response Errors in Reports about Child Support and Their Implications for Questionnaire Design." Chap. 9 in *Autobiographical Memory and the Validity of Retrospective Reports*, edited by Norbert Schwarz and Seymour Sudman, 141-60. New York, NY: Springer-Verlag, 1994. 360p.

Telephone interviews were conducted in 1987 with 964 divorced mothers residing with their children. The sample was obtained from the Court Record Database

(CRD) of the Wisconsin court system. A questionnaire from the Parent Survey was used to gather the self-reports concerning child support awards and payments. Schaeffer investigated a number of approaches appropriate for examining errors in self-reports: *complexity* (the frequency, regularity, and similarity of an event); *salience* (how memorable an event is to the respondent); *clarity* (how distinct an event is from similar events); and how much *reinforcement* is received from the social context in which the event occurred. Several other factors—such as respondents' memory decay, motivation, and characteristics, and features of the survey instrument—were also examined. Respondents' self-reports were then compared with CRD records. The analysis indicates that (1) the complexity of the respondent's support experience had a substantial impact on accuracy; (2) errors increased when the amount of support owed or paid to the mother was variable; (3) the amount of time elapsing between the end of the reference period and the interview was not associated with increased error; and (4) respondent characteristics, except for increasing age and the number of children receiving benefits, had little effect on reporting error. Schaeffer concludes that event and task characteristics have a more pronounced impact on validity than the other factors examined. (10 footnotes) There are 518 cumulated references on pages 335-60.

381. Sinclair, Michael Deloy. "Evaluating Reinterview Survey Methods for Measuring Response Error." Ph.D. diss., George Washington University, 1994. 232 leaves. [*Dissertation Abstracts International* Order No. AAT9507470; *DAI* 55B, no. 10 (April 1995): 4452.]

At the center of this research is a statistical procedure developed by S. L. Hui and S. D. Walter ["Estimating the Error Rates of Diagnostic Tests." *Biometrics* 36 (1980): 167-71.]. Sinclair applied the Hui and Walter methods and modifications to evaluate the effectiveness of different reinterview methodologies. Reinterview surveys measure the level of response error (usually content errors resulting from some aspect of the data collection procedure, primarily questionnaire wording) occurring when the individual values reported in response to a survey question differ from that individual's true characteristics. To measure this bias, researchers reinterview a subsample of the original survey using more highly trained or experienced interviewers; probing techniques; or field reconciliation (that is, the respondent is queried by the interviewer to determine which of the two responses is correct). The Hui and Walter method is subsequently used to evaluate the classification errors in both the original survey and in the reinterview. The method "requires two subpopulations which have different prevalence rates for a characteristic and equal classification errors from the original-reinterview survey process" (p. 7). Sinclair modified the procedure to account for the dependent error structure resulting from the reconciled reinterview data collection procedures in the estimated process, and then applied the method to evaluate the Current Population Survey and the 1990 Content Reinterview Survey, a study designed to measure response error from portions of the decennial census. An alternative design is presented which allows the researcher

to evaluate two testing procedures when two equal subpopulations cannot be located. The Hui and Walter methodology was found to be effective when certain assumptions are met. High-level statistical formats are employed throughout the presentation. (37 references)

382. Sinclair, Michael D., and Joseph L. Gastwirth. "On Procedures for Evaluating the Effectiveness of Reinterview Survey Methods: Application to Labor Force Data." *Journal of the American Statistical Association* 91, no. 435 (September 1996): 961-69.

Several types of reinterview surveys have been designed for the purpose of measuring a variety of response errors common to survey data. The authors examine the effectiveness of the *response-bias* and the *response-variance* reinterview techniques for evaluating the Current Population Survey program. In the response bias-type study, the reinterview survey is designed to be more accurate than the original survey by using so-called "preferred" methods of data collection. These include hiring more qualified or experienced staff, utilizing extensive probing techniques, and employing field reconciliation (in which the enumerator resolves with the respondent the differences in responses to the original survey and the reinterview). In response variance, the goal of the reinterview survey is to replicate the original collection procedure in such a way that the classification error rates are the same. The response-bias study reconciles 75 percent of the reinterview sample; the response-variance technique is conducted on the remaining 25 percent. Using a diagnostic test paradigm developed by S. L. Hui and S. D. Walter [see Item No. 381 for citation], Sinclair and Gastwirth evaluate the effectiveness of the procedures. Estimates are presented for the misclassification error rates found in the original data collection procedures and in the reinterview methods. The authors explain that the new procedure "enables us to estimate the dependence between the error rates of the original survey and the initial nonreconciled reinterview when the reconciled reinterview method is used" (p. 961). Although response-variance reinterview methods were found to be effective in replicating the error rates of the original survey, they created a substantial dependency between the original and the nonreconciled reinterview error rates. (38 references)

INTENSITY

383. Abelson, Robert P. "Opportunities in Survey Measurement of Attitudes." Chap. 9 in *Questions about Questions: Inquiries into the Cognitive Bases of Surveys*, edited by Judith M. Tanur, 173-76. New York, NY: Russell Sage Foundation, 1992. 306p.

Abelson's presentation serves as a thematic overview of the following two chapters in the volume—all appearing as part 4, "Expression: The Case of Attitude Measurement in Surveys." Abelson and the authors of chapters 10 and

11 identify and discuss two primary problem areas in the survey measurement of attitudes. The first, the use of multiple measures of a given attitude, includes the concept of attitude strength. Suggestions are offered for identifying which measure(s) of strength might be most appropriate in a given environment. The other problem area explored is the mode of attitude expression which involves the distinction between spontaneous and deliberate responses. The challenge for the survey researcher is to design the response task to elicit the type of answer mode desired. (15 references)

384. Krosnick, Jon A., and Robert P. Abelson. "The Case for Measuring Attitude Strength in Surveys." Chap. 10 in *Questions about Questions: Inquiries into the Cognitive Bases of Survey*, edited by Judith M. Tanur, 177-203. New York, NY: Russell Sage Foundation, 1992. 306p.

The vast majority of surveys measure only respondents' attitude *direction*, thereby ignoring the *strength* with which that attitude is held. Krosnick and Abelson, through a review of both the theoretical and practical literature on the topic, conclude that whatever one's goal is in measuring attitudes, it can be better achieved by measuring both direction and strength. Five dimensions of measurable attitude strength (extremity, intensity, certainty, importance, and knowledge) are identified, defined, and discussed in relation to one another. By using four kinds of studies, the authors demonstrate that these dimensions differentiate crystallized attitudes from uncrystallized ones, with strong attitudes being more firmly crystallized than weak ones. Evidence is cited that supports the view that strong attitudes also have more influence on cognition and behavior. Among the phenomena discussed are (1) the impact of attitudes on behavior and perceptions of others' attitudes; (2) the influence of attitudinal similarity on social attraction; (3) the effect of attitudes toward an object's individual attributes on attitudes toward the entire object; (4) the impact of attitudes on memory for attitude-relevant information; and (5) the susceptibility of attitude reports to changes in a question's wording and context. The authors advise that two of the dimensions, importance and extremity, may be the most useful in research studies at the present time. (8 footnotes, 147 references)

MODEL

385. Zaller, John, and Stanley Feldman. "A Simple Theory of the Survey Response: Answering Questions versus Revealing Preferences." *American Journal of Political Science* 36, no. 3 (August 1992): 579-616.

Existing models of survey response are reviewed and criticized as having "extensive" amounts of over time response instability, as well as the tendency for very small changes in questionnaire form to affect the expression of attitudes. Conventional attitude theory maintains that most respondents have opinions at the level of specificity needed to answer typical survey items. By contrast, Zaller

and Feldman believe that respondents' attitudes are highly changeable, not well formed, and reflect only those thoughts most accessible in memory at the time. An alternative model is proposed to provide insight into the nature of public opinion. Much of the analysis is based on data from the 1987 Pilot Study of the National Election Studies, an examination of the factors that underlie people's responses to closed-ended survey questions. The pilot study was conducted in two waves: 457 respondents were interviewed in May, and 360 the following month. Two types of probes were used. The *retrospective probe* was designed to determine exactly what was on respondents' minds at the moment of response. The *prospective probe* (sometimes called the "stop-and-think" probe) was designed to encourage respondents to search their memories with greater care. The model is discussed in terms of outcome, response effects, the impact of television news, and the effects of encouraging additional thought. The authors conclude that "even when people exhibit high levels of response instability, the opinions they express may still be based on real considerations. Even when these considerations turn out to be transitory, the opinion statements they generate are not, for that reason, necessarily lacking in authenticity" (p. 612). Polls should be interpreted as reflecting a "balance of considerations," rather than as counts of people's true attitudes. An appendix provides the attitude items, the political awareness scale, and the social welfare ideology scale. (18 footnotes, 68 references)

NONRESPONSE

General

386. Couper, Mick P., and Robert M. Groves. "Household-Level Determinants of Survey Nonresponse." Chap. 5 in *Advances in Survey Research*, no. 70, edited by Marc T. Braverman and Jana Kay Slater, 63-79. New Directions for Evaluation, A Publication of the American Evaluation Association, edited by Lois-ellin G. Datta. The Jossey-Bass Education Series. San Francisco, CA: Jossey-Bass Publishers, 1996. 110p.

A framework is presented for an enduring problem in survey research—that of nonresponse—with the goal of "sensitizing" practitioners to current perspectives. The framework addresses how household-level factors influence a respondent's decision on whether to participate in a survey. The authors selected one set of variables for the study, namely, the sociodemographic characteristics of the household and/or householder. Factors affecting survey cooperation are those beyond the researcher's control (such as the survey-taking climate, urban/rural environments, and household structure), and those under the researcher's control (such as the topic, the mode of administration, and interviewer traits). The methodology involved comparing nonresponse data from six large national surveys with data obtained from the 1990 decennial census. The surveys considered, all reflecting high response rates, were the following: Consumer

Expenditure Survey, Current Population Survey, National Health Interview Survey, National Crime Survey, National Household Survey on Drug Abuse, and the Survey of Census Participation. Couper and Groves discuss a set of constructs that describe the factors impacting a respondent's decisions. The *opportunity cost hypothesis* would have the respondent weigh the negatives of participation against the benefits. The *social exchange hypothesis* deals with how an individual feels and reacts to the influence of social norms, that is, the relationship between the individual and the larger society. The *social connectedness and authority hypotheses* are closely tied to the agencies collecting the data, especially those representing important social institutions such as the government or a university. The individual's "connectedness" to the larger society is a distinct feature. Other popular hypotheses include fear of crime, and topic saliency. A table shows the multivariate logistic regression coefficients for a model of cooperation versus refusal. The analysis indicates that there are several categories of individuals who tend to be cooperative during the conduct of survey research: African Americans and Hispanics; those living in multiperson households; households with all members below the age of thirty, or seventy years of age or older; and people not owning expensive homes. Within these variables, the type of housing structure and the presence of children failed to demonstrate significant effects on participation. (41 references)

387. Decouflé, Pierre, Patricia Holmgreen, Eugenia E. Calle, and Michael F. Weeks. "Nonresponses and Intensity of Follow-up in an Epidemiologic Study of Vietnam-Era Veterans." *American Journal of Epidemiology* 133, no. 1 (January 1991): 83-95.

The data analyzed are based on the health interview component of the Vietnam Experience Study, a large-scale, multidimensional cohort study conducted with a sample of Vietnam-era veterans to determine if military service had presented them with long-term health challenges. Four issues were investigated: (1) What are the demographic and other background characteristics of each of the two major types of nonrespondents: veterans who cannot be located and veterans who refuse to be interviewed? (2) Do the characteristics vary according to the effort required to locate them? (3) Are health outcome reporting patterns different for easy-to-locate and hardest-to-locate respondents? and (4) Can recruitment of respondents be stopped at an earlier point without biasing results? From a larger random sample of 17,867 veterans, 15,288 were eventually located and interviewed during 1985 and 1986. There was an 85.6 percent response rate. Interviews were conducted by trained interviewers using computer-assisted telephone interviewing and a structured survey instrument containing items on a wide spectrum of health status measures, including psychological symptomatology and social and demographic indicators. Eleven of these items were analyzed for this research. The results indicate the following: (1) for all but two of the baseline characteristics, there were marked differences between respondents and the nonrespondents who could not be located; (2) the veterans who could not be located were more likely to possess baseline characteristics predictive of increased mortality; (3)

refusals were very similar to respondents; (4) the characteristics of nonrespondents were related to whether they had refused to be interviewed (once located) or had never been located; and (5) the level of effort required to locate interviewed veterans was associated with certain demographic and military characteristics. The most difficult-to-locate veterans had the highest prevalence of risk factors and health problems. There are two appendixes. (20 references)

388. Delener, Nejdet. "An Integrative Review of Nonresponse Errors in Survey Research: Major Influences and Strategies." Chap. in *Research in Marketing*, vol. 12, edited by Jagdish N. Sheth and Atul Parvatiyar, 49-80. Greenwich, CT: JAI Press, 1995. 287p.

Delener provides a review, synthesis, and critical assessment of the literature on nonresponse error, beginning with the major sources of such error: the demographic characteristics of the respondent; the personal characteristics of the interviewer, such as gender, age, race, years of experience, and certain behaviors; the design of the survey instrument; the content of the questions; the effects of the data collection method; and respondents' failure to provide accurate answers. Also reviewed are some of the sociological, psychological (for example, compliance, liking, authority of the requestor, and persuasion), and situational (for example, the location of the survey and when it was conducted) influences on nonresponse. The author discusses twelve strategies found in the literature for enhancing response rates, noting that these approaches "require a balancing of the expected costs of these design attributes and the likely nonresponse error reduction which may result from them" (p. 66). The techniques include in following: (1) prenotify respondents and follow up through letters and/or telephone calls; (2) offer material incentives in the form of money, gifts, and lottery chances; (3) improve question design and interviewing procedures to encourage recall and reduce threat; (4) provide the respondent with the name of the survey sponsor, and confidentiality assurances, and (5) employ well-trained interviewers. Suggestions are offered for potential future research directions. Appendix A summarizes the types/sources of error and the strategies for error reduction. (149 references)

389. Gfroerer, Joseph, Judith Lessler, and Teresa Parsley. "Studies of Nonresponse and Measurement Error in the National Household Survey on Drug Abuse." In *The Validity of Self-Reported Drug Use: Improving the Accuracy of Survey Estimates*, edited by Lana Harrison and Arthur Hughes, 273-95. NIDA Research Monograph 167; NIH Publication No. 97-4147. Rockville, MD: U.S. Department of Health and Human Services, National Institutes of Health, National Institute on Drug Abuse, Division of Epidemiology and Prevention Research, 1997. 508p. [SuDocHE20.3965:167]

The primary foci of the research are two studies designed to evaluate the methodological procedures found in questionnaires administered by the National Household Survey on Drug Abuse (NHSDA). The NHSDA protocol involves a

combination of interviewer-administered and self-administered components. The survey instrument tends to avoid skip patterns for fear that respondents will realize that their use or nonuse of a drug will be revealed to interviewers based on the amount of time taken to complete the answer sheets. The first study, the Skip Pattern Experiment, compared two NHSDA questionnaires: the standard version that requires answers to all questions regardless of reported drug use, and an experimental version that allows the respondent to "skip out" of a set of questions if no drug use is reported. Interviewers administered both formats: 7,149 nonskip and 974 skip versions. The comparison indicates that the modified questionnaire tended to produce lower estimates of illicit drug use. The second study, the Census Match Study, involved matching responding and nonresponding NHSDA household and individual data with 1990 decennial census figures. The likely predictors of nonresponse are identified as well as the variables related to response propensity. Response rates were not constant across various interviewer, respondent, household, and neighborhood characteristics. (15 references)

390. Groves, Robert M., and Mick P. Couper. *Nonresponse in Household Interview Surveys*. Wiley Series in Probability and Statistics, Survey Methodology Section. A Wiley-Interscience Publication. New York, NY: John Wiley & Sons, 1998. 344p.

Existing literature on nonresponse is characterized as "overwhelmingly atheoretical" and based largely on bivariate analyses of sociodemographic correlates from single surveys. Groves and Couper focus on the importance of nonresponse to surveys and how multiple influences combine to impact overall survey participation. A "critical weakness" in the area is addressed: the lack of information about nonresponse across multiple surveys. A study is reported in which samples of respondents and nonrespondents were obtained from six face-to-face household surveys conducted near the time of the 1990 decennial census: Consumer Expenditure Survey, Current Population Survey, National Health Interview Survey, National Crime Survey, National Household Survey on Drug Abuse, and Survey of Census Participation. Data from these surveys were subsequently matched to census data, thereby obtaining all variables on the census form to characterize the nonrespondents. The authors concentrate on the errors resulting from unit, rather than item, nonresponse. Following an introduction, a theoretical orientation is presented on survey participation and survey nonresponse. Most of the chapters deal with a basic framework of the various influences on survey participation and cooperation, including household characteristics, social-environmental influences, characteristics of the interviewers, respondent-interviewer interaction, and the effects of certain features of the survey design. In the final chapter the authors review the processes of survey design, implementation, and analysis, and apply the findings to alternative designs. The authors conclude that nonresponse rates for different subpopulations may be sensitive to different situational factors; nonresponse will not always produce errors in survey statistics; and effective postsurvey adjustment schemes still will be required. The volume

is appropriate for students, teachers, and practitioners of survey methodology. (315 references)

391. Peterson, John, and Joseph A. Catania. "Item Nonresponse in the National AIDS Behavioral Surveys among African American and White Respondents." In *Researching Sexual Behavior: Methodological Issues*, edited by John Bancroft, 106-9. The Kinsey Institute Series, vol. 5, edited by John Bancroft. Bloomington, [IN]: Indiana University Press, 1997. 461p.

Two types of response bias are identified: respondents' refusal to answer a question or replying "don't know," and respondents' providing answers which they believe are socially acceptable. Peterson and Catania focus on the former, using data from the baseline study of the 1990-1991 National AIDS Behavior Survey, a large-scale, random-digit-dialed telephone survey. The purpose of the research was to examine how ethnic and racial patterns of response bias varied by gender and age. The authors' sampling frame involved large oversamples of African Americans between 18 and 75 years of age, and older Americans. Comparison data were available for white adults. Two demographic questions were asked first for anchoring purposes. Low levels of nonresponse were found for the fundamental sexual question asked of all respondents: "Have you had sex of any kind in the past 5 years [for those under age 50] or the past 15 years [for those over 50 years of age]?" Patterns of nonresponse were similar across gender and racial categories. There also were very low levels of nonresponse across ethnic and gender groups regarding a sexual orientation question and one on the number of sexual partners. The differences that did arise involved questions of a more sensitive nature, with older white respondents providing more nonresponse than their African-American counterparts. On some of the condom attitude items, nonresponse was relatively high. White women and older respondents were more likely to decline to answer this question. (1 footnote)

392. Schaeffer, Nora Cate, Judith A. Seltzer, and Marieka Klawitter. "Estimating Nonresponse and Response Bias: Resident and Nonresident Parents' Reports about Child Support." *Sociological Methods & Research* 20, no. 1 (August 1991): 30-59.

This validation study involves a sample of divorced mothers living with their children, and nonresident fathers, selected to examine the accuracy of self-reports about child support awards and payments. The investigation compared divorced parents' self-reports with official court records. Data were provided from two sources: the Court Record Database (CRD) and the Parent Survey, in which telephone interviews were conducted with a subsample of parents from cases in the CRD. The analysis was based on 1,829 divorce cases entering the Wisconsin court system between 1984 and 1986. The divorce resident mothers were asked about the support payments they had received; the nonresident fathers were questioned as to the amount of support paid. Comparisons with the

CRD were made to estimate nonresponse and response bias. The analysis indicates that (1) the parents who were not interviewed were less likely to have received awards or to have paid support; (2) resident mothers and nonresident fathers overreported the amount of support owed and paid, with bias being greater for fathers; (3) nonparticipation bias was greater for measures of paying support than for measures of owing support; and (4) response bias contributed more to total nonsampling bias than did nonparticipation bias. The authors conclude that nonresponse bias can be a serious threat to survey-based estimates. An appendix provides the questions asked. (16 endnotes, 49 references)

393. Viswesvaran, Chockalingam, Murray R. Barrick, and Deniz S. Ones. "How Definitive Are Conclusions Based on Survey Data: Estimating Robustness to Nonresponse." *Personnel Psychology* 46, no. 3 (Autumn 1993): 551-67.

Traditional approaches for addressing the problem of nonresponse are the following: (1) identify the factors affecting response rate, such as question wording and context, the offering of incentives, and the method of data collection; (2) utilize available responses to estimate those of nonrespondents; (3) determine similarities between respondents and nonrespondents on other related variables; and (4) apply inferential statistical techniques to estimate the average response. The authors propose an alternative solution to the problem of nonresponse—a "decisional aid" which "attempts to overcome one's limits on rationality by providing a simplified, structured framework within which one can consider a number of decision options" (p. 553). The framework is compared to Rosenthal's file drawer N in the metaanalysis literature, with the authors noting the conceptual similarities between the two. Both approaches examine the effects of nonrepresented data on obtained data. A subsequent section deals with the concept of *critical response rate (CRR)*, that is, the issue of what response rate is required in order to ensure that conclusions from the respondent subsample will generalize to the original total sample, "given a judgmental estimate of the average response level of the nonrespondents" (p. 558). The authors demonstrate the applicability of CRR; discuss the effects of nonresponse on t- and F-tests; construct robustness tables independent of sample size, survey length, and scale width; and consider the differences between a sample and a population. (1 footnote, 28 references)

Models

394. Groves, Robert M., Robert B. Cialdini, and Mick P. Couper. "Understanding the Decision to Participate in a Survey." *Public Opinion Quarterly* 56, no. 4 (Winter 1992): 475-95.

The authors outline a model for identifying the factors that affect survey participation, specifically the refusal component of nonresponse. The factors are

divided into two categories: the observed influences of sociodemographics and survey design, and the less observable impact of psychological concepts. The first category, which has received more attention in the survey methodology literature, includes societal-level factors (for example, the degree of social responsibility felt by the individual); attributes of the survey design (for example, the data collection mode and the length of the interview); characteristics of the interviewer (for example, race, gender, and age); and respondent-interviewer interaction (for example, the behavior, attitudes, and expectations each participant brings to the interview environment). The second set of influences consists of three psychological concepts relevant to survey participation: compliance with requests, helping tendencies, and opinion change. Compliance involves the principles of reciprocity, consistency, social authority, scarcity, and favorable attitudes toward the interviewer. Certain emotional states of the respondent—anger, happiness, and sadness—can increase or reduce the willingness (that is, helping decisions) to comply. The same principles identified to affect behavioral compliance with requests also have been demonstrated to impact the willingness of respondents to change their opinion on the same topic. In addition to the theoretical perspectives presented, the authors report on a series of focus groups they conducted between 1988 and 1991 with interviewers from the Census Bureau and the Survey Research Center at the University of Michigan. The topics concerned “tailoring,” that is, the use of different dress, words, and persuasion strategies for different sample persons, and how to obtain and maintain interaction with the potential respondent. (82 references)

395. Little, Thomas C., Jr. “Models for Nonresponse Adjustment in Sample Surveys.” Ph.D. diss., University of California, Berkeley, 1996. 60 leaves. [*Dissertation Abstracts International* Order No. AAT9723082; *DAI* 58B, no. 2 (August 1997): 786.]

The highly statistical presentation begins with a statement expressing the magnitude of the problem of nonresponse—about 30 percent for academic and government surveys and about 50 to 70 percent for surveys conducted by large commercial polling organizations. Due to missing data, large potential biases in estimates can result, with sampling error accounting for only a small portion of the total. Several statistical inference procedures practiced by survey organizations to correct for nonresponse are reviewed. The author analyzed state-level data from seven 1988 preelection polls conducted by CBS within two weeks of the election [Bush/Dukakis]. To reduce nonresponse bias, CBS uses population data on demographic covariates to weight responses according to whether they belong to undersampled or oversampled segments of the population (a technique known as “raking”). The author maintains that a “special situation arises when the survey variable of interest y is binary, as in the case of a two-candidate election” (p. 1). A heuristic model and a hierarchical logistic regression model are applied to the data using as co-variates the variables identified by CBS in their raking procedure. A discussion of the computational aspects of the methodology is included. (24 references)

OVERREPORTING

396. Abelson, Robert P., Elizabeth F. Loftus, and Anthony G. Greenwald. "Attempts to Improve the Accuracy of Self-Reports of Voting." Chap. 7 in *Questions about Questions: Inquiries into the Cognitive Bases of Surveys*, edited by Judith M. Tanur, 138-53. New York, NY: Russell Sage Foundation, 1992. 306p.

When people state that they voted when they had not, it is typically not due to memory failure, but rather for reasons of social desirability. The authors report on the methodology and findings of three wording experiments designed to test procedures to reduce survey overreporting through alternative ways of posing the vote report question in order to make nonvoting seem socially acceptable. Several approaches were tested: a two-time-frame procedure, modified versions of the two-time-frame procedure, and a procedure which varied the question wording to include the concept of the respondents' inability to vote—their "missing out" on the opportunity to cast a ballot. The first and last experiments were panel studies. The impact of time delay and past voting habits were also evaluated. Vote validation records were available for all experiments. A persistent bias toward vote overreporting was exhibited. Neither the two-time-frame procedure and its variations, nor the preamble that provided excuses for nonvoting, were effective for reducing overreporting. As time elapsed after the election, reporting errors increased. Explanations are offered for the failure of the procedures to reduce overreporting. (1 footnote, 12 references)

397. Belli, Robert F., Michael W. Traugott, Margaret Young, and Katherine A. McGonagle. "Reducing Vote Overreporting in Surveys: Social Desirability, Memory Failure, and Source Monitoring." *Public Opinion Quarterly* 63, no. 1 (Spring 1999): 90-108.

Two split-ballot telephone experiments were conducted to evaluate whether a revised version of a voter-turnout question would reduce the level of reported voting and overreporting in comparison to a question that exactly copied or closely modeled the standard National Election Studies (NES) voter-turnout question. Investigated were factors of memory failure, social desirability, and source monitoring, a framework that emphasizes that there are aspects of an individual's past experience that can be used to draw inferences about whether one has behaved in a particular manner. The first experiment involved a sample of 1,358 participants in the Survey of Consumer Attitudes (SCA), a monthly, national, random-digit-dialed study conducted by the Survey Research Center at the University of Michigan. Either the experimental or the standard NES voter-turnout question was appended to the SCA. The second experiment was administered in the state of Oregon following a vote-by-mail special senate election. Either the experimental or the standard NES voter-turnout question was asked of 1,483 respondents about one-third of the way into the interview. Validated registration data were available for the Oregon respondents. Response

rates were 69 percent for the first experiment and 60 percent for the second. The authors found the revised version superior to the standard NES question for reducing the rate at which respondents reported having voted (the NES study) and for reducing the level of overreporting (the Oregon study). The experimental version was particularly successful in reducing overreporting at the later interview dates. An appendix provides the wording for the two question formats examined. (5 footnotes, 23 references)

398. Presser, Stanley. "Can Changes in Context Reduce Vote Overreporting in Surveys?" *Public Opinion Quarterly* 54, no. 4 (Winter 1990): 586-93.

The tendency of respondents to falsely claim in postelection interviews to have voted in the election is described as one of the most reliable predictions in survey research, with overreporting "found in every major validation study." Factors such as an individual's need for social approval and the mode of administration are viewed as contributors. Presser designed two split-ballot telephone experiments to determine if context, namely, question order or sequence, could improve the accuracy of vote reporting. The first experiment was included in the spring 1989 Maryland Poll conducted by the Survey Research Center at the University of Maryland. A Mitofsky-Waksberg two-stage design was used to draw a sample from all telephone households in Maryland, yielding 964 completed interviews. The voter turnout question was manipulated so that it was preceded by a question about the polling location. The author hypothesized that if respondents did not know the place where they voted, they would be less likely to report false turnout. The response rate ranged from 66 to 69 percent depending on the treatment of nonanswered numbers. Little support was found for the hypothesis. The second experiment, involving 705 Maryland households selected by Mitofsky-Waksberg procedures, was part of the fall 1989 Maryland Poll. The response rate was between 62 to 67 percent. The vote item was preceded by a question concerning the respondents' lifetime voting behavior. It was hypothesized that fewer respondents would claim they had voted in the last election after having been given the opportunity to report participation in prior elections. However, the results indicate that context changes failed to reduce vote overreporting. The findings are said to "underscore" the difficulties of predicting context effects in survey questions. (4 footnotes, 12 references)

RANDOMIZED RESPONSE TECHNIQUE

General

399. Hosseini, Jamshid C., and Robert L. Armacost. "Gathering Sensitive Data in Organizations." Chap. 2 in *Improving Organizational Surveys: New Directions, Methods, and Applications*, edited by Paul Rosenfeld, Jack E. Edwards, and Marie D. Thomas, 29-57. Sage Focus Editions, vol. 158. Newbury Park, CA: Sage Publications, 1993. 273p.

When an organization finds it necessary to gather sensitive information about its employees, managers, competitors, customers, and other “stakeholders,” several methods of inquiry are available. These include direct questioning, vignettes or scenarios, and—the focus of the chapter—*randomized response techniques (RRTs)*. These probability-based methods are designed to guarantee anonymity to respondents and their answers to a particular question. Hosseini and Armacost believe RRTs are useful for minimizing both response and nonresponse bias in organizational surveys. The most common forms of the technique combine sensitive questions with innocuous ones in a manner in which responses can be attributed to respondents only on a probability basis. Four different qualitative models serve to demonstrate the diversity of the various designs: those by Stanley L. Warner, R. Morton, Robert F. Boruch (the *contamination design*), and Bernard G. Greenberg. Information is provided on implementation, strengths and weaknesses, comparability to other models, and future applications. An appendix reprints a partial RRT survey instrument. (2 endnotes, 42 references)

400. Hosseini, Jamshid C., and Robert L. Armacost. “Randomized Responses: A Better Way to Obtain Sensitive Information.” *Business Horizons* 33, no. 3 (May-June 1990): 82-86.

The applicability of several *randomized response techniques (RRTs)* to the corporate setting is discussed. RRT designs are used to conceal the “true response” of the individual answering the question, and assume large sample sizes. Hosseini and Armacost compare and contrast the features of five different designs: Warner’s; Greenberg’s *unrelated question*; Morton’s; the *contamination design*; and Richards’ *responder-set probability*. Warner was the first to develop a method for randomizing responses, but because both questions were “charged,” either no responses or false answers could result. Related questions were part of the protocol. Greenberg and others asked two unrelated questions (in which the probability of the innocuous question must be known ahead of time or a control group must be used to determine the probability). Morton avoided this requirement by presenting three statements—one is always true, one is always false, and one is sensitive, thereby eliminating the need to know the probability of the innocuous question. The contamination design, which contains only the sensitive question, requires the respondent to lie or tell the truth according to the outcome of a randomizing device. Richards’ approach involves discussing with respondents what probability for selecting the sensitive question would be acceptable to them. RRTs are perceived to be more effective than direct questioning as shown by the higher percentage of responses obtained to sensitive questions. The primary challenge is to convince respondents that the format provides complete privacy. It is also important to identify the areas considered sensitive by employees. (11 references)

401. Umesh, U. N., and Robert A. Peterson. “A Critical Evaluation of the Randomized Response Method: Applications, Validation, and Research

Agenda." *Sociological Methods & Research* 20, no. 1 (August 1991): 104-38.

The *randomized response method (RRM)* was introduced by Stanley Warner in 1965 as a technique for obtaining truthfulness in self-reports on sensitive topics ["Randomized Response: A Survey Technique for Eliminating Evasive Answer Bias." *Journal of the American Statistical Association* 60, no. 309 (March 1965): 63-69.]. RRM was developed with the assumption that respondents would be more honest when anonymity was assured. Umesh and Peterson review twenty years of research in which RRM was applied to the measurement of sensitive information in a wide variety of subject areas, such as criminal behavior, alcohol and drug usage, education, accounting, demography, personal and social behavior, product ownership, and medicine. An analysis of thirteen studies published from 1976 to 1987 that compared RRM to direct questioning indicates that RRM did not consistently yield higher estimates of sensitive behavior, and that in some studies direct questioning was just as successful in eliciting this behavior. Seven studies published from 1967 to 1983 that address validity issues are summarized. It is concluded that RRM is challenged in the validation area, being somewhat worse than direct questioning in terms of simplicity and cost. The authors observe that, based on the number of articles on RRM, interest in the technique is ongoing. (63 references)

Bibliography

402. Daniel, Wayne W. *Collecting Sensitive Data by Randomized Response: An Annotated Bibliography*. 2^d ed. Georgia State University, College of Business Administration, Research Monograph, no. 107. Atlanta, GA: Georgia State University Business Press, 1993. 134p.

The second edition contains 424 entries (162 from the first edition of 1979, plus 262 new titles). Coverage is extended through 1989. Daniel observes that two books, sixteen doctoral dissertations, and one master's thesis have appeared since the first edition. The *randomized response technique*, developed by Stanley L. Warner [See Item No. 401 for citation], has been applied to many new areas to reduce the effects of nonresponse, and has undergone considerable refinement. Warner's randomizing device allows respondents to answer sensitive questions (such as those concerning attitudes toward drug and alcohol abuse, abortion, sexual activity, and mental illness) "without revealing to the interviewer their true status relative to the sensitive attribute" (p. 2). The bibliography is arranged by date and then alphabetically by author. There are references to books, chapters, journal articles, published and unpublished reports, conference proceedings and papers, speeches, theses and dissertations, and textbooks. The chronological arrangement shows the following entries: 1965-1969 - 11; 1970s - 224; and 1980s - 189. Most entries have annotations; numerous foreign citations are unannotated. Many of the journal articles are from the *Journal of the American Statistical Association*.

UNDERREPORTING

403. Fendrich, Michael, and Connie M. Vaughn. "Diminished Lifetime Substance Use Over Time: An Inquiry into Differential Underreporting." *Public Opinion Quarterly* 58, no. 1 (Spring 1994): 94-123.

Data from the National Longitudinal Survey of Youth (NLSY) served as the basis for the study. The NLSY is a nationally representative sample of 12,686 men and women who were between 14 and 21 years of age when they were initially interviewed in 1979. From 1979 to 1990, twelve waves of interviews were conducted with this sample, with the present research focusing on two subsamples totaling 7,793 respondents from the 1984 and 1988 surveys. Questions concerning lifetime usage of two illicit drugs, cocaine and marijuana, were asked in 1980, 1984, and 1988. In the 1988 NLSY, the respondents who had acknowledged use in 1984 were randomly assigned to either interviewer-administered drug use supplements or to supplements completed by self-report. The prevalence and correlates of two indicators of underreporting—use denial and use reduction—were examined. The variables investigated included age, gender, race/ethnicity (African American, Hispanic, and white/other), income, employment status, education, urban/rural residence, and marital status. The results of the 1988 reinterviews indicate the following: (1) there was a high rate of underreporting for both cocaine and marijuana; (2) denial of use was nearly twice as prevalent among cocaine users as among marijuana users; (3) the most consistent correlates of underreporting were interview mode, race/ethnicity, and educational status (telephone, minority, and lesser-educated respondents tended to underreport); (4) African Americans were more than twice as likely to underreport for all indicators; (5) those residing in rural areas reported less use of cocaine and were more likely to deny having used the substance; (6) married respondents denied cocaine use at a higher rate than those never married; (7) employed respondents denied marijuana use more often than the unemployed; and (8) income was associated with use reduction and denial for both marijuana and cocaine. (5 footnotes, 38 references)

404. Jones, Elise F., and Jacqueline Darroch Forrest. "Underreporting of Abortion in Surveys of U.S. Women: 1976 to 1988." *Demography* 29, no. 1 (February 1992): 113-26.

Estimates of the level of abortion reporting from three recent major surveys of U.S. women were compared to external counts to determine incidence, trends over time, demographic characteristics of the reporting women, possible effects of the length of recall, and impact of the data collection mode. The surveys analyzed are the 1976, 1982, and 1988 cycles of the National Survey of Family Growth (NSFG), an ongoing project of the National Center for Health Statistics; the 1976 and 1979 National Surveys of Young Women [NSYW], conducted by researchers at Johns Hopkins University; and the National Longitudinal Surveys of Work Experience of Youth (NLSY), carried out at the Center for Human

Resource Research at The Ohio State University. All three surveys used stratified sampling designs and were conducted with face-to-face interviews. The external figures were taken from compilations of data submitted by abortion providers to the Alan Guttmacher Institute, whose statistics are “widely accepted” as “the best available estimates” of abortion incidence in the United States. A brief self-administered questionnaire was appended to the 1988 NSFG to ascertain if a more confidential approach could increase reporting. (The NLSY introduced a confidential reporting form in addition to face-to-face interviewing in 1984.) Jones and Forrest found the level of abortion reporting highly deficient and variable across the surveys. The 1976 NSYW, with some caveats, had the highest level of reporting; the 1988 NSFG had the lowest. The two self-administered formats elicited an improved level of reporting. White women were more likely to report having had an abortion than African-American and Hispanic women. There were no clear associations with age, but there was some evidence that younger women were more candid. In some of the surveys, married women reported more abortions than unmarried women. The recall data were inconclusive. The authors believe that in a large majority of cases the reported numbers must be more than doubled to compensate for the number of abortions missing from the surveys investigated. (5 endnotes, 17 references)

405. Koss, Mary P. “Detecting the Scope of Rape: A Review of Prevalence Research Methods.” *Journal of Interpersonal Violence* 8, no. 2 (June 1993): 198-222.

Following a discussion of rape terminology, including such terms as common law rape, sexual assault and battery, statutory rape, and prevalence, Koss reviews the existing empirical data on rape prevalence in several populations—college and adult women, adolescent boys and men, ethnic minorities including Hispanics and African Americans, and various special groups such as the homeless, the elderly, residents of nursing homes, psychiatric and medical patients, lesbians, and prisoners. The reader is alerted to the variation in prevalence rates reported in the studies cited. The author focuses on the methodological choices that may influence the level of rape detection, namely, fabrication (an environment in which the respondent makes false reports) and nondisclosure (where the respondent withholds information), with the latter considered the greater impediment to validity. Other factors contributing to variation among the published studies include (1) the differences in rape terminology used by the investigators; (2) the content and context of the survey items; (3) the various methods of collecting data (face-to-face and telephone interviews, and self-administered mail questionnaires); (4) the impact of confidentiality on disclosure; (5) interviewer gender and ethnicity; and (6) the sociodemographic characteristics of the sample (for example, age, education, ethnic composition, and the level of previous exposure to sexual assault). Ten recommendations are provided for designing future studies of rape prevalence. (74 references)

406. Koss, Mary P. "The Underdetection of Rape: Methodological Choices Influence Incidence Estimates." *Journal of Social Issues* 48, no. 1 (1992): 61-75.

Key terminology in the area is explained, including common law rape, reform-statutes rape, sexual penetration, incidence, and prevalence. Koss discusses both federal and independent sources of incidence data. The two federal sources are the Uniform Crime Reports (UCR), compiled by the Federal Bureau of Investigation, and the National Crime Survey (NCS), conducted by the Bureau of Justice Statistics. The NCS involves a stratified, multistage cluster sample of 97,000 individuals, with face-to-face and telephone interviews administered every six months for a three-year period. A total of 102,555 reported crimes qualified as rapes in the 1990 UCR, a victimization rate of 80 per 100,000 women (about 6 percent of the total violent crimes reported). The NCS reported 135,410 rapes in 1989, or 1.2 per 1,000 women and girls (about 3 percent of the total violent crimes reported). According to the author, "it is widely accepted that the reported rapes [in the UCR] represent only the tip of the iceberg" (p. 63). In addition, NCS rape incidence estimates are flawed and deficient due to several features of the methodology used: the lack of confidentiality; interviewers untrained in dealing with sensitive topics; respondents' misinterpretation of the meaning of rape; ambiguous questions; differing terminology; and the handling of multiple victimizations, which are excluded from the count. Koss also reviews estimates originating from several independent studies, noting that they not only vary from the NCS data, but also from each other. The difficulties in comparing data are discussed. The author concludes that the incidence of rape is much higher than federal statistics suggest. The increasing occurrence of acquaintance rape (that is, between people who know each other) is far more common than is reflected in crime surveys, and may be six to ten times higher than current NCS estimates. (Women are up to four times more likely to be raped by an acquaintance than by a stranger.) Although some progress has been made in NCS rape detection procedures, additional revisions are needed to accurately reflect the incidence of the crime and to correct underreporting. (45 references.)

Analysis

BAYESIAN

407. Satake, Eiki. "Bayesian Inference in Polling Technique: 1992 Presidential Polls." *Communication Research* 21, no. 3 (June 1994): 396-407.

The potential usefulness of the Bayesian statistical method is discussed and compared to the classical statistical techniques employed by pollsters. The Bayesian method of inference begins with a single initial uncertainty concerning the true predictability and then revises that figure based on information contained in the sample. In contrast to classical methods, a mean is obtained by specifying the hypothesized parameter values in terms of a numerical probability. The Bayesian approach is believed to be superior for polling results because it permits continuous revision from one poll to the next, thereby allowing for knowledge from a previous poll to be used with newer poll findings to update an estimate. In addition, the technique allows for the simultaneous use of more than two hypotheses, and subjective views can be expressed from previous experience. Satake demonstrates how the cumulative treatment of data adjusts the margin of error to increase the predictability of the final result. The four major probabilities are explained: a prior probability, a data probability, a posterior probability, and the maximum likelihood ratio. An example illustrates how Bayesian inference can be applied to polling results, specifically how discrepancies can be minimized among five polls taken before Bill Clinton's 1992 presidential candidacy. (9 references)

ERROR

General

408. Braverman, Marc T. "Sources of Survey Error: Implications for Evaluation Studies." Chap. 2 in *Advances in Survey Research*, no. 70, edited by Marc T. Braverman and Jana Kay Slater, 17-28. New Directions for Evaluation, A Publication of the American Evaluation Association, edited by Lois-ellin G. Datta. The Jossey-Bass Education Series. San Francisco, CA: Jossey-Bass Publishers, 1996. 110p.

This chapter provides an overview of some recent advances in survey research which are explored within the context of various types of survey error, and how the findings may be applied to program evaluation. Braverman selected an error classification scheme developed by Robert Groves as a foundation for the discussion. Groves' schematic model is based on formulations by Leslie Kish and others, whose *total survey error*, or mean square error, consists of two primary families of subcomponents: variance error and bias error. The components of survey error are errors of nonobservation (that is, those resulting from coverage, nonresponse, and sampling), and errors of observation (that is, those resulting from the interviewer, the respondent, features of the survey instrument, and the method of data collection). Each type is defined, and examples are provided. Within the instrument errors category, Braverman writes of the uncertainties in the comprehension and the attributed meaning of questions; the "interpretative presumptions" on the part of the respondent; response errors created by context effects; the challenges presented by the use of multiple languages; and the problematic nature of sensitive questions. In conclusion, the author reiterates the central theme: only the reduction in total survey error can help evaluators maximize the validity of survey data. (1 endnote, 37 references)

409. Futrell, David. "Ten Reasons Why Surveys Fail." *Quality Progress* 27 (April 1994): 65-69.

With the goal of improving customer satisfaction surveys, the author offers suggestions for reducing sampling and measurement errors. Futrell emphasizes the necessity to reduce these types of errors, noting that "most people who conduct surveys...seldom work to minimize both" (p. 65). One cause of sampling error relates to how the target population is selected, as well as to the number of people sampled. Planned, random, statistical sampling must be undertaken to avoid biased results. Procedures for obtaining a scientific sample are discussed. The second type of sampling error occurs when researchers fail to consider the individuals those who choose not to participate in a survey, as nonparticipants almost always differ from respondents. Measurement error includes a variety of mistakes made in determining the content of a survey and how the results are utilized. The author recommends a reliability analysis, including pretesting the survey instrument with a small sample. Customer satisfaction surveys should not

be used “as a direct measure of product quality” or considered a one-time event. Rather, such surveys should be conducted over time to best monitor changes and patterns in customer needs and expectations. Other pitfalls include asking nonspecific questions and failing to ask all the questions necessary for evaluation. To avoid the problem of incorrect or incomplete data analysis, the use of a statistician is suggested. Companies should not ignore the findings of a survey but, instead, act on the results. (2 references)

410. Lessler, Judith T., and William D. Kalsbeek. *Nonsampling Error in Surveys*. Wiley Series in Probability and Mathematical Statistics, Applied Probability and Statistics. A Wiley-Interscience Publication. New York, NY: John Wiley & Sons, 1992. 412p.

Written as a general reference tool for students and practitioners of the survey method, the volume covers existing techniques developed to measure and reduce nonsampling errors in survey statistics. Lessler and Kalsbeek identify sampling errors as those present in the design of the survey, a consequence of the conscious choice to examine some subset rather than the entire population. Nonsampling errors encompass all other factors contributing to survey error. The concept of *total survey design* is the attempt to control all sources of error. The twelve chapters are arranged into three primary sources of nonsampling error: problems with the sampling frame (frame error), nonresponse in gathering data from the sample population (nonresponse error), and shortcomings that occur during the process of obtaining survey measures from respondents (measurement error). For each of these sources of error, the key concepts, terminology, and relevant mathematical models for the impact of the error type are discussed. Also considered are the contributions to variance; the error rate; how to estimate the size of error in the context of the mathematical models presented; and the appropriate methodology that can be utilized to control or reduce the effect of a particular error source. Chapter 12 contains a twenty-page compendium of nonsampling error terminology. The definitions include citations to locations and sources in the text where the term can be found, and are provided “to indicate the diversity of interpretations one finds for some key concepts.” Throughout, emphasis is placed on mathematical models and terminology clarification. (383 references)

411. Weinstein, Neil D., and Mark Nicolich. “Correct and Incorrect Interpretations of Correlations between Risk Perceptions and Risk Behaviors.” *Health Psychology* 12, no. 3 (1993): 235-45.

The purpose of the research is to demonstrate that researchers who use survey data to study certain behaviors frequently examine the wrong correlations to determine the results. These correlations between risk perceptions and risk-influencing behavior are then used to evaluate two important but easily confused questions: (1) Are individuals’ perceptions of the personal risk accurate, correctly reflecting their precautions and their risk-increasing behaviors? and (2) Does

recognition of high personal risk cause people to adopt precautions to reduce that risk? Weinstein and Nicolich maintain that “something is wrong” when the same correlations are used to answer two quite different questions. The problems are attributed to confusion about the pairs of variables, and the correlations between risk perception and risk behavior over time. The authors propose a mathematical model, the *precaution adoption model*, which permits a bidirectional relationship to be made between perception and behavior. In addition, it identifies the different correlations between the two that can be examined, as well as changes that can occur over time. Three cases illustrate the model’s applicability and implications. (7 footnotes, 24 references)

Measurement

412. Alwin, Duane F. “Research on Survey Quality.” *Sociological Methods & Research* 20, no. 1 (August 1991): 3-29.

Alwin’s article serves the dual purposes of reviewing recent research on the quality of survey data and of introducing a special issue of *Sociological Methods and Research* devoted to minimizing survey measurement error. An overview of the various types of survey error based on a classification by Groves is discussed, including coverage, sampling, nonresponse, and measurement. The author describes an alternative approach to the conceptualization of survey errors—a model which “nests” measurement errors within other nonmeasurement errors. In this “population” model the levels of “nestedness” represent different compoundings of errors, with the author observing that “these errors also do not enter the picture at the same time or in the same manner, but they all may be viewed as compounding the measurement errors believed to exist at the population level” (p. 11). A general framework is presented for considering the components of survey measurement error, including a discussion of validity, invalidity, and reliability. The contributions of respondents to measurement error are outlined. Several recent theoretical developments on respondent error are reviewed and evaluated, such as applications of rational choice theories of response behavior, applications of cognitive theories of judgment and information processing, and experiments in question meaning and context. Brief summaries are provided of the other four articles in the issue [Item Nos. 371, 392, 401, and 426]. (11 endnotes, 67 references)

413. Biemer, Paul P., and Michael Witt. “Repeated Measures Estimation of Measurement Bias for Self-Reported Drug Use with Applications to the National Household Survey on Drug Abuse.” In *The Validity of Self-Reported Drug Use: Improving the Accuracy of Survey Estimates*, edited by Lana Harrison and Arthur Hughes, 439-76. NIDA Research Monograph 167; NIH Publication No. 97-4147. Rockville, MD: U.S. Department of Health and Human Services, National Institutes of Health, National Institute on Drug Abuse, Division of Epidemiology and Prevention Research, 1997. 508p. [SuDocHE20.3965:167]

The authors provide a review of measurement error terminology, defining and discussing such concepts as measurement bias, validity, reliability, and mean square error. Attention is directed to the methods for estimating measurement bias that rely on repeated measurements (for example, reinterview, test-retest, record check, and biological test validation) of the same characteristics for the same individuals. The focus of the chapter is the Hui-Walter method [See Item No. 381 for citation], a recently developed statistical technique for estimating false positive and false negative reports from repeated measurement studies. Originally designed for evaluating medical diagnostic testing procedures, the Hui-Walter method has been extended to include the evaluation of survey measurements. Biemer and Witt apply the technique to estimate measurement bias and self-reported drug use from the National Household Survey on Drug Abuse (NHSDA), specifically to estimate false positive and false negative rates of drug usage based on two sets of model assumptions: the independent model and the dependent model. To provide evidence of the validity of Hui-Walter estimates, NHSDA false negative rates were compared to denial rates from the National Longitudinal Survey of Youth. There was a high correlation for cocaine usage across various socioeconomic groups. (15 references)

414. Biemer, Paul P., Robert M. Groves, Lars E. Lyberg, Nancy A. Mathiowetz, and Seymour Sudman, eds. *Measurement Errors in Surveys*. Wiley Series in Probability and Mathematical Statistics, Applied Probability and Statistics. A Wiley-Interscience Publication. New York, NY: John Wiley & Sons, 1991. 760p.

On 11-14 November 1990, the International Conference on Measurement Errors in Surveys was held in Tucson, Arizona. The event was sponsored by four groups—the American Association for Public Opinion Research, the American Marketing Association, the American Statistical Association, and the International Association of Survey Statisticians. The conference attendees sought to document the current state of research on the topic and to foster interdisciplinary and cross-cultural interaction. Thirty-two of the conference presentations (with review and revision) were selected as chapters for the present volume, whose purpose was to address the significant issues in survey measurement error, incorporating diverse perspectives. The five conference organizers also served as editors of the volume. The chapters are categorized into these main sections: (1) “The Questionnaire,” edited by Seymour Sudman; (2) “Respondents and Responses,” edited by Nancy A. Mathiowetz; (3) “Interviewers and Other Means of Data Collection,” edited by Lars Lyberg; (4) “Measurement Errors in the Interview Process,” edited by Robert M. Groves; and (5) “Modeling Measurement Errors and Their Effects on Estimation and Data Analysis,” edited by Paul P. Biemer. The editors view the contents as being most appropriate for those with some prior training in survey research methodology. There are 822 cumulative references on pages 687-733. The following entries have been selected from the volume, with individual annotations found at the indicated item numbers:

“Introduction.” [Kruskal - Item No. 417].

Chapter 1: “Measurement Error across the Disciplines.” [Groves - Item No. 416].

Section A, Chapter 2: “The Current Status of Questionnaire Research.” [Bradburn and Sudman - Item No. 88].

Chapter 4: “Context Effects in the General Social Survey.” [Smith - Item No. 113].

Chapter 5: “Mode Effects of Cognitively Designed Recall Questions: A Comparison of Answers to Telephone and Mail Surveys.” [Dillman and Tarnai - Item No. 272].

Chapter 7: “Measurement Errors in Business Surveys.” [Dutka and Frankel - Item No. 445].

Section B, Chapter 8: “Recall Error: Sources and Bias Reduction Techniques.” [Eisenhower, Mathiowetz, and Morganstein - Item No. 336].

Chapter 9: “Measurement Effects in Self vs. Proxy Responses to Survey Questions: An Information-Processing Perspective.” [Blair, Menon, and Bickart - Item No. 346].

Chapter 10: “An Alternative Approach to Obtaining Personal History Data.” [Means, Swan, Jobe, and Esposito - Item No. 197].

Chapter 11: “The Item Count Technique as a Method of Indirect Questioning: A Review of Its Development and a Case Study Application.” [Droitcour, Caspar, Hubbard, Parsley, Visscher, and Ezzati - Item No. 215].

Chapter 12: “Toward a Response Model in Establishment Surveys.” [Edwards and Cantor - Item No. 448].

Section C, Chapter 14: “Reducing Interviewer-Related Error through Interviewer Training, Supervision, and Other Means.” [Fowler - Item No. 186].

Chapter 16: “Expenditure Diary Surveys and Their Associated Errors.” [Silberstein and Scott - Item No. 248].

Section D, Chapter 19: “Conversation with a Purpose—Or Conversation? Interaction in the Standardized Interview.” [Schaeffer - Item No. 193].

Chapter 20: “Cognitive Laboratory Methods: A Taxonomy.” [Forsyth and Lessler - Item No. 312].

415. Bound, John, and Alan B. Krueger. “The Extent of Measurement Error in Longitudinal Earnings Data: Do Two Wrongs Make a Right?” *Journal of Labor Economics* 9, no. 1 (January 1991): 1-24.

Data from the Current Population Survey (CPS) were compared to payroll tax records from the Social Security Administration (SSA) to examine the nature and magnitude of measurement error in longitudinal earnings data. The CPS, a primary source of U.S. labor market statistics, surveys about 55,000 households monthly. One part of the CPS, the Annual Demographic Supplement (conducted each March), asks respondents a question concerning their annual labor earnings (wages, salary, tips, and bonuses) for the previous calendar year. SSA records were selected for the comparison because they were perceived to be “a relatively accurate measure of true earnings.” The procedures undertaken to generate a longitudinal employer-employee dataset with CPS data are discussed, beginning with the 1978 Current Population Survey-Social Security Earnings Records (CPS-SER) Exact Match File. Bound and Krueger explain the procedure in this way: “The resulting matched CPS-SER file contains a single cross section of responses to the March CPS questions for 1978 and a time series of annual covered SSA earnings records for each individual from 1950 to 1978” (p. 5). A three-way link among 1977 and 1978 CPS data and SSA earnings records resulted in significant sample attrition, although the sample was considered to be reasonably representative of its population. Subsequent sections deal with the effect of measurement error on econometric analyses under various assumptions; how to measure the reliability of a variable; the properties of measurement error in longitudinal earnings estimates; and the potential problems affecting sample representativeness. Errors were found to be serially correlated over two years and negatively correlated with true earnings. An appendix provides the limited dependent variable models used for calculating the estimates found in the text. (18 footnotes, 16 references)

416. Groves, Robert M. “Measurement Error across the Disciplines.” Chap. 1 in *Measurement Errors in Surveys*, edited by Paul P. Biemer, Robert M. Groves, Lars E. Lyberg, Nancy A. Mathiowetz, and Seymour Sudman, 1-25. Wiley Series in Probability and Mathematical Statistics, Applied Probability and Statistics. A Wiley-Interscience Publication. New York, NY: John Wiley & Sons, 1991. 760p.

Groves introduces the collection, an outgrowth of a 1990 conference on measurement error [Item No. 414], by summarizing the topic and defining key terminology

(primarily associated with the disciplines of statistics and psychology). The major classes of error and their conceptual structures are noted, focusing on *observational errors*, that is, those resulting from the interviewer, the respondent, various features of the survey instrument, and the method of data collection. *Nonobservational errors* are viewed as arising from three sources—coverage, nonresponse, and sampling. *Processing errors* include mistakes in coding, imputation, editing, and processing. The author evaluates the strengths and weaknesses of a variety of current techniques for estimating and reducing measurement error. These include (1) cognitive laboratories (that is, studies taking place in controlled laboratory settings); (2) validation studies for comparing survey results to external sources; (3) split-sample experiments; (4) “interpenetration” for estimation of variable measurement error; and (5) replication measurements of the same persons. Another concept reviewed is the use of model-based estimates of error at the point of inference. Groves concludes with comments on the “true value morass.” There are 822 cumulated references on pages 687-733.

417. Kruskal, William. “Introduction.” In *Measurement Errors in Surveys*, edited by Paul P. Biemer, Robert M. Groves, Lars E. Lyberg, Nancy A. Mathiowetz, and Seymour Sudman, xxiii-xxxiii. Wiley Series in Probability and Mathematical Statistics, Applied Probability and Statistics. A Wiley-Interscience Publication. New York, NY: John Wiley & Sons, 1991. 760p.

Kruskal was the opening speaker at the 11-14 November 1990 International Conference on Measurement Errors in Surveys held in Tucson, Arizona, from which thirty-two presentations were selected as chapters for the present volume [Biemer - Item No. 414]. The author addresses the problem of “true value,” a concept found to be challenging when applied to the measurement of beliefs and opinions for an entire population. Other discussions cover the scope of surveys, the current techniques for reducing measurement error, and *total survey error*. Also considered are the “bottom-up” and “top-down” versions of total survey error. Three difficulties with the bottom-up approach are that researchers frequently are unaware of all the sources of error; our knowledge of the functional way in which errors operate and combine is imperfect; and the magnitude of fundamental error is rarely known. In the top-down approach, the researcher sometimes has separate methods for measuring what the survey is intended to measure, that is, independent forms of calibration. However, this technique can be used only for questions where calibration information is available. The author reminds the reader of the central role that measurement error plays in the design and use of surveys and the diverse approaches to its management. There are 822 cumulated references on pages 687-733.

418. Turner, Charles F., Judith T. Lessler, and Joseph C. Gfroerer. “Future Directions for Research and Practice.” Chap. 12 in *Survey Measurement of Drug Use: Methodological Studies*, edited by Charles F. Turner, Judith

T. Lessler, and Joseph C. Gfroerer, 299-306. DHHS Publication no. (ADM) 92-1929. Washington, DC: U.S. Department of Health and Human Services, Public Health Service, Alcohol, Drug Abuse, and Mental Health Administration, 1992. 413p. [SuDocHE20.8002:S7/2]

The final presentation in the volume summarizes three general conclusions derived from the preceding chapters in which a wide variety of strategies had been employed to determine the error structure of measurements made in the National Household Survey on Drug Abuse (NHSDA). The conclusions reached are that (1) nonsampling components of error and bias can “dwarf” sampling variance in drug use measurements; (2) cognitive methods can help identify problems associated with the survey instrument as well as the recall demands made on the respondent; and (3) self-administered questionnaires, as compared to interviewer-administered formats, produce more complete reports of illicit drug usage (more than double). In relation to the last finding, the authors discuss how computer-assisted self-interviewing (CASI) technology and its audio version (Audio-CASI) might be methodologically advantageous. Final comments concern future NHSDA research needs. (12 footnotes, 12 references)

Models

419. Groves, Robert M. “Survey Error Models and Cognitive Theories of Response Behavior.” Chap. 15 in *Cognition and Survey Research*, edited by Monroe G. Sirken, Douglas J. Herrmann, Susan Schechter, Norbert Schwarz, Judith M. Tanur, and Roger Tourangeau, 235-50. Wiley Series in Probability and Statistics, Survey Methodology Section, edited by Robert M. Groves, Graham Kalton, J.N.K. Rao, Norbert Schwarz, and Christopher Skinner. A Wiley-Interscience Publication. New York, NY: John Wiley & Sons, 1999. 395p.

The integration of knowledge from cognitive-style methodological research into statistical estimation procedures is the focus of the research. Groves suggests that the principles underlying many sources of survey error (such as coverage, nonresponse, and interviewer effects) will originate from various social science theories. Sampling and nonsampling error theories are compared and contrasted. The nonsampling error theories that could be integrated into survey estimates are (1) theories about the direction of bias; (2) theories relative to the causes of bias; (3) theories concerning bias in components of error usually studied as variance properties; (4) theories relating to response variance; and (5) theories about response bias and variance. A final point of discussion concerns the “barriers” to merging the fields of cognitive and social sciences and statistics. The author maintains that most cognitive and social theories about errors are at “too high a level of abstraction”; that survey researchers are reluctant to use model-based estimation of population parameters; and that many of the theories “imply improvement in estimation processes only if the survey design is altered,” a

scenario more likely to occur in academic and government surveys than with commercial surveys. Statistical examples accompany the text. (28 references)

420. Palmquist, Bradley, and Donald P. Green. "Estimation of Models with Correlated Measurement Errors from Panel Data." Chap. 4 in *Sociological Methodology*, vol. 22, edited by Peter V. Marsden, 119-46. Washington, DC: American Sociological Association, 1992. 401p.

The authors discuss the *correlated errors (CE) model* proposed by James A. Wiley and Mary Wiley ["A Note on Correlated Errors in Repeated Measurements." *Sociological Methods and Research* 3 (1974): 172-88.]. [An earlier Wiley and Wiley paper (1970) dealt with the *random errors (RE) model*.] Unlike the RE model, the CE model has rarely been used, with only eight references appearing in *Social Sciences Citation Index*, as compared to ninety for the RE model. Palmquist and Green maintain that the CE model "seems to give the researcher the option, even when limited to a single indicator at three waves in a panel study, of modeling either simple random error or systematic error with a component of overtime correlations" (p. 121). The authors (1) evaluate the strengths and weaknesses of the two models; (2) report some anomalous results that CE applications have shown; (3) discuss the "asymptotic" standard errors for the CE model with three waves of data to indicate variability; (4) demonstrate how additional waves of data can enhance usefulness; (5) present the results of a five-wave study showing that the degree to which measurement errors are correlated can be determined; and (6) comment on the utility of the CE model, especially for panels of four or more waves. There are two appendixes. (18 footnotes, 36 references)

INCOMPLETE AND MISSING DATA

421. Fay, Robert E. "Alternative Paradigms for the Analysis of Imputed Survey Data." *Journal of the American Statistical Association* 91, no. 434 (June 1996): 490-98.

All but the appendixes deal with simple random sampling. The contributions of multiple imputation (Rubin, 1987) are considered as an approach to inference from survey datasets with missing values supplied by imputation. The presentation is an extension of Fay's previous research and that of J.N.K. Rao and Jun Shao ["Jackknife Variance-Estimation with Survey Data under Hot Deck Imputation." *Biometrika* 79, no. 4 (December 1992): 811-22.]. *Hot deck imputation* is commonly employed for item nonresponse in sample surveys. The Rao-Shao *jackknife variance estimation formula* is reviewed. The work is extended to include fractionally weighted imputation and multiple imputation. Monte Carlo comparisons are shown for two types of missing data problems: (1) high rates of missing data (for example, a response rate of 70 percent) where the imputation classes are only somewhat predictive; and (2) surveys in which the sample is small (such as

20 percent) but which represents a probability sample from a larger population. The appendixes consider extensions of the Rao-Shao variance estimator, namely, the consistency of the estimator for fractionally weighted imputation, and the consistency of the modified Rao-Shao variance estimator for multiple imputation. Advanced statistical knowledge is needed for comprehension as the article consists largely of mathematical formulas. (24 references)

422. Gelman, Andrew, Gary King, and Chuanhai Liu. "Not Asked and Not Answered: Multiple Imputation for Multiple Surveys." *Journal of the American Statistical Association* 93, no. 443 (September 1998): 846-57.

The authors address the problem which arises when some questions are not answered in some surveys, and some respondents do not answer some of the questions asked. These two circumstances are with reference to independent cross-sectional surveys, but the method suggested for remediation also can be applied to a single survey in which different questions are asked, or when different sampling methods are employed in different strata or clusters. The authors' approach was to add to existing imputation methods (that is, those designed for single surveys) a hierarchical regression model that permits covariates at the individual and survey levels. The survey weight's information was used in conjunction with the variables on which the weights were based, followed by "reweighting individual responses (observed and imputed) to estimate population quantities" (p. 846). The imputation model was checked by comparing imputed data to nonimputed data. The project was motivated by a study of preelection public opinion polls in which not all of the questions were asked in all of the surveys, which therefore made it not possible to "impute within each survey separately." Advanced statistical knowledge is needed for comprehension. (30 references)

423. Graham, John W., Scott M. Hofer, and Andrea M. Piccinin. "Analysis with Missing Data in Drug Prevention Research." In *Advances in Data Analysis for Prevention Intervention Research*, edited by Linda M. Collins and Larry A. Seitz, 13-63. National Institute of Drug Abuse Research Monograph 142; NIH Publication No. 94-3599. Washington, DC: U.S. Government Printing Office, 1994. 457p. [SuDocHE20. 3965.142]

The chapter is intended to be an extension of work by Roderick J.A. Little and Donald B. Rubin [*Statistical Analysis with Missing Data*. New York, NY: Wiley, 1987. 278p.], as well as other researchers. The authors remark that while the methods examined have appeared frequently in the statistical literature, they have received little attention in the prevention field. The observations presented are appropriate for continuous rather than categorical data; for data "reasonably normally distributed"; for missing data problems related to the general linear model; and for analyses using a covariance matrix as input. The examples are from the conduct of drug prevention research. Several challenges are discussed: the desire to ask respondents more questions than most individuals can answer,

the difficulties raised by attrition, and the time and expense of some measurement techniques which preclude their use for all respondents. The authors suggest that researchers use the Expectation-Maximization algorithm or a similar maximum likelihood procedure, determine the origin of the “missingness,” and include it in analysis models. Missing data procedures can make the most of available data but do not “generate something out of nothing.” Table 4 offers a set of possible measures of causes of missingness. (10 endnotes, 27 references)

424. Potthoff, Richard F., Kenneth G. Manton, and Max A. Woodbury. “Correcting for Nonavailability Bias in Surveys by Weighting Based on Number of Callbacks.” *Journal of the American Statistical Association* 88, no. 424 (December 1993): 1197-1207.

Nonresponse is generated by individuals who refuse to participate in a survey and by those who are not at home to respond to survey questions. The authors concentrate on nonavailability, noting that survey respondents who differ in their availability may also differ in their average characteristics, thereby producing estimates that may be biased unless the effects of nonavailability are corrected. The pros and cons of existing remediation approaches are reviewed, including the Politz-Simmons “nights-at-home” weighting scheme [Politz, Alfred, and Willard Simmonds. “An Attempt to Get the ‘Not at Homes’ into the Sample without Callbacks.” *Journal of the American Statistical Association* 44, no. 245 (March 1949): 9-16.]. The present authors introduce three mathematical models which require no nights-at-home questions because the weighting of respondents is based on the number of callbacks necessary to obtain an interview, rather than on the nights reported at home. The “Class O” problem (that is, individuals not at home any night of the six) is avoided by “assuming a model where p , the probability that a sample member is at home and available for interview, is beta distributed and where the expectation of the response variable given p is a linear (or possibly other) function of p ” (p. 1198). The simplest callback model requires estimates of the two parameters of the beta distribution; the other two each have a third parameter. Four appendixes provide the formulas used. (37 references)

INSTRUCTIONAL MATERIALS

425. Fink, Arlene. *How to Analyze Survey Data*. Vol. 8 of *The Survey Kit*, edited by Arlene Fink. Thousand Oaks, CA: Sage Publications, 1995. 99p.

In this volume of *The Survey Kit* [Item No. 24], it is Fink’s desire “to teach the basic vocabulary of statistics and the principles and logic behind the selection and interpretation of commonly used methods to analyze survey data” (frontmatter). The initial chapter is devoted to discussions of measurement scales (nominal, ordinal, and numerical); the differences between independent and dependent variables; measures of central tendency (mean, median, and mode); and measures of spread (range, standard deviation, percentile, and interquartile range). In

chapter 2 the author considers relationships, or correlations, including how to calculate the correlation coefficient, the size of the correlation, regression, normal distribution, and hypothesis testing (the null hypothesis is also explained). A final chapter is intended to assist the reader in selecting the most appropriate method for analyzing results. The concepts covered include chi-square, *t* test, analysis of variance (ANOVA), confidence intervals, and screening and transforming data. Fink advises the reader to review the entire dataset before analyzing; to screen the data for incorrect values; and to resolve the issue of missing values before proceeding. Six briefly annotated suggested readings and an eighty-six-entry glossary are included.

RELIABILITY

426. Alwin, Duane F., and Jon A. Krosnick. "The Reliability of Survey Attitude Measurement: The Influence of Question and Respondent Attributes." *Sociological Methods & Research* 20, no. 1 (August 1991): 139-81.

Alwin and Krosnick discuss the concept of reliability in survey research, the importance of estimating reliability, and three sources of random measurement error in survey reports of attitudes—the nonexistence of attitudes, ambiguity in internal cues, and ambiguity of response scale alternatives. Respondent and question characteristics associated with the ambiguity of response alternatives are described. For this investigation the authors selected and analyzed ninety-six attitude measures from these sources: five three-wave national reinterview surveys, three Michigan Election Panel Surveys, and two General Social Surveys. Several theoretical hypotheses were examined, as well as a variety of response options such as agree-disagree, rating scales, and forced-choice. The results indicate the following: (1) a number of question attributes were linked to estimated reliability; (2) although there were some exceptions, higher reliability was shown for the attitude questions offering more response options; (3) response options possessing more extensive verbal labeling were associated with higher reliability; (4) no greater reliability was shown for questions explicitly offering a "don't know" alternative; (5) the overall impact of question characteristics on reliability was somewhat ambiguous; and (6) some characteristics of the respondent were found to be related to reliability, with older and less-educated respondents providing the least reliable reports. The study results are discussed within a general framework for the consideration of survey errors and their sources. (25 endnotes, 89 references)

427. Green, Kathy E. "Applications of the Rasch Model to Evaluation of Survey Data Quality." Chap. 6 in *Advances in Survey Research*, no. 70, edited by Marc T. Braverman and Jana Kay Slater, 81-92. New Directions for Evaluation, A Publication of the American Evaluation Association, edited by Lois-ellin G. Datta. The Jossey-Bass Education Series. San Francisco, CA: Jossey-Bass Publishers, 1996. 110p.

Respondents' misinterpretation of survey items can have "profound" effects on both simple and sophisticated statistical descriptions. Green advocates the use of the *Rasch model*—a measurement device designed to assist quality appraisal, identify suspect responses, and construct conceptually sound measures. Developed by G. Rasch in the late 1950s, the one-parameter item response model has been used in the United States for developing and analyzing large-scale achievement tests. Green describes the model as a scaling device in which respondents' answers to individual questions are used to estimate individual attitude and item position or agreeability. The model "relates a person's 'amount' of a trait, attitude or ability to the probability of the response to an item via specification of a mathematical model" (p. 83). The author reviews various ways in which the model's applicability can improve the evaluation of survey data quality, including (1) isolating the underlying meaning that accounts for respondent answers; (2) designing and refining scales; (3) identifying comprehension difficulties; (4) accounting for the failure of some items to contribute to the definition of the variable; (5) determining whether measures remain stable across subgroups; (6) preparing estimates from incomplete data; and (7) comparing data over different populations and time periods. (1 endnote, 26 references)

428. Litwin, Mark S. *How to Measure Survey Reliability and Validity*. Vol. 7 of *The Survey Kit*, edited by Arlene Fink. Thousand Oaks, CA: Sage Publications, 1995. 87p.

As with other contributors to *The Survey Kit* [Item No. 24], Litwin uses a teaching approach to discuss appropriate measurement techniques for determining reliability and validity in sample surveys. The text is accompanied by exercises and answers, examples, illustrations, guidelines, and checklists. The intended audiences are students, survey researchers, and others responsible for conducting and using surveys. Following an overview of psychometrics, Litwin considers reliability and several frequently used indicators: test-retest, alternative-form, internal consistency, interobserver, and intraobserver. The types of validity described include face, content, criterion (subdivided into concurrent and predictive), and construct (subdivided into convergent and divergent). Also covered are the techniques necessary to scale and score a survey, and instructions on how to code and pilot test both new and established surveys. The reader's attention is drawn to the issues that may arise in cross-cultural or multicultural surveys, with the author noting that translation must work both linguistically as well as culturally. Five suggested readings with single-sentence annotations and a thirty-two-entry glossary are included.

REPLICATION

429. Firebaugh, Glenn. *Analyzing Repeated Surveys*. Sage University Paper Series on Quantitative Applications in the Social Sciences, 07-115. Thousand Oaks, CA: Sage Publications, 1997. 72p.

Repeated survey designs ask the same questions to different samples of individuals at different points in time—perhaps at a fixed interval (monthly, quarterly, annually, or biennially), or on an occasional basis. The intent is to enable researchers to analyze changes in society as a whole and to study aggregate trends. Firebaugh differentiates repeated survey designs (or repeated cross-sectional designs) from *panel survey designs*, or reinterviews of the same individuals, noting that some panel studies add individuals to the sample, and some repeated surveys do not always draw entirely new samples for each survey. Combinations of the two types are called *rotating panel surveys* and *split-panel surveys*. Examples of well-known repeated surveys include the General Social Survey, the National Election Studies, and the National Health Interview Survey. Firebaugh defines and discusses four methods for studying social change: (1) trend analysis; (2) proximate decomposition of trends (decomposing a trend into proximate—immediately following or preceding—sources); (3) decomposition of change in one variable in terms of change in the levels and effects of other variables; and (4) change in the effects of variables at the individual level (the *changing-parameter model*). The author advises that a grasp of the fundamentals of regression analysis is necessary for understanding the presentation. (79 references)

430. Firebaugh, Glenn, and Dana L. Haynie. "Using Repeated Surveys to Study Aging and Social Change." Chap. 6 in *Studying Aging and Social Change: Conceptual and Methodological Issues*, edited by Melissa A. Hardy, 148-63. Thousand Oaks, CA: Sage Publications, 1997. 229p.

The chapter deals with *repeated surveys*—namely, those that ask the same set of questions to different population samples. With this methodology, as utilized in the General Social Survey and the National Election Studies, a new sample is selected at each measurement period, following cohorts of individuals born at the same time "as they age and add cohorts as they are added to the target population (e.g., become old enough to vote)" (p. 152). The individuals themselves are not followed, an important factor in determining how repeated surveys can and cannot be adapted to the study of aging and social change. Firebaugh and Haynie distinguish repeated surveys from *panel designs*, noting that the latter are based on a fixed sample in which the same individuals are reinterviewed, or a significant subset of the new sample overlaps with prior samples. There is little or no overlap in the samples of repeated surveys. *Split-panel designs* are created by adding a panel component to repeated surveys. The authors discuss and demonstrate three applications of repeated surveys: the study of net change or trends, the study of the impact of cohort replacement, and the study of changing individual-level effects. Several models are explained. References are cumulated on pages 206-23.

SECONDARY

431. Clark, Rich, and Marc Maynard. "Research Methodology: Using Online Technology for Secondary Analysis of Survey Research Data—'Act Globally, Think Locally.'" *Social Science Computer Review* 16, no. 1 (Spring 1998): 58-71.

Secondary analysis, defined as any subsequent analysis of an existing dataset that was collected by someone else, is reviewed in terms of versatility, feasibility, cost saving, and importance to social science research. According to Clark and Maynard, survey research is well-suited to secondary analysis. For example, some studies, such as the General Social Survey (GSS) conducted by the National Opinion Research Center, are produced primarily for purposes of secondary research by scholars in a variety of disciplines (over 4,000 publications have been generated from GSS data). The authors discuss the past, present, and future impact of online technologies on the way secondary analysis of survey research is conducted. The development of the Internet and the World Wide Web has dramatically changed the manner in which data are accessed, as well as the quantity and type of data available for analysis. Technology has progressed to the point that today's researcher can download and manipulate very large datasets. A number of major online sources for question-level survey research data are discussed. The Roper Center for Public Opinion maintains the largest question-level public opinion database—the Public Opinion Location Library (POLL). Another major question database has been compiled by the Institute for Research in Social Science at the University of North Carolina at Chapel Hill. Other national and international online sources described are the California Poll Web site; Euroinion; the Centre for Applied Social Surveys (the University of South Hampton); the Data Archive (the University of Essex); the Institute for Social Research (the University of Michigan); ZEUS (the University of Mannheim); and the Steinmetz Archive (the Netherlands). The authors present a model based on the Data Exploration Program, developed in Spain, that allows users to locate and analyze public opinion data "without the burden of knowing complicated statistical packages and arcane search syntax" (p. 69). (20 endnotes, 13 references)

VALIDITY

432. Harrison, Lana. "The Validity of Self-Reported Drug Use in Survey Research: An Overview and Critique of Research Methods." In *The Validity of Self-Reported Drug Use: Improving the Accuracy of Survey Estimates*, edited by Lana Harrison and Arthur Hughes, 17-36. NIDA Research Monograph 167; NIH Publication No. 97-4147. Rockville, MD: U.S. Department of Health and Human Services, National Institutes of Health, National Institute on Drug Abuse, Division of Epidemiology and Prevention Research, 1997. 508p. [SuDocHE20.3965:167]

Validation research studies conducted prior to the mid 1980s suggest that drug use surveys utilizing self-report methodology produce fairly accurate results. However, more recent validation studies, especially those conducted with criminal justice and former treatment clients, indicate that self-reporting techniques overlook substantial recent drug use. Two techniques currently under investigation are improved urinalyses and hair analyses—processes referred to as *bioassays* [determination of the relative strength of a substance, such as a drug, by comparing its effect on a test organism with that of a standard preparation]. Harrison's chapter, the first of twenty in the volume, serves as both an overview of the topic and as a critique of selected research methods on the validity of self-reported drug use. Among the topics discussed are internal and external validity procedures, the limitations of validity research, and the strengths and weaknesses of the various approaches. A review of the literature suggests that neither self-reports nor bioassays are completely accurate, and both have inherent problems. However, self-reporting of sensitive information is needed since biological assays are only able to corroborate the information provided by respondents. (38 references)

433. Harrison, Lana, and Arthur Hughes. "Introduction—The Validity of Self-Reported Drug Use: Improving the Accuracy of Survey Estimates." Chap. in *The Validity of Self-Reported Drug Use: Improving the Accuracy of Survey Estimates*, edited by Lana Harrison and Arthur Hughes, 1-16. NIDA Research Monograph 167; NIH Publication No. 97-4147. Rockville, MD: U.S. Department of Health and Human Services, National Institutes of Health, National Institute on Drug Abuse, Division of Epidemiology and Prevention Research, 1997. 508p. [SuDocHE20.3965:167]

Self-reporting is the primary method of data collection in surveys of illicit drug use. Because such surveys deal with sensitive and very stigmatized behaviors, the validity of the methodology has been questioned. The volume was written "to review current and cutting-edge research...and to describe methodological advances designed to reduce total error in estimates of drug use and quantify sources of nonsampling error" (p. 1). Harrison and Hughes provide overviews of the chapters contained within. A technical note addresses issues pertaining to the use of hair as a medium for drug use analysis. Hair testing technology, described as a "developing science with unresolved issues," has been receiving increased attention from researchers undertaking prevalence studies as a measure of drug usage. The strengths and weaknesses of the technique are discussed. (8 references)

434. Harrison, Lana, and Arthur Hughes, eds. *The Validity of Self-Reported Drug Use: Improving the Accuracy of Survey Estimates*. NIDA Research Monograph 167; NIH Publication No. 97-4147. Rockville, MD: U.S. Department of Health and Human Services, National Institutes of Health, National Institute on Drug Abuse, Division of Epidemiology and Prevention Research, 1997. 508p. [SuDocHE20.3965:167]

The monograph is based on a technical review carried out on 8-9 September 1994 in Gaithersburg, Maryland. Twenty of the twenty-five papers presented were selected for inclusion in this volume. The research focuses on the validity of self-reports using internal or external criteria, and on the methodological advances designed to reduce total error in estimates of drug use. (9 footnotes) The following entries have been selected from the volume, with individual annotations found at the indicated item numbers:

“Introduction—The Validity of Self-Reported Drug Use: Improving the Accuracy of Survey Estimates.” [Harrison and Hughes - Item No. 433].

“The Validity of Self-Reported Drug Use in Survey Research: An Overview and Critique of Research Methods.” [Harrison - Item No. 432].

“Studies of Nonresponse and Measurement Error in the National Household Survey on Drug Abuse.” [Gfroerer, Lessler, and Parsley - Item No. 389].

“Adaptive Sampling in Behavioral Surveys.” [Thompson - Item No. 159].

“Self-Reported Drug Use: Results of Selected Empirical Investigations of Validity.” [Hser - Item No. 436].

“Design and Results of the Women’s Health Study.” [Tourangeau, Jobe, Pratt, and Rasinski - Item No. 486].

“Privacy Effects on Self-Reported Drug Use: Interactions with Survey Mode and Respondent Characteristics.” [Aquilino - Item No. 364].

“The Use of the Psychological Laboratory to Study Sensitive Survey Topics.” [Willis - Item No. 199].

“Repeated Measures Estimation of Measurement Bias for Self-Reported Drug Use with Applications to the National Household Survey on Drug Abuse.” [Biemer and Witt - Item No. 413].

435. Harrison, Lana D. “The Validity of Self-Reported Data on Drug Use.” *Journal of Drug Issues* 25, no. 1 (Winter 1995): 91-111.

Harrison maintains that surveys, in spite of being subject to some bias, are a better measure of drug usage than are other available techniques such as biological specimens (for example, urine, blood, and hair), police records, court documents, and ethnographic methods of investigation. The basis for the research is a comparison of the concordance between external validation measures and self-reports. Studies evaluating each of the techniques are reviewed, noting their features and advantages and disadvantages. Urinalysis, though increasingly

popular, has a “narrow window of detectability.” Hair analysis has received increased attention because it does not decompose, and collection procedures are less embarrassing. Harrison points out that many chemical-based validation studies have produced results that are not generalizable to other populations; have been conducted with relatively small numbers of subjects; and lack proper control groups. Various types of official records have been used to validate self-report, with several examples cited. The author reviews efforts made by the National Household Survey on Drug Abuse (NHSDA) and the Monitoring the Future (MTF) surveys to improve the validity of self-reported data. These include the use of cognitive testing, varying the mode of administration, and offering confidentiality assurances. Factors contributing to validity are the recency of the event, the degree of social desirability of the drug, the data collection methodology used, and well-trained interviewers. NHSDA and MTF surveys are thought to produce highly valid estimates of drug use among members of the general population. (33 references)

436. Hser, Yih-Ing. “Self-Reported Drug Use: Results of Selected Empirical Investigations of Validity.” In *The Validity of Self-Reported Drug Use: Improving the Accuracy of Survey Estimates*, edited by Lana Harrison and Arthur Hughes, 320-43. NIDA Research Monograph 167; NIH Publication No. 97-4147. Rockville, MD: U.S. Department of Health and Human Services, National Institutes of Health, National Institute on Drug Abuse, Division of Epidemiology and Prevention Research, 1997. 508p. [SuDocHe20.3965:167]

A review of the literature suggests that the validity of self-reported drug use may vary widely according to survey conditions, the types of drugs used, the types of measures (for example, frequency or amount), and characteristics of the sample population. Hser discusses two series of empirical studies designed to investigate the quality of self-reported drug use data. The first set of analyses dealt with a sample of 323 narcotics addicts who had participated in two face-to-face interviews conducted ten years apart. Urine specimens were collected at both interviews as an external validity check. The results contributed strongly to confidence in the validity of the relationships among self-reported data. The second set of analyses concerned certain high-risk groups, including samples from sexually transmitted disease clinics, hospital emergency rooms, and jails. Face-to-face interviews were conducted with a total of 3,493 such individuals residing in Los Angeles County. Urinalysis results were again used to corroborate self-report. The findings indicate that the factors listed above can impact the quality of self-reported recent drug use data. Hser concludes that “empirical validation of self-report data is always necessary to enhance the utility of these data and to suggest means of controlling the potential biases” (p. 340). Additional research is needed in the area. (27 references)

437. Kagay, Michael R. “Variability Without Fault: Why Even Well-Designed Polls Can Disagree.” Chap. 5 in *Media Polls in American Politics*, edited

by Thomas E. Mann and Gary R. Orren, 95-124. Washington, DC: Brookings Institution, 1992. 172p.

Instances of variability in poll results were investigated for three topics: the standing of presidential candidates, the “war” in the Persian Gulf, and the abortion issue. Kagay maintains that each topic contains elements that can cause even well-designed polls to produce variable findings. In the case of candidate standings, such factors as the timing of polls, the stage of the campaign, question wording and context, the population sampled, and differences in analysis and reporting of results can affect variability. The findings of several polls on the Persian Gulf “war” serve to point out the challenges posed by polls on foreign policy—polls which are especially sensitive to dramatic events, appeals from leaders, and how policy options are presented. The abortion debate is used to demonstrate the complexities of polling on controversial domestic issues. The number of questions asked in a particular poll and the distinctions pollsters allow respondents to make are important considerations impacting the responses received. Due to the proliferation of national polls, users need to be aware of subtle differences that can lead to discrepancies. However, Kagay is of the view that this proliferation increases the possibility that some polling organizations will ask the proper questions at the right time “to probe beyond the immediate or temporary manifestations of American public opinion.” (34 endnotes)

438. Smith, Tom W. “Actual Trends or Measurement Artifacts? A Review of Three Studies of Anti-Semitism.” *Public Opinion Quarterly* 57, no. 3 (Fall 1993): 380-93.

Smith compares and contrasts certain methodological features of three major national studies of attitudes and trends in anti-Semitism carried out over the last three decades. The first, conducted in 1964 as part of the Five-Year Study of Anti-Semitism, was sponsored by the Anti-Defamation League (ADL). The face-to-face interview survey was designed by the Survey Research Center at the University of California at Berkeley and conducted by the National Opinion Research Center at the University of Chicago. The sample population consisted of respondents 21 years of age and older; the sample size was 1,975. The second study, designed as a follow-up to the 1964 survey, was sponsored by the American Jewish Committee and carried out in 1981 by Yankelovich, Skelly, and White. This survey was conducted with face-to-face interviews with respondents 18 years of age and older. The sample size was 1,072, with an oversample of 143 African Americans and Jews. The third study, also designed as a follow-up to the 1964 survey, was conducted in 1992. It was sponsored by the ADL with the goal of examining trends and making over-time comparisons. The firm of Marttila and Kiley was commissioned to conduct a telephone survey of respondents 18 years of age and older, with a sample of 1,101 respondents selected by random-digit-dialing sampling procedures. There was an oversample of 200 African Americans. Smith believes the methodological differences across the studies undermine their comparability and compromise the examination of

changes in anti-Semitism. The 1981 and 1992 surveys are said to contain “numerous differences and seriously deviate from the ideal of constant measurement and stimulus” (p. 389). The author describes and discusses the challenges encountered in sample coverage and study design (for example, two of the surveys used different interviewing approaches, the age samples varied, and different organizations conducted the surveys). In addition, the question content, wording, and context differed among the surveys, with relatively few anti-Semitism questions repeated across the surveys. Numerous question wording changes, the introduction of true/false items, and the handling of “don’t know” responses, among other factors, hampered over-time comparisons and the analysis of trends. An eleven-point anti-Semitism scale developed for the 1964 survey by Gertrude J. Selznick and Stephen Steinberg [*The Tenacity of Prejudice: Anti-Semitism in Contemporary America*. New York, NY: Harper & Row, 1969. 248p.] is used to demonstrate some of the problematic comparisons. Smith offers this recommendation: “In order to measure change do not change the measure” (p. 388), adding that “most of the variations cannot be compensated for by appropriate analysis techniques” (p. 387). An appendix provides the questions asked in the three surveys. (7 footnotes, 14 references)

439. Wentland, Ellen J., with Kent W. Smith. *Survey Responses: An Evaluation of Their Validity*. San Diego, CA: Academic Press, 1993. 207p.

The volume was written to (1) analyze data from prior studies on response validity; (2) identify and evaluate the factors associated with response validity; (3) form a theoretical perspective based on the variable found to influence response accuracy; and (4) provide a guide for both researchers and undergraduate and graduate students in research methods courses. Following an introduction to the topic and the organization of the book, Wentland and Smith identify and review thirty-seven empirical studies published from 1944 to 1988 that used external validation criteria. The literature review covers both nonthreatening and sensitive topics such as voting, drinking, sex, smoking, health services, taxes, savings, and debt, as well as various atypical respondent groups. Each of the studies contains questions with coded attributes for later meta-analysis. In total, the responses to 258 questions provided by 56,701 respondents were analyzed. Three separate meta-analyses were carried out that regressed characteristics of the surveys on the percent correct responses, the latter inferred from outside sources such as administrative records or laboratory tests. The authors conclude that the accessibility to the respondent of the requested information was the most important factor affecting response accuracy. There are 105 cumulated references at the end of the volume.

440. Wilson, Timothy D., Suzanne J. LaFleur, and D. Eric Anderson. “The Validity and Consequences of Verbal Reports about Attitudes.” Chap. 5 in *Answering Questions: Methodology for Determining Cognitive and Communicative Processes in Survey Research*, edited by Norbert Schwarz

and Seymour Sudman, 91-114. San Francisco, CA: Jossey-Bass Publishers, 1996. 469p.

The authors, experimental social psychologists, discuss the relevance and implications of their research on attitudes and introspection to the validity of survey questions. The goal was to demonstrate that verbal protocols, like survey questions, are sometimes subject to error, and that problems of validity and reactivity remain unaddressed. Two types of questions are delineated: those dealing with feelings (“why” questions) and those concerning attitudes and opinions (“how” questions). Questions in the first category are used less frequently in surveys than are attitude items. Difficulties arise with the former because even if respondents know why they feel the way they do, they may suppress or distort their answers due to social desirability concerns or misinterpretation of the question. Further, respondents might be unaware of why they feel they way they do. In addition to validity issues, the asking of “why” questions can create contexts that might impact subsequent attitude questions. The authors believe that introspection is an imperfect method for uncovering the causes of human nature, but that questions dealing with feelings can provide useful information when a sampling of reasons is desired that is “accessible, plausible, and expressible.” These questions should be asked following attitude items. The validity and reactivity of attitude questions is more complex, without specific recommendations made. (4 endnotes) There are 534 cumulated on pages 403-41.

Reporting

441. Ansolabehere, Stephen, and Thomas R. Belin. "Poll Faulting." *Chance: New Directions for Statistics and Computing* 6, no. 1 (1993): 22-27.

Ansolabehere and Belin present three main points. The first concerns the lack of reporting of the margin of error for the lead candidate in political campaigns (usually a single + or - is reported). To calculate the margin of error for the lead when not reported, the reported margin of error should be multiplied by the square root of 3 (this is a "good rule of thumb"). Second, it is suggested that results from one poll be reported along with those of other polls conducted during a similar time period. The purpose is to permit comparison, as well as to enable the reader to consider the relative merits of extreme results. Third, the authors encourage the use of a "truth box" which would identify the target population and explain features of the poll—such as nonresponse rates or method(s) used to address the issue. When likely voters' views are reported, an explanation of how the figure was calculated should appear, or a profile of a likely voter should be presented. One table, four graphs, and several boxed inserts provide the following information: the standard deviation of lead candidates; suggestions for calculating the margin of error of the lead; an explanation of the rule of thumb for calculating the margin of the lead; the candidates in two-way and three-way races; and the binomial error formula.

442. Fink, Arlene. *How to Report on Surveys*. Vol. 9 of *The Survey Kit*, edited by Arlene Fink. Thousand Oaks, CA: Sage Publications, 1995. 91p.

The last volume in *The Survey Kit* [Item No. 24] deals with the final step in the survey process. Report preparation, a crucial component, consists of a summary and

explanation of survey methods, findings, and significance. The report can be verbal or written. In the frontmatter Fink outlines the objectives for more effective report preparation, including the following: (1) prepare and interpret lists, charts, and tables; (2) identify survey report contents for various audiences; (3) prepare and explain slides and transparencies; and (4) discuss the survey's purpose(s), design, sample, results, and conclusions. The text is accompanied by graphs, charts, and checklists. Detailed guidelines illustrate how to prepare bar and line charts, slides, and the contents of the written report. A number of "scoring sheets" for reviewing the report's comprehensiveness and accuracy are found on pages 75-81. The section is divided into introduction and background, survey content, design and sampling, reliability and validity, data analysis, and reporting. Within each section Fink poses a number of questions for the reader to contemplate when evaluating her/his work. There are six briefly annotated suggested readings at the end of the book.

Discipline-Oriented Studies and Applications to Specific Areas

BUSINESS

443. Chaudron, David. "The Right Approach to Employee Surveys." *HR Focus* 74, no. 3 (March 1997): 9-10.

Chaudron is managing partner of Chaudron Associates, a management consulting firm located in San Diego. Four strategies are discussed for increasing the effectiveness of employee opinion surveys, noting that many such surveys fall short of delivering the desired results. The initial advice is to "keep the data anonymous, but communicate the actions," although anonymity can lead to other difficulties. The use of various information-collecting methods, such as scaling, open-ended questions, and focus group interviewing, is viewed as beneficial. To produce valid and reliable data, surveys should be conducted multiple times during the year with adequate samples consisting of a cross section of employees. Feedback with the groups surveyed is a crucial component of the survey process. Without communication, employees can become confused and frustrated, which can lead to complacency.

444. Cooper, Donald R., and C. William Emory. "Survey Methods." Chap. 10 in *Business Research Methods*, 266-93. 5th ed. The Irwin Series in Statistics. Chicago, IL: Irwin, 1995. 681p.

There are multiple chapters of relevance to this bibliography, notably chapter 8 on sampling design and chapter 11 on survey instrumentation. However, it is chapter 10 that focuses on survey methods, discussing face-to-face and telephone interviewing as well as self-administered questionnaires. The advantages and disadvantages of each are also presented in tabular format. The face-to-face approach is evaluated along with a consideration of interviewing techniques.

Problematic areas include nonresponse and interviewer error. Cooper and Emory discuss the new technologies and trends in telephone interviewing, with commentary on the impact of answering machines and multiline households. The chapter has a summary, a list of key terms, discussion questions, fifty endnotes, and six suggested readings.

445. Dutka, Solomon, and Lester R. Frankel. "Measurement Errors in Business Surveys." Chap. 7 in *Measurement Errors in Surveys*, edited by Paul P. Biemer, Robert M. Groves, Lars E. Lyberg, Nancy A. Mathiowetz, and Seymour Sudman, 113-23. Wiley Series in Probability and Mathematical Statistics, Applied Probability and Statistics. A Wiley-Interscience Publication. New York, NY: John Wiley & Sons, 1991. 760p.

A *business survey* is defined as a survey in which the sampling and enumeration unit is a business establishment such as a retail store, an institution, or an individual in her/his capacity as a member of a business (having a title such as owner or president). Business surveys are usually enumerative or analytical, and investigate either the business unit itself or information associated with the unit. The information obtained by this type of survey is often gathered by the retrieval of records (invoices, purchase orders, sales, and so forth) by sophisticated electronic systems, as well as by direct observation. Dutka and Frankel identify three sources of measurement error: measurement of the wrong variable, incorrect or biased measurement, and variability due to the measurement instrument. Measuring the wrong variable is considered the most important, problematic, and "unobtrusive" factor in business surveys. Measurement bias can result from aspects of the interview, record retrieval, and the observational methods utilized. Interviewing biases arise when the respondent, either unintentionally or deliberately, provides incorrect information. Record retrieval biases result from the use of out-of-scope data, misleading records, and contamination of information. Observational methods can be subject to biases due to an insufficient time sample (time interval sampling). The survey instrument is discussed as a prime contributor to error. The authors believe that measurement error in business surveys is preventable and/or controllable, and subject to cost-benefit considerations. There are 822 cumulated references pages 687-733.

446. Dutka, Solomon, and Lester R. Frankel. "Measurement Errors in Organizational Surveys." Chap. 3 in *Improving Organizational Surveys: New Directions, Methods, and Applications*, edited by Paul Rosenfeld, Jack E. Edwards, and Marie D. Thomas, 58-70. Sage Focus Editions, vol. 158. Newbury Park, CA: Sage Publications, 1993. 273p.

Dutka and Frankel summarize the various measurement techniques used in organizational surveys; evaluate the role of measurement error in such surveys; and provide examples of how measurement errors are detected and controlled. Measurement techniques are categorized into three classes: interviewing methods (that is, face-to-face, telephone, and self-administered, or some combination of

the three); record retrieval procedures (primarily obtained from computerized data banks); and observational methods (these usually measure static phenomena). The authors identify the potential sources of error produced by each technique. For example, respondents may provide inaccurate information or socially desirable answers. Administrative records may be misleading, misclassified, or contaminated (a problem occurring when a database or file contains records that do not correspond to the survey purpose). With observational techniques, statistical variation of the measuring instrument constitutes the prime source of error. Suggestions are offered for reducing these errors. (14 references)

447. Edwards, Jack E., and Marie D. Thomas. "The Organizational Survey Process: General Steps and Practical Considerations." Chap. 1 in *Improving Organizational Surveys: New Directions, Methods, and Applications*, edited by Paul Rosenfeld, Jack E. Edwards, and Marie D. Thomas, 3-28. Sage Focus Editions, vol. 158. Newbury Park, CA: Sage Publications, 1993. 273p.

A step-by-step approach is provided for individuals who have limited experience conducting surveys and who need to rapidly acquire knowledge. A distinction is made between in-house surveys that can be designed to fit specific needs of an organization, and "off-the-shelf" surveys whose advantages include better reliability and validity, and norms which permit comparison from one organization to another. Edwards and Thomas divide the survey process into five phases, beginning with identifying the purpose(s), determining if this methodology will most effectively accomplish the goals of the organization, and designing an overall plan. The second step involves developing the survey—writing the items, and formatting and pretesting the instrument. Respondent selection, data collection options, and survey administration are covered in phase three. In the fourth step, computer data entry, verification, and analysis are discussed. The presentation of the findings is considered in the final phase. The authors stress the importance of organization-wide involvement in the survey process. (2 endnotes, 22 references)

448. Edwards, W. Sherman, and David Cantor. "Toward a Response Model in Establishment Surveys." Chap. 12 in *Measurement Errors in Surveys*, edited by Paul P. Biemer, Robert M. Groves, Lars E. Lyberg, Nancy A. Mathiowetz, and Seymour Sudman, 211-33. Wiley Series in Probability and Mathematical Statistics, Applied Probability and Statistics. A Wiley-Interscience Publication. New York, NY: John Wiley & Sons, 1991. 760p.

An *establishment survey* is defined as "a census or sample survey whose sources of information are public or private businesses, agencies, or other nonhousehold organizations, or individuals acting as representatives of them" (p. 212). As compared to household surveys, little research exists concerning the difficulties associated with measurement error. Edwards and Cantor report the development

of a model of survey response processes based on the authors' research on the Occupational Safety and Health System conducted by the Bureau of Labor Statistics. The two types of surveys are compared and contrasted, including a discussion of how the cognitive steps in the response process in household models [as outlined by Donna Eisenhower and others - Item No. 336] can be applied to establishment surveys. Respondent factors affecting these surveys include the encoding of information; the record formation process; respondent selection (that is, does s/he have access to the information requested); comprehension and retrieval mechanisms; and motivation, judgment, and communication. The primary difference between household and establishment surveys, in terms of the response process, is the extent to which establishment survey respondents use information systems instead of recall to answer questions. This difference, however, is one of degree, without clear boundaries. The authors are of the view that certain characteristics of the respondent (especially her/his relationship to the information systems required to answer questions) have the greatest impact on response error. Six hypotheses are proposed for future methodological research. There are 822 cumulated references on pages 687-733.

449. Howe, Maynard A., and Dee Gaeddert. "Customer Survey Research: Extending the Partnership." Chap. 64 in *Applying Psychology in Business: The Handbook for Managers and Human Resource Professionals*, edited by John W. Jones, Brian D. Steffy, and Douglas W. Bray, 640-52. Issues in Organization and Management Series, edited by Arthur P. Brief and Benjamin Schneider. Lexington, MA: Lexington Books, 1991. 878p.

The necessity for establishing and maintaining a "partnership" philosophy between corporations and their customers is reviewed, with the authors noting that the few companies practicing this philosophy are consistently the market leaders. Howe and Gaeddert introduce a "strategic" model for improving customer-vendor relations. The model seeks a contemporary interactive and proactive approach that can be carried out through a systematic survey research program which features eleven steps for conducting an effective customer survey. Steps 1 and 2 involve designing and pilot-testing the instrument, with precisely stated objectives of what will be measured and what knowledge will be gained. In administering the survey, step 3, it is necessary to select the sample population and the data collection approach. The next two steps cover data processing and analysis. The authors believe a clear and straightforward analysis is most beneficial to the organization. Feedback procedures to management, employees, and customers are discussed in steps 6 through 9. A pattern of ongoing communication with all participants should be established. Applications of the data are discussed. (15 references)

450. Macdonald, Douglas A., and Lois Haggard. "Turning Point Analysis: Using Survey Research to Call Changes in Consumer Behavior and Predict

Sales Taxes." *Public Budgeting & Finance* 10, no. 4 (Winter 1990): 47-61.

The authors are of the opinion that forecasters frequently disagree on revenue predictions due to differences in modeling techniques (such as time series, aggregate, and component sales tax econometric). The application of survey research methodology is advocated to determine changes in consumer behavior and to more accurately predict state sales tax income. Three examples demonstrate the current use of survey research confidence indices in national fiscal policy making: (1) The Index of Consumer Sentiment of the University of Michigan ("the Michigan Survey"), a random telephone survey established in 1946, samples about 500 U.S. households. The Department of Commerce has incorporated the survey into its Index of Leading Indicators; (2) The National Association of Purchasing Management Survey, a mail survey funded by the *Wall Street Journal* and conducted since 1965, has a sample size of about 300; and (3) The Conference Board Consumer Confidence Survey, established in 1969, is a mail survey of over 5,000 U.S. households. The questions concern current and future business topics, employment, and consumers' potential purchases. Five state-specific consumer or business confidence surveys are discussed: (1) The Texas Quarterly Business Survey monitors the top ten Texas sales tax payers via mail questionnaire; (2) The Florida Economic and Consumer Survey, conducted monthly by telephone by the Bureau of Economic and Business Research at the University of Florida, samples about 500 to 600 Floridians; (3) The New Mexico Index of Consumer Sentiment has a sample size of 600 households and is conducted with quarterly telephone interviews by the Survey Research Bureau at the University of New Mexico; (4) The Utah Business Confidence Survey uses face-to-face interviews to poll the state's top business leaders (approximately 200); and (5) The Utah Index of Consumer Sentiment is a telephone survey which is conducted quarterly with about 400 Utahans. This survey asks five general questions (identical to those in the Michigan survey) and a specific one to monitor Utah's financial outlook for the coming year. The Utah surveys are compared to those of other states. (13 endnotes)

451. Malhotra, Manoj K., and Varun Grover. "An Assessment of Survey Research in POM: From Constructs to Theory." *Journal of Operations Management* 16, no. 4 (July 1998): 407-25.

The reader is advised to use survey research methodology carefully when applying its principles to theory development in the field of production and operations management (POM). Utilizing studies from other social science disciplines, for example, psychology, marketing, and organizational behavior, Malhotra and Grover suggest a normative perspective on survey research practices, with the goal of bridging the gap between survey research and theory development in POM. Seventeen ideal survey research attributes are identified and discussed, such as clearly defining the unit of analysis (individual or organization) and establishing a framework and procedures for reducing various

types of error—measurement, sampling, internal validity, and those that result from faulty statistical conclusions. The authors identified and analyzed twenty-five survey-based articles that were published between 1990 and 1995 in four prominent academic journals involved in POM research: *Journal of Operations Management*, *Decision Sciences*, *Management Science*, and *Production and Operations Management*. Among the results are the following: (1) no study received a perfect quality rating score, but a few came quite close, scoring fifteen of the possible seventeen points; (2) although both exploratory and explanatory research was conducted, emphasis was on the latter; (3) sampling errors were generally avoided; (4) statistical conclusion errors were found in about 30 percent of the studies; (5) all studies except one used purely cross-sectional rather than longitudinal data; (6) eighteen of the articles were published in 1994 and 1995, indicating increased interest in the field. Suggestions are offered for producing more advanced POM studies in the future. These include employing multi-item constructs and assessing them for validity, pretesting the survey instrument, and paying closer attention when reporting data collection procedures. Appendix A provides the rating form for assessing POM survey research. (4 footnotes, 27 references)

452. Noto, Frank. "Use Opinion Research to Build Strong Communication." *Communication World* 12, no. 3 (March 1995): 28-30.

Business communicators are urged to acquire an understanding of audience opinions, attitudes, and beliefs. Public opinion research is advocated as a cost-effective method for providing insights into people's motivation and decision making. Noto discusses several developments in the area, such as focus group interviewing, which can assist in understanding attitudes beyond the numbers provided by polling. This format, consisting of a targeted group of eight to twelve people, is led by a moderator in a roundtable discussion environment. Other useful methodologies are conjoint analysis, which features a series of forced choices, and random-sample opinion surveys, in which data are collected in a systematic, scientific manner. Telephone survey research has greatly increased due to the development of computer-assisted analytical techniques, including cluster analysis and causal modeling. In cluster analysis, people are grouped according to their shared values and attributes. Causal modeling identifies the messages that move people to action, thereby changing attitudes and influencing behavior. Suggestions are offered for overcoming barriers to survey use. The author believes that public opinion research can provide "insights on what to say, whom to say it to, and how, when and where to say it best" (p. 30). Several recommendations for selecting a research consultant are given.

453. Throgmorton, James A. "Planning as a Rhetorical Activity: Survey Research as a Trope in Arguments about Electric Power Planning in Chicago." *Journal of the American Planning Association* 59, no. 3 (Summer 1993): 334-46.

A rhetorical approach to planning is proposed. The technique emphasizes the necessity to think of survey research, computer modeling, and forecasting as rhetorical tropes (that is, as figures of speech and argument, or rhetorical devices) in an effort to persuade specific audiences in specific contexts to “accept proposed explanations, embrace inspiring visions, and undertake recommended actions” (p. 335). The importance of language, discourse, and argument in planning, thought, and action is stressed. The approach is applied to Chicago’s effort from 1985 to 1991 to explore alternatives as to whether the city should remain dependent on a single, privately owned electric utility, namely, Commonwealth Edison (Com Ed). A case study is recounted which focused on a survey (sponsored by the Chicago Association of Commerce and Industry) of fifty-four Chicago businesses in hopes of persuading them that a city takeover of Com Ed’s services would “wreak economic havoc.” The article chronicles a survey researcher’s attempt to persuade a mayorally appointed citizens’ task force of the survey’s validity. (The task force took issue with the wording of the questions and the reliability of the results.) Throgmorton discusses how a rhetorical approach could improve the theory, pedagogy, and practice of planning. (12 endnotes, 43 references)

454. Tickamyer, Ann R., and Teresa A. Wood. “Identifying Participation in the Informal Economy Using Survey Research Methods.” *Rural Sociology* 63, no. 2 (June 1998): 323-39.

Informal economic activity [that is, “odd jobs”] is defined as “a form of income generating or subsistence activity within first world economies” (p. 323). Definitions vary greatly: in rural studies informal work is thought of as supplemental to other forms of income; in urban studies it is viewed as a substitute for “formal and protected” work. Tickamyer and Wood report on a study conducted to evaluate the use of telephone survey methodology to develop low-cost, efficient data sources to answer questions as to what constitutes informal work, what activities make up the informal economy, its prevalence in urban and rural America, and where informal work can be found. Data for the study came from three administrations of The Kentucky Survey, a biannual, random-digit-dialed, general public opinion poll of noninstitutionalized adults residing in the state of Kentucky. In the first survey, conducted in the fall of 1994, 649 respondents were asked a series of closed-ended questions to determine if any household member engaged in certain activities. The spring 1995 survey of 675 respondents presented two open-ended items with examples or prompts provided. Using slightly different examples of informal work as prompts, the open-ended approach was repeated in the fall 1995 survey. There were 663 completed interviews in the last study. In each administration of the survey, a set of core questions were asked prior to the specific ones on various employment options. The authors compare the results of the three question formats; evaluate each methodology as to its ability to gather data on households’ participation in informal economic activities; and examine different definitions of the exchanges included in informal work. The findings are

discussed in terms of question format, urban-rural differences, and the difficulties of developing survey-based measures of informal activity. (4 footnotes, 23 references)

455. Walton, Lisa Williams. "Telephone Survey: Answering the Seven Rs to Logistics Research." *Journal of Business Logistics* 18, no. 1 (1997): 217-31.

Two leading journals in the field—the *Journal of Business Logistics* and the *Transportation Journal*—were examined to determine the preferred method of data collection in the articles published from 1984 to 1994. The mail survey was found to be the most frequently used methodology in the *Journal of Business Logistics*, occurring fifty-five times (twice that of face-to-face interviews, and more than five times that use of telephone surveys). Articles in the *Transportation Journal* used the mail survey seventy times (four times more than face-to-face interviews, and seven times more than telephone surveys). In addition, the three methods were evaluated as to their effectiveness in helping logistics investigators meet the "Seven Rs" of logistic research: "The challenge of contacting the right person with the right information at the right time in order to ask the right questions using the right instrument for the collection of the right data at the right cost" (p. 217). According to these criteria, telephone surveys are considered the most appropriate approach for conducting logistics research (about twice the rating of mail surveys and seven points higher than face-to-face interviews). Walton outlines and discusses ten steps to follow when implementing this methodology. The author believes that logistics researchers need additional education and training in this technique. (16 endnotes, 5 references)

456. Whitehead, John C., Timothy C. Haab, and Ju-Chin Huang. "Part-Whole Bias in Contingent Valuation: Will Scope Effects Be Detected with Inexpensive Survey Methods?" *Southern Economic Journal* 65, no. 1 (July 1998): 160-68.

Using data from a 1995 telephone survey conducted by the Survey Research Laboratory at East Carolina University, the authors tested for scope effects with the *contingent valuation (CV) method*, a "survey approach to the valuation of resource allocation changes" (p. 160). The CV method is used to determine the total economic value (which also includes nonuse value) for environmental resources damaged by commercial activities. The issue was citizens' support for water quality policy and improvements in the Albemarle and Pamlico Sounds in North Carolina. Sample selection was by random digit dialing, with 1,077 respondents completing the survey for a 75 percent response rate. Standard interviewing methods were used (employing neither photographs nor other visual aids). Data on the willingness to pay (WTP) were sought, with the WTP determined with closed-ended questions. Respondents were given short descriptions of the environmental resources, policy descriptions, payment rule, and payment vehicle. The authors found that inexpensive survey methods are

appropriate for eliciting WTP values that are sensitive to scope. (11 footnotes, 32 references)

CRIMINOLOGY

457. Cook, Philip J., Jens Ludwig, and David Hemenway. "The Gun Debate's New Mythical Number: How Many Defensive Uses per Year?" *Journal of Policy Analysis and Management* 16, no. 3 (Summer 1997): 463-69.

Figures from a previous survey suggest that each year 2.5 million Americans use guns for defensive purposes against a criminal attacker. The authors believe that data supplied by Gary Kleck and Marc Gertz [Item No. 460] are substantially overstated and represent a "mythical number." (By contrast, the U.S. Department of Justice, Bureau of Justice Statistics, estimates the number at about 1.3 million annually.) Approximations of the number of defensive gun uses (DGUs) is deemed considerably exaggerated due to the problem of false positives, a source of bias common in survey estimates of rare events (DGUs are considered by the authors to be in this category), and that, in surveys which include questions about DGUs, even small false-positive rates will lead to relatively large overestimates. The authors cite several nationally representative random-digit-dialed telephone surveys which ask DGU questions similar to those of Kleck and Gertz. One such study, the 1994 National Survey of Private Ownership of Firearms, suggests that nearly 50 percent of reported incidents "appear to contain some internal discrepancy or otherwise do not make sense" (p. 465). Rather, the discrepancies generate estimates that greatly exaggerate the actual number of DGUs. Possible sources of false DGU reports are suggested; strategies are offered for minimizing the problem; and comments are made on the implications of inflated gun statistics for the policy debate concerning how firearms should be regulated and for the practice of survey research. (11 footnotes, 23 references)

458. Hagan, Frank E. "Survey Research: Interviews and Telephone Surveys." Chap. 6 in *Research Methods in Criminal Justice and Criminology*, 155-85. 3^d ed. New York, NY: Macmillan Publishing Company, 1993. 466p.

Hagan outlines the primary components of the interview process, emphasizing the range of telephone survey opportunities. Beginning with the pros and cons of interviewing, the author discusses variations, procedures, training, planning the session(s), administration, interviewer probing, and recording the exchange. Telephone surveys are considered in terms of their positive and negative qualities. Two commonly used techniques—computer-assisted telephone interviewing and random digit dialing—receive attention. The author focuses on specific surveys of interest to the criminologist, such as the National Crime Survey and the Uniform Crime Reports, and on the special issues relating to victim surveys. Problematic

areas in crime surveys include false reports, mistaken reporting, poor memory, telescoping, and interviewer effects, as well as sampling bias, over- and underreporting, coding unreliability, mechanical error, and the challenges involved in measuring certain crimes. Hagan defends the use of victim surveys by emphasizing their beneficial aspects. The chapter contains summaries, a list of key concepts, and review questions. (77 references)

459. Hemenway, David. "Survey Research and Self-Defense Gun Use: An Explanation of Extreme Overestimates." *Journal of Criminal Law & Criminology* 87, no. 4 (Summer 1997): 1430-45.

Prior data on self-defense gun use came from two sources—the large National Crime Victimization Survey (NCVS) and eight smaller surveys carried out by private organizations. The NCVS, conducted by Census Bureau interviewers for the Bureau of Justice Statistics, consists of about 90,000 face-to-face interviews (at six-month intervals) with telephone follow-up. NCVS data indicate that victims use guns against offenders about 65,000 times annually. The smaller surveys, having sample sizes between 600 and 1,500 respondents, were undertaken between 1976 and 1990 and produced estimates of self-defense gun use of approximately 700,000 times per year. The reasons for these widely varying rates are suggested. The focus of the article is Hemenway's criticism of a 1992 national random-digit-dialed telephone survey of 5,000 dwelling units conducted by Gary Kleck and Marc Gertz [Item No. 460]. The estimates from Kleck and Gertz's survey indicate that defensive gun usage approached 2.5 million times a year, a figure widely cited by the National Rifle Association and by those supporting gun ownership. Hemenway maintains that this figure "cannot be accepted as valid," noting that two aspects of the survey—a social desirability bias and false positives—combine to create "severe misestimation" in the form of a "huge overestimation bias." Kleck and Gertz are further criticized for failing to provide detailed information about the survey methodology. (61 footnotes)

460. Kleck, Gary, and Marc Gertz. "Armed Resistance to Crime: The Prevalence and Nature of Self-Defense with a Gun." *Journal of Criminal Law & Criminology* 86, no. 1 (Fall 1995): 150-87.

Research is reviewed which supports the effectiveness and prevalence of armed victim resistance to attack. Kleck and Gertz analyzed the results of thirteen surveys to highlight the underreporting of defensive gun use (DGU) in the National Crime Victimization Survey (NCVS), a face-to-face survey administered by Census Bureau interviewers. NCVS data indicate that there are only about 68,000 defensive uses of guns annually in connection with robberies and assaults, and about 80,000 to 82,000 such uses when household burglaries are included. The NCVS figures are less than one-ninth of the estimates produced by the thirteen other surveys, a varied collection of studies conducted since 1976 by academicians and commercial polling firms, and sponsored by a variety of public and private organizations. The authors point out the methodological limitations and

flaws found in both the NCVS and the other surveys, including nonanonymity, inadequate samples, nonspecific recall periods, misrepresentation of the sponsor (in the case of the NCVS), and poorly written questions. In response to these perceived shortcomings, the authors developed a new national self-defense survey which features (1) complete respondent anonymity through random-digit-dialed methods; (2) a large nationally representative sample (4,977 respondents); (3) a state-of-the-art survey instrument; (4) experienced professional interviewers; (5) a long series of detailed questions on DGU incidents; and (6) procedures to reduce telescoping and increase recall. Discussion continues on the estimates produced by the survey (2.2 to 2.5 million DGUs of all types per year); the reasons why the estimates are higher than those of all previous surveys; the nature of self-defense (a study of 222 sample cases); and what types of individuals are involved in DGU. (102 footnotes)

461. Kleck, Gary, and Marc Gertz. "The Illegitimacy of One-Sided Speculation: Getting the Defensive Gun Use Estimate Down." *Journal of Criminal Law & Criminology* 87, no. 4 (Summer 1997): 1146-61.

Kleck and Gertz provide new evidence in support of their previous research [Item No. 460] and address criticisms by David Hemenway [Item No. 459]. At the center of the controversy are the high estimates of defensive gun use (DGU) produced in a series of surveys conducted by the authors in 1993, in which at least 2.55 million people per year were found to use a firearm for protection against criminals. [By contrast, the National Crime Victimization Survey, conducted by Census Bureau interviewers for the Bureau of Justice Statistics, place the frequency at approximately 55,000 to 80,000 times annually.] Kleck and Gertz defend their estimates in terms of false positives, checks on external validity, the social desirability bias, interviewing practices, and other methodological procedures. The authors maintain that their estimates have been corroborated by, among others, a large-sample survey sponsored by the National Institute of Justice and conducted under the auspices of the Police Foundation. The authors maintain that Hemenway "has failed to cast even mild doubt on the accuracy of our estimates" (p. 1461), and that instead of providing better empirical evidence to support his claims, Hemenway's critique serves the "narrow political purpose of 'getting the estimates down' " with the goal of advancing the gun control cause. (80 footnotes)

462. Maxfield, Michael G., and Earl Babbie. "Survey Research and Other Ways of Asking Questions." Chap. 10 in *Research Methods for Criminal Justice and Criminology*, 231-60. 2^d ed. Belmont, CA: Wadsworth Publishing Company, 1998. 411p. plus appendixes.

Seven areas in criminal justice research are seen as particularly appropriate for survey application: crime statistics, self-reports, perceptions and attitudes, policy proposals, targeted victim surveys, additional evaluation uses, and general-purpose crime surveys. Surveys can be used for descriptive (particularly of large

populations), explanatory, and applied research, with individuals or groups as the units of analysis. Maxfield and Babbie provide guidelines to assist the researcher in framing and asking questions, with two basic options discussed: open-ended and closed-ended. Suggestions are offered for minimizing social desirability, one of the problems that afflict self-report crime questions in general population surveys. These include: assure confidentiality and anonymity to the respondent; add a disclaimer to a group of self-report questions; "sanitize" the presentation of offenses; and use computer-assisted face-to-face interviewing. The authors discuss the construction of the questionnaire for use as a self-administered instrument, or for face-to-face and telephone interviews. The strengths and weaknesses of surveys as a research method are evaluated, as are other ways of collecting data, such as focus group interviewing. The volume has five appendixes, a cumulative bibliography on pages B1-B12, a glossary, and an index.

463. Smith, Tom W. "A Call for a Truce in the DGU War." *Journal of Criminal Law & Criminology* 87, no. 4 (Summer 1997): 1462-69.

Smith contributes to the discussion concerning the number of defensive gun uses (DGUs) occurring annually in the United States. Previous research [Item Nos. 457, 459-61] has provided greatly varying estimates of how frequently individuals use a firearm for protection against criminals. These estimates, ranging from 55,000 to at least 2.5 million occurrences per year, are based primarily on three sources: (1) a 1993 series of national, privately conducted, self-defense surveys [Kleck and Gertz - Item Nos. 460-61]; (2) an analysis of the National Survey of Private Ownership of Firearms (Cook and Ludwig); and (3) the National Crime Victimization Surveys [a face-to-face survey (with telephone follow-up) conducted by Census Bureau interviewers for the Bureau of Justice Statistics]. The author sums up the controversy by writing, "Neither side seems to be willing to give ground or see their opponents' point of view. This is unfortunate since there is good reason to believe that both sides are off-the-mark" (p. 1462). Smith compares the strengths and limitations of the data collection approaches, discusses the key issues of disagreement, and offers a number of suggestions for producing more accurate estimates. These include the following: (1) analyze existing surveys more thoroughly; (2) conduct additional research; (3) undertake validation studies designed to test for the social desirability bias; (4) conduct studies that examine the factors contributing to over- and underestimates; (5) use taped descriptions of reported DGUs employing detailed probes if necessary; (6) vary the methodology for measuring DGUs; and (7) conduct a large, high-quality panel survey with corrections for telescoping. (45 footnotes)

EDUCATION

464. *The ABC Complete Book of School Surveys*. Ray (Township), MI: Banach, Banach & Cassidy, 1995. 101p.

Surveys are an important approach for school districts to consider for gaining school support and analyzing the thoughts of the participants involved in the communication process. Twelve examples are given for possible applications in this environment. Also listed are some of the reasons people do not use surveys, such as fear of the outcome, mistrust of sampling procedures, and the complexities of the technique. Step-by-step, the reader is guided through the survey process, beginning with an examination of why a survey is necessary, what population is to be surveyed, and what goals and objectives should be achieved. The method of collecting data (face-to-face, telephone, or mail questionnaire) must be decided, the sample selected, and a timeline established. Preparation of the questions involves a choice of formats and response options: dichotomous (yes-no), closed response, multiple choice, and preference, which then must be appropriately placed in the survey instrument. The next step is to select and train the interviewing staff. Data tabulation and analysis processes follow, with the results then shared with all concerned parties. The handbook contains a glossary, and six appendixes provide examples of surveys for students, parents, staff, and community.

465. Bugher, Wilmer. *Polling Attitudes of Community on Education: Manual*, edited by Willard Duckett. Rev. ed. Bloomington, IN: Phi Delta Kappa, 1992. 1 volume with various pagings.

This self-instructional guide, also referred to as the "PACE Manual," was designed to assist boards of education, professional school personnel, and others in assessing communities' attitudes toward a wide variety of educational issues. Bugher writes that survey data can be used as a guide for program development, as a tool for evaluation, or as a device for more effective leadership within a community by school administrators, teacher organizations, citizen groups, planning agencies, and service groups. Twelve steps are outlined for planning and conducting a survey, beginning with the commonly used methods for collecting data, the types of questions, and questionnaire formatting and pretesting. The section on question classification includes 1969 through 1991 Gallup Poll questions and findings on public attitudes toward the nation's public schools. Five basic sampling methods are discussed, noting that no single design is appropriate for all school districts. The interviewing section includes two entire guides: the *Handbook for Conducting Personal (Face-to-Face) Interviews* (50 p.) and the *Handbook for Conducting Telephone Interviews* (37 p.). Suggestions are offered for tabulating responses and preparing a report. Appendixes provide sample questionnaires, tables of random sampling numbers, and the 21st through the 27th annual Phi Delta Kappa/Gallup Polls (September 1989 through September 1995) reprinted from the Phi Delta Kappan. (8 references)

466. Glass, Thomas E. "Using School District Public Opinion Surveys to Gauge and Obtain Public Support." *School Community Journal* 7, no. 1 (Spring-Summer 1997): 101-16.

In the opening comments Glass emphasizes the importance for school districts to conduct public opinion surveys for planning, decision making, communicating with the public, and obtaining feedback from the community. School districts should consider not whether to conduct surveys, but rather when and how they can assist in furthering the above goals and objectives. Opinion surveys designed for assessing public education issues are differentiated from those conducted for private or political purposes, namely, that they “seek information about a societal concept, not whether an individual will buy a product or vote for a candidate” (pp. 1-2). Public schools must not only establish, but also continue a consensus relationship with the wide variety of clients they serve—parents, citizens, private businesses, corporations, governmental agencies, employee associations, religious groups, and political organizations. Four approaches to collecting data for public education surveys are mail questionnaires, and telephone, face-to-face, and focus group interviews. Each is discussed in terms of the appropriateness for the targeted task, the resources required, development of the sampling plan, data collection procedures, response rate, data processing, and reporting the results. Suggestions are given for obtaining the services of an external survey consultant. (15 references)

467. Kominski, Robert, and Paul M. Siegel. “Measuring Education in the Current Population Survey.” *Monthly Labor Review* 116, no. 9 (September 1993): 34-38.

From 1940 to 1990, questions concerning educational attainment were asked in both the decennial census of population and in the Current Population Survey (CPS) which collects data on the U.S. labor force. Throughout this fifty-year period the question read, “What is the highest grade or year of regular school...has ever attended?” and “Did...complete the grade?” (Before 1940, respondents’ level of education was determined by simply asking if they could read and write.) In 1990, the Census Bureau adopted a new question, with the CPS following in January 1992. The redesigned item reads, “What is the highest level of school...has completed or the highest degree...has received?” Some of the challenges encountered with the former item were that the years of schooling completed tended to be misclassified into degree status; it was impossible to identify specific degrees; the classification of high-school graduates was difficult; and the previous questionnaire design failed to meet agency needs. Kominski and Siegel discuss the wording and format of the new item, examine some of the factors prompting the change, and present the results of a national CPS test comparing the two versions of the question. A high level of consistency was found between the old and new items: 84.3 percent for all respondents and 86.3 percent for respondents with educational levels below college. The new version was more effective at classifying individuals with respect to the specific degrees they hold. (4 endnotes)

468. Mertens, Donna M. “Survey Research.” Chap. 5 in *Research Methods in Education and Psychology: Integrating Diversity with Quantitative and Qualitative Approaches*, 104-43. Thousand Oaks, CA: Sage Publications, 1998. 422p.

Mertens guides the student through the steps required for conducting a survey research study—planning the design, determining the sampling frame, writing the items, formatting the questionnaire, and carrying out the project. In the design phase, the researcher should define the purpose(s) of the survey and outline clearly stated and specific goals and objectives. In addition, the data collection method(s) needs to be determined. A search of the literature is recommended prior to designing the questionnaire. The discussion extends to closed-ended and open-ended question formats; how to write easily understandable questions; and pretesting or pilot testing the survey instrument with a small sample as similar as possible to the intended group of respondents. The author covers a variety of different question types: demographic, nonthreatening behavioral, threatening behavioral, knowledge, and attitudinal. The features of mail, telephone, and face-to-face data-gathering techniques are compared and contrasted, with suggestions provided for the optimal use of each. The impact of interviewer-respondent ethnicity and gender on survey results is considered. Sampling and data analysis are discussed in chapters 10 and 12, respectively. References are cumulated on pages 377-98.

469. Mertens, Donna M., and John A. McLaughlin. "Quantitative Research Methods." Chap. 3 in *Research Methods in Special Education*, 20-44. Applied Social Research Methods Series, vol. 37. Thousand Oaks, CA: Sage Publications, 1995. 136p.

Seven types of quantitative research are considered in the chapter: experimental, quasi-experimental, single-group, causal comparative, correlational, single-subject, and survey research. The book is directed toward teachers, other educational personnel, and individuals who need to conduct research in the area of special education. The targeted population is primarily those who are eligible for funds under the federal government classification system of special education students. The authors observe that none of the research methods discussed are unique to the field; rather, they are adopted from a variety of disciplines—namely, psychology, ethnography, and anthropology. Mertens and McLaughlin concentrate on the available sources of information (such as school records, parents, and the students themselves); the various methods for collecting data; survey design (simple descriptive, cross-sectional, and longitudinal); and response rates. Two major surveys in the field are the National Longitudinal Transition Study of Special Students and the Annual Survey of Hearing Impaired Children and Youth. There are 209 cumulated references at the end of the volume.

470. *PACE Polling Attitudes of Community on Education: Appendix E, Handbook for Conducting Telephone Interviews*. Bloomington, IN: Phi Delta Kappa International, 1999. 14p.

The handbook was prepared to assist school officials in conducting surveys for the purposes of gauging the public's attitudes toward education and enlisting the public's participation in long-range planning activities. The interviewer is advised to

remain neutral throughout the interview, probing only when it is necessary to obtain more complete responses. The details of filling out call sheets, that is, forms supplied to the surveyor by companies which generate survey samples, are explained. Information is supplied for administering the questionnaire, covering such topics as how to deliver the introduction, and how to ask open and closed questions, exclusion questions (used to obtain opinions from respondents with specific backgrounds or experiences), and questions calling for demographic data. The role of the interviewer is viewed as vital to the success of the survey. Interviewers have the "ultimate control" for properly administering the questionnaire.

471. Suskie, Linda A. *Questionnaire Survey Research: What Works*. 2^d ed. Resources for Institutional Research, no. 6. Tallahassee, FL: Association for Institutional Research, 1996. 206p.

Institutional researchers and others interested in research in higher education are the intended audiences. A question-and-answer format is presented, with seven chapters guiding the reader through the steps of the survey process. In the first chapter, the author considers planning the survey, establishing objectives for the study, the ethical issues that may be encountered, how to select the sampling design, and the necessity to establish a timeline for completing the project. The following two chapters cover a variety of question and response options (for example, "yes-no," multiple-choice, checklists, rankings, scales, and open-ended) and questionnaire development, with emphasis on validity and reliability issues. Chapters 4 and 5 deal with the mechanics of conducting a survey, including response rates, data collection approaches, and data processing (editing and coding). Suskie covers analyzing the data and reporting the findings in the final chapters. Information on technological advances has been updated for the second edition. Appendixes include the Code of Ethics of the Association for Institutional research; a sample timeline; examples of questionnaire formats, cover letters, telephone survey interviewer guidelines; and a summary report. Print, electronic, and organization resources are listed on pages 185-206.

472. Thomas, Susan J. *Designing Surveys That Work! A Step-by-Step Guide*. Thousand Oaks, CA: Corwin Press, 1999. 97p.

The reader is guided through six steps of the survey research process, beginning with suggestions on how to identify and narrow the scope of a project and create a timeline for its completion. Thomas then focuses on the length of the survey instrument and the response options available to the researcher. The author discusses how to recruit and contact respondents, commenting on various legal and ethical issues relative to their selection. An important message in data collection preparation is the necessity to conduct a pretest or pilot test of the questionnaire. Additional steps involve collecting, summarizing, and presenting the results of survey data, considering topics such as increasing response rates and protecting respondents' confidentiality. The guide was developed primarily for teachers and school administrators taking graduate-level courses, as well as for other

educators who conduct surveys. The book contains worksheets, checklists, examples, exercises, tables, and charts.

473. Wang, Lin. "A Typology and Evaluation of the Survey Sample Designs in the *Educational Administration Quarterly*: 1980-1995." Ph.D. diss., Texas A&M University, 1996. 255 leaves. [*Dissertation Abstracts International* Order No. DA9701734; *DAI* 57A, no. 8 (February 1997): 3353.]

A content analysis approach was used to identify the frequency of survey methodology found in the *Educational Administration Quarterly* (*EAQ*). From a total of 286 articles, 50 fit the dissertation criteria. Fifty-three sample designs were analyzed with the intent of classifying the sample selection methods, appraising the quality of the designs, and making recommendations for improving sample design in educational research. *EAQ* emphasizes quantitative techniques and empirical inquiry (45.4 percent of the research articles published by the journal between 1972 and 1979 were based on surveys). Wang identified three typological models: one-stage (54.7 percent), two-stage (39.6 percent), and three-stage (5.7 percent). In relation to the selection procedures, it was found that the target populations were not explicitly defined in forty-two designs, sample-size decisions were mentioned in only two designs, and response rates were reported in forty-nine designs (these ranged from 34 percent to 100 percent). In evaluating the estimation procedures, it was found that weighting adjustments were not made in the designs having unequal selection probabilities, sixteen probability samples used complex designs, and none of the studies specified a confidence interval for a point estimate. The evaluation of the data analysis procedures resulted in three major findings: no adjustments for inflated error rates were mentioned in certain studies; inferential statistics were applied to nonrandom data without discussion of the implications; and nonresponse bias effects were not investigated in any design indicating low response rates. Three appendixes provide the titles of the articles analyzed, the coding results, and the classification sheet for the survey sample designs. (138 references)

HEALTH AND MEDICINE

474. Blendon, Robert J., and Karen Donelan. "Interpreting Public Opinion Surveys." *Health Affairs* 10, no. 2 (Summer 1991): 166-69.

Blendon and Donelan comment on the discrepancies in response found in a survey commissioned by the Health Insurance Association of America and reported by Cindy Jajich-Toth and Burns W. Roper [Item No. 479], as compared to results from a 1988 Harvard/Harris survey. The topic was whether the majority of Americans would prefer the Canadian health plan over the U.S. healthcare system. Jajich-Toth and Roper attributed the variations between the two surveys to question order. Blendon and Donelan cite additional surveys that indicate consistent

results, thereby casting doubt on the context effect theory. The present article also takes issue with Jajich-Toth and Roper's conclusion that public support is greater for healthcare reforms that do not directly involve the federal government. In analyzing data from nine surveys conducted in 1989 and 1990, Blendon and Donelan found Americans evenly divided on the question of an all-public versus a private-public universal healthcare plan. The authors demonstrate how the options offered the respondent impact the answers obtained. Only by examining the consistency of findings from multiple surveys, conducted by different organizations within the same time period, can true public consensus be determined. (10 endnotes)

475. Dignan, Mark B. "A Brief Review of Sample Survey Methods for Research in Health Education and Health Promotion." *Health Values* 16, no. 3 (May-June 1992): 58-61.

The author writes that "sampling theory has provided convincing evidence to support the idea that acceptable estimates of characteristics of a population can be developed by extrapolating from information collected from carefully selected, representative members of that population" (p. 58). Distinctions are made between a sample survey and a census, which collects information from each and every member of a population. Sample surveys are appropriate when it is impossible or impractical to query each member of a group. Carrying out a successful sample survey or census depends on access to, and characteristics of, the target population, including where they live (rural or urban, settled or nomadic), language(s) spoken, level of literacy, telephone availability, mail service, familiarity with surveys, and amount of time and financial resources available. Dignan discusses numerous key factors to be considered when planning and designing a survey: a sample should be selected that accurately reflects important subgroups, the method for collecting data should be chosen, management systems should be established, and issues of quality control should be addressed. Sample surveys are viewed as a basic tool for data collection for health educators since the focus of research in this area is often the group rather than the individual. (4 references)

476. Gfroerer, Joseph C., Joseph Gustin, and Charles F. Turner. "Introduction." Chap. 1 in *Survey Measurement of Drug Use: Methodological Studies*, edited by Charles F. Turner, Judith T. Lessler, and Joseph Gfroerer, 3-10. DHHS Publication no. (ADM) 92-1929. Washington, DC: U.S. Department of Health and Human Services, Public Health Service, Alcohol, Drug Abuse, and Mental Health Administration, 1992. 413p. [SuDocHE20.8002:S7/2]

Since 1971 the National Household Survey on Drug Abuse (NHSDA) has been the leading monitor of trends and patterns of licit and illicit drug use in the general population of the United States. Ten surveys were conducted between 1971 and 1991. The purpose of the volume is to report the results of a program

of methodological research designed to evaluate and improve the accuracy of measurements made in the original survey. Most of the research reported began in 1989 and was conducted by personnel from the Research Triangle Institute and the National Institute on Drug Abuse. Comments are provided on the background and development of the survey, with the authors noting that in 1971 the collection of sensitive data on one's illegal drug activities was somewhat "uncharted territory." The NHSDA uses face-to-face interviews; stratified, multistage, area probability sampling; introductory letters; self-administered answer sheets for sensitive questions; and confidentiality assurances. The methodology has undergone substantial change through the years. The sample design, in particular, has been extensively revised, with the sampling frame expanded from 3,186 respondents in 1971 to more than 32,000 in 1991. A continuous data collection protocol was implemented in 1988. Brief descriptions are provided of the following eleven chapters. (3 footnotes)

477. Giuffre, Maureen. "Designing Research Survey Design—Part One." *Journal of PeriAnesthesia Nursing* 12, no. 4 (August 1997): 275-80.

This is the first of two articles dealing with various aspects of the survey research process from the nurses' point of view. Giuffre distinguishes between *status surveys* (that is, those that include the entire population, such as a census), and *sample surveys* (that is, those in which a portion of the population is selected in order to make inferences or generalizations about a larger group). External validity is defined as "how well the findings from a sample survey represents [*sic*] the probable situation in the population" (pp. 275-76). The author explains that a sample must be of an appropriate size and randomly drawn—that is, taken from an environment in which every member of the population has an equal chance of being selected. Four types of sampling designs are defined and discussed: (1) convenience or accidental (probably the most commonly used method in nursing research but whose results have no external generalizability); (2) random (the method having the least potential for bias); (3) stratified random (used to ensure representation of all segments of a population); and (4) cluster (poses a risk of selecting a sample that does not represent the whole).

478. Giuffre, Maureen. "Designing Research Survey Design—Part Two." *Journal of PeriAnesthesia Nursing* 12, no. 5 (October 1997): 358-62.

This is the second of two articles dealing with the application of survey methodology from the nurses' perspective. The author considers the advantages and disadvantages of the different data collection methods as well as the techniques for evaluating survey findings. The mail questionnaire, or in some cases a distributed instrument, is described as the least expensive type of survey. In addition, no skilled interviewer is required, standardized wording can be used, and responses can be readily analyzed. Disadvantages include not knowing the respondent's true identity and low response rates. The face-to-face interview has the advantage of allowing the interviewer to clarify questions, and, if necessary,

probe for answers. The researcher must be aware that interviewer age, gender, race, manner of dress, and other characteristics and behaviors can influence the respondent. Telephone interviews are said to fall somewhere between the other two approaches when both strengths and weaknesses are considered. Giuffre concludes by identifying the risks to internal and external validity. (1 reference)

479. Jajich-Toth, Cindy, and Burns W. Roper. "Americans' Views on Health Care: A Study in Contradictions." *Health Affairs* 9, no. 4 (Winter 1990): 149-75.

Jajich-Toth and Roper review findings from the 1989 and 1990 Monitoring Attitudes of the Public (MAP) surveys and explore their implications for health policy reform. The health insurance component of MAP, sponsored for more than a decade by the Health Insurance Association of America, has been conducted by the Roper Organization since 1985. MAP surveys are based on a scientifically selected sample of about 1,500 individuals and are administered with face-to-face household interviews. The results of the 1990 survey suggest that although many Americans express a preference for national health insurance, a large majority are generally satisfied with their insurance and healthcare. However, many respondents expressed dissatisfaction with some aspects of their present system as well as for government-run programs. Levels of support for radical changes and government-run alternatives varied across surveys. Data from the 1989 survey are provided to further demonstrate the lack of support for government-run programs. The question asked respondents their preference for American or Canadian health insurance systems. The effects of probing are analyzed; the MAP results are compared to those of a study by Louis Harris and Robert Blendon ["Three Systems: A Comparative Survey." *Health Management Quarterly* (1st quarter, 1989): 2-10.]; and the impact of context effects on the level of public support for a reform measure are discussed. Survey data from different studies, using different questions presented in varying contexts, found no clear consensus of Americans' views on healthcare issues. (4 endnotes)

480. Jajich-Toth, Cindy, and Burns W. Roper. "Basing Policy on Survey Data: Proceed with Caution." *Health Affairs* 10, no. 2 (Summer 1991): 170-72.

The authors reply to criticisms of their previous article [Item No. 479] by Robert J. Blendon and Karen Donelan [Item No. 474]. Jajich-Toth and Roper attribute the large difference between their results and those of a *Los Angeles Times* poll to the latter's addition of a phrase concerning cost savings to the taxpayer under the Canadian healthcare system. The authors also address Blendon and Donelan's criticism of the role of context effects in generating different responses to the same questions by noting how differently the questions between surveys had been framed. The authors respond to a second major concern of Blendon and Donelan dealing with Jajich-Toth and Roper's strong affirmation that public support is greater for health reforms not directly involving the government. The authors point out that they were summarizing their own survey results and

“find it hard to interpret these data any other way” (p. 171). Comments are made on statistical significance and its relevance to their data. (3 endnotes)

481. Mieczkowski, Thomas. “The Accuracy of Self-Reported Drug Use: An Evaluation and Analysis of New Data.” Chap. 11 in *Drugs, Crime and the Criminal Justice System*, edited by Ralph Weisheit, 275-302. ACJS (Academy of Criminal Justice Sciences) Anderson Monograph Series, edited by Anna Kuhl. Highland Heights, KY: Academy of Criminal Justice Sciences; Cincinnati, OH: Anderson Publishing Company, 1990. 405p.

Twenty-four validation research studies are reviewed, noting author, date of study, validation criteria, sample size and composition, data collection methods, general conclusions, and statistical measures used. Mieczkowski then documents a study that compares self-reports with urinalysis results (using enzyme multiplied immune testing or EMIT technology), with the goal of determining the concordance, or agreement, for both drug type and level of use. The data analyzed came from the Drug Use Forecast, an ongoing research effort sponsored by the National Institute of Justice. In this program, individuals recently arrested by the Detroit Police Department volunteer without compensation to be interviewed and to provide a urine sample for drug analysis. The study reported is based on 454 interviews (364 males and 90 females), for a 95 percent interview response rate and a 90 percent urine sample rate. The author found that the substance abusers monitored appeared to report their drug use with a reasonably high degree of accuracy, thus confirming the results of most earlier studies (of 454 responses, 21.1 percent were nonconcordant). Substance type (heroin, cocaine, and marijuana) appeared to be related to the probability of an invalid response, with a misrepresentation rate of 9.2 percent for heroin, 42 percent for cocaine, and 11 percent for marijuana (the latter revealed a distinctive distribution pattern within the nonconcordant categories). Intensity of use failed to demonstrate such a relationship. Also discussed are sources of nonconcordance (such as intentional falsification and recall error), problems of data interpretation, and policy implications of current drug-testing technology. (35 references)

482. Miller, Heather G., Charles F. Turner, and Lincoln E. Moses. “Methodological Issues in AIDS Surveys.” Chap. 6 in *AIDS: The Second Decade*, edited by Heather G. Miller, Charles F. Turner, and Lincoln E. Moses, 359-475. National Research Council, Commission on the Behavioral and Social Sciences and Education, Committee on AIDS Research and the Behavioral, Social, and Statistical Sciences. Washington, DC: National Academy Press, 1990. 495p.

The authors provide a detailed review of the current state of methodological research in AIDS surveys, focusing on the various data-gathering approaches, the errors that impact measures of sexual and drug use behavior, and the ways to improve data quality. To illustrate these points, fifteen surveys were selected and

analyzed. These studies had been conducted in response to the demand for population-based estimates of certain sexual behaviors known to be associated with HIV transmission. All of the surveys (1) made an attempt to collect data on some aspect of sexual behavior and, in some cases, HIV risk factors; (2) employed some form of probability sampling; (3) had a response rate that could be calculated; and (4) provided data on the survey design and sampling procedures. The surveys are discussed in terms of collection mode, response rate, and nonresponse bias. Comments are made on the relevance of the *seroprevalence survey*, namely, a survey that applies principles of probability sampling and survey methodology to the collection of blood specimens for estimating disease incidence and prevalence. Four such efforts are described. Measurement problems associated with surveys of sexual behaviors include nonsampling issues, such as respondents' failure to understand the questions; respondents' reluctance to reveal information of a sensitive nature; interviewer error; and clerical mistakes made during data coding and processing. The difficulties of producing independent corroboration of the validity of self-reported sexual behaviors are considered. Validation techniques include partner reports, longitudinal studies, clinical evidence, polygraph, and urinalysis. Issues of replicability are covered, with the authors concluding that "surveys of AIDS risk behaviors can, indeed, provide replicable measurements..." (p. 429). Reliability studies have generally demonstrated moderate levels of response consistency over time. The authors consider the contributions of ethnographic research methodologies which may provide complementary information to that obtained by surveys. This approach is useful for gathering data on hard-to-reach populations, for assisting researchers in understanding the diversity of conceptual frameworks, and for refining and determining the appropriateness of questionnaires. The presentation concludes with four recommendations: there should be increased support for methodological research; additional use should be made of ethnographic techniques, pretests, pilot studies, and cognitive laboratory investigations; experimental studies should be embedded within behavioral surveys; and self-reports should be supplemented with other indicators. (71 footnotes, 35 references)

483. Miller, Peter V. "Is 'Up' Right? The National Household Survey on Drug Abuse." *Public Opinion Quarterly* 61, no. 4 (Winter 1997): 627-41.

The National Household Survey on Drug Abuse (NHSDA) is discussed in terms of its role in the 1996 Clinton/Dole presidential race. The NHSDA, usually conducted biennially since its inception in 1971, was augmented, redesigned, and conducted more frequently following the establishment of the Office of National Drug Control Policy, one provision of the Anti-Drug Abuse Act of 1988. During the campaign, Dole used NHSDA data to accuse the Clinton administration of failing to discourage teenagers' use of marijuana, cocaine, and hallucinogens. Miller describes Dole's interpretation of the data as "selectively negative," although they went unchallenged by the White House and were corroborated by other surveys, such as the annual, school-based Monitoring the Future study. (In contrast to this consensus, Miller points out that only three

years earlier, during a congressional investigation, the General Accounting Office questioned the entire process of gathering drug-usage data via self-report.) Attention is directed to some of the methodological procedures undergoing change in the NHSDA, especially those in the areas of sample design, data collection, and postsurvey adjustments. For example, the size of the sample has been considerably expanded since the 1988 legislation, and there have been substantial modifications in questionnaire design and editing procedures. The impact of these changes on trend data and the role of the political climate in instituting the modifications are noted. The presentation concludes with responses to the question of whether positive reports of drug usage are more valid than negative ones. Additional validation research (for example, studies examining the use of urinalysis and hair samples) needs to be conducted to address the view that "up is right." This refers to a statement that "estimates that show a growing drug problem appear to be more politically credible than those that suggest the problem is static or is being solved" (p. 628). (25 references)

484. Minnick, Ann, Marc J. Roberts, Wendy B. Young, Ruth M. Kleinpell, and Wendy Micek. "An Analysis of Posthospitalization Telephone Survey Data." *Nursing Research* 44, no. 6 (November-December 1995): 371-75.

The purpose of the analysis was to examine response-rate differences and reasons for nonparticipation by gender, age, ethnicity, and race. A total of 4,600 adults who had been patients in 118 medical-surgical units in seventeen midwestern hospitals were identified by nurses and caregivers as potential respondents. If the patient agreed to participate, information regarding her/his reports of hospital experiences were obtained by telephone interviews. Calls were placed within twenty-six days of discharge; the interviews required approximately twenty-five minutes. Language preference (English or Spanish) could be specified. More than 1,500 of the potential respondents never entered the study—577 were judged unable to participate, and 956 refused for various reasons, such as being "too busy" or "too sick." Of the 3,067 individuals who agreed to participate, 2,051 were actually interviewed. The results indicate that although females were more likely to be ineligible for the study, eligible females were slightly more likely than males to agree to an interview, resulting in a nearly identical enrollment rate for males and females. Whites had the lowest rate of initial ineligibility, while rates for African Americans and other groups were about the same. Neither race nor gender had a bearing on interview completion, with white and African-American respondents having nearly identical rates. Hispanics and non-Hispanics had similar completion rates. Age was the best predictor of whether an interview would be completed, with the younger patients much more likely to finish the survey. (9 references)

485. Totten, Vicken Y., Edward A. Panacek, and Daniel Price. "Basics of Research (Part 14) Survey Research Methodology: Designing the Survey Instrument." *Air Medical Journal* 18, no. 1 (January-March 1999): 26-34.

An overview of the survey research process is presented, providing the reader with information necessary to plan and conduct an effective and scientifically valid survey in the medical environment. The authors identify the preliminary steps in such an endeavor: define the research question and testable hypothesis(es), examine the variables involved, and discuss the research design with a statistician. The importance of maximizing response rates is emphasized, noting that the characteristics of respondents and nonrespondents may vary, and that nonrespondents can bias the results in unpredictable directions. Suggestions are offered for minimizing low response rates, such as preparing the proper design, reducing respondents' cognitive effort, sending advanced notifications, establishing trust, and implementing follow-up procedures. The advantages and disadvantages of mail, face-to-face, telephone, and electronic modes of administration are reviewed. The authors recommend locating a previously validated questionnaire that can be adapted for a specific use. The content is determined by the nature of the primary research question. In writing the questions, the pros and cons of the different options must be considered. Formatting, context, language level, and response categories are discussed, as well as the major types of scales. (11 references)

486. Tourangeau, Roger, Jared B. Jobe, William F. Pratt, and Kenneth Rasinski. "Design and Results of the Women's Health Study." In *The Validity of Self-Reported Drug Use: Improving the Accuracy of Survey Estimates*, edited by Lana Harrison and Arthur Hughes, 344-65. NIDA Research Monograph 167; NIH Publication No. 97-4147. Rockville, MD: U.S. Department of Health and Human Services, National Institutes of Health, National Institute on Drug Abuse, Division of Epidemiology and Prevention Research, 1997. 508p. [SuDocHE20.3965:167]

The research goal was to investigate sources of error in surveys dealing with sensitive topics—namely, those involving illegal or embarrassing activities such as condom use, the number of sexual partners, unplanned and unwanted pregnancies, and sexually transmitted diseases (STDs). In addition, procedures were tested to increase the accuracy of the data collected for the National Survey of Family Growth (NSFG). The authors report on the Women's Health Study, a methodological experiment sponsored by the National Center for Health Statistics. Most of the 1,000 women and all of the men (a comparison sample of 100) were selected from an area probability sample and from rosters at cooperating abortion clinics. The two different survey instruments administered were based on a questionnaire from the NSFG. Five variables were investigated: (1) the placement of items in the instrument; (2) the individual who conducted the interview—a nurse or a field interviewer; (3) the location (inside or outside the respondent's home) where the interview took place; (4) whether the interviewer or the respondent administered the questions; and (5) the mode of data collection—on paper or via computer. The analysis indicates that the method of administering the questions showed the most consistent impact on the level of reporting. Self-administration significantly increased the reporting of the number of sexual

partners, STDs, and condom use. Few effects were found for the other factors tested. (29 references)

487. Turner, Charles F., Judith T. Lessler, and Joseph C. Gfroerer, eds. *Survey Measurement of Drug Use: Methodological Studies*. DHHS Publication no. (ADM) 92-1929. Washington, DC: U.S. Department of Health and Human Services, Public Health Service, Alcohol, Drug Abuse, and Mental Health Administration, 1992. 413p. [SuDoc HE20.8002:S7/2]

This publication was developed by the Research Triangle Institute (RTI) for the National Institute on Drug Abuse (NIDA), Division of Epidemiology and Prevention Research. Gfroerer served as NIDA project officer. Tom Virag was project director for RTI's work on the National Household Survey on Drug Abuse (NHSDA), whose questionnaire served as the basis for the studies. At the time the volume was prepared, twelve of the contributors were associated with RTI and four with NIDA. The papers cover the impact of measurement procedures and new problem-solving techniques for diagnosing flawed questionnaires and improving their design. The twelve chapters are organized into six main parts: (1) "Background"; (2) "Cognitive Studies of the NHSDA"; (3) "Assessment of Past NHSDA Surveys"; (4) "NHSDA Field Experiment"; (5) "Related Studies"; and (6) "Improving Measurements of Drug Use." Six appendixes provide the 1988 and 1990 NHSDA questionnaires; the 1990 NHSDA modified questionnaire; the NHSDA in cognitive appraisal codes; supplementary tables; and examples of consistent and inconsistent codes. The following entries have been selected from the volume, with individual annotations found at the indicated item numbers:

- Part 1, Chapter 1: "Introduction." [Gfroerer, Gustin, and Turner - Item No. 476].
- Part 2, Chapter 2: "Cognitive Evaluation of the Questionnaire." [Forsyth, Lessler, and Hubbard - Item No. 77].
- Chapter 3: "Laboratory Experiments Testing New Questioning Strategies." [Hubbard - Item No. 123].
- Chapter 5: "Inconsistent Reporting of Drug Use in 1988." [Cox, Witt, Traccarella, and Perez-Michael - Item No. 373].
- Chapter 6: "Follow-Up of Nonrespondents in 1990." [Caspar - Item No. 210].
- Part 4, Chapter 7: "Effects of Mode of Administration and Wording on Reporting of Drug Use." [Turner, Lessler, and Devore - Item No. 257].

- Chapter 8: "Effects of Mode of Administration and Wording on Data Quality." [Turner, Lessler, George, Hubbard, and Witt - Item No. 258].
- Chapter 9: "Effects of Decomposition of Complex Concepts." [Hubbard, Pantula, and Lessler - Item No. 94].
- Part 5, Chapter 10: "Effect of Mode of Administration on Reporting of Drug Use in the National Longitudinal Survey." [Schober, Caces, Pergamit, and Branden - Item No. 256].
- Chapter 11: "Collecting Data on Illicit Drug Use by Phone." [Gfroerer and Hughes - Item No. 285].
- Part 6, Chapter 12: "Future Directions for Research and Practice." [Turner, Lessler, and Gfroerer - Item No. 418].
488. Willis, Gordon B., and Angela Gonzalez. "Methodological Issues in the Use of Survey Questionnaires to Assess the Health Effects of Torture." *Journal of Nervous and Mental Disease* 186, no. 5 (May 1998): 283-89.

The challenges of utilizing survey methodology to collect data on traumatic events are reviewed—specifically, whether the torture experience and its associated effects on mental and physical health and social functioning can be assessed by the administration of a standardized survey instrument. The items included must evaluate both the independent variable of the torture experience as well as the key dependent measures that represent the victim's current health status. Willis and Gonzalez initially focus on the cognitive deficits associated with survey reporting, such as inadequate encoding of the traumatic event, poor recall, and lack of concentration. An additional problem is survivors' and recent refugees' unwillingness to relate their past trauma in the interview environment. Research is reviewed which supports the use of a checklist approach which relies on recognition processes, as opposed to an open-ended format, to elicit more cooperation and accurate reporting. Respondents also may prefer self-administered questionnaires, a format shown to maximize the reporting of sensitive information by providing more privacy and confidentiality. Five recommendations for improving the validity of surveys of torture survivors are offered: (1) interviewers need to explain the rationale for collecting such data; (2) responses should not be linked to administrative decisions; (3) data collection should be incorporated into a more general resettlement process (in the case of refugees); (4) researchers need to be sensitive to cultural values; and (5) the health effects of torture also should be measured. The authors conclude that, if properly conducted, survey methodology can be an effective tool for the scientific study of the torture survivor. (2 footnotes, 61 references)

LAW

489. Becker, Susan J. "Public Opinion Polls and Surveys as Evidence: Suggestions for Resolving Confusing and Conflicting Standards Governing Weight and Admissibility." *Oregon Law Review* 70, no. 3 (Fall 1991): 463-522.

Once regarded as inadmissible hearsay, survey evidence is now not only routinely admitted but also is assigned such high probative value as to be largely determinative of key issues in litigation. Becker discusses the relevance of the *Manual for Complex Litigation* [Item No. 491]; the *Pittsburgh Press Club v. United States* decision (or criteria or standards) for testing proffered survey data for "circumstantial guarantees of trustworthiness"; and Federal Rule of Evidence 703, which allows the admission of expert testimony if the expert's opinion is based on data "of a type reasonably relied upon by experts in the particular field in forming opinions or inferences upon the subject..." (p. 485). The presentation considers six unresolved issues: (1) the pros and cons of the "weight versus admissibility" standard; (2) the usefulness of Fed. R. Evid. 703 when survey results are proffered; (3) whether disclosure of intent to execute a survey should be required; (4) the determination of the proper degree of attorney involvement in polling methods; (5) the question of whether a "showing of necessity" should be employed when evaluating the admissibility of survey data; and (6) whether separate standards of admissibility should be established for polls gathering objective data versus subjective impressions. The article concludes with several suggestions for resolving the challenges discussed, beginning with the perspective that courts adopt a "hybrid" approach to the standards set forth in the manual and the *Press Club* decision. Courts and litigants are urged to recognize that survey evidence does not deserve admission in every case, nor is it an "inherently inferior" class of evidence that can be ignored. The author advocates the adoption of a new rule of evidence that would codify, revise, and clarify current standards governing survey research. A seven-point rule is proposed. (281 footnotes)

490. Diamond, Shari Seidman. "Reference Guide on Survey Research." Chap. in *Reference Manual on Scientific Evidence*, 221-71. Washington, DC: Federal Judicial Center, 1994. 637p.

The purposes of the manual are to assist judges in evaluating the trustworthiness and scientific credibility of the litigation that is presented in the courtroom, and to serve as a basis for defining the disputes underlying expert evidence. Diamond's chapter is one of seven issue-oriented contributions to the volume, which was commissioned by the Federal Judicial Center with the goal of furthering judicial education in the areas of epidemiology, toxicology, survey research, forensic analysis of DNA, statistical inference, multiple regression analysis, and estimation of economic loss. The discussion on survey research is divided into seven sections: introduction, purpose and design of the survey,

population definition and sampling, survey questions and structure, surveys involving interviewers, data entry and grouping of responses, and disclosure and reporting. The categories are subdivided, with information presented in a question-and-answer format. Diamond observes that as late as thirty years ago (about 1960) the question of the admissibility of survey data in the courtroom was unsettled. However, consistent with Federal Rule of Evidence 703, courts generally have accepted such evidence. Fed. R. Evid. 703 recognizes facts or data “of a type reasonably relied upon by experts in the particular field in forming opinions or inferences upon the subject.” Therefore, in the case of a survey, the question becomes, was the poll or survey conducted in accordance with generally accepted survey principles, and were the results used in a statistically correct way? Issues dealing with survey research are also addressed in the *Manual for Complex Litigation* [Item No. 491]. There is a glossary of thirty-three entries. (131 footnotes, 14 references)

491. *Manual for Complex Litigation, Third/Federal Judicial Center*. N.p., [West Publishing Company], 1995. 568p.

Sampling and opinion surveys are considered in Part II, “Management of Complex Litigation,” section 21.49 (“Special Problems”), with the specific section at 21.493. A distinction is made between sampling for the purpose of generating data about a population “to be offered for its truth,” and sampling for the purpose of determining opinions, attitudes and actions of a population. The manual states that in order to determine survey validity, one needs to determine whether the questions asked were clear and not leading; whether qualified interviewers conducted the survey and followed appropriate procedures; and if objectivity was maintained throughout the process. Opposing parties should be appraised as to the nature of a survey so that objections and issues of admissibility can be raised and addressed prior to the hearing or trial. It is observed that sometimes surveys may be considered to involve inadmissible hearsay, and that “when the purpose of a survey is to show what people believe—but not the truth of what they believe—the results are not hearsay [as found in Fed. R. Evid. 801(c) and 803(3)]. In the rare situation in which a survey involves inadmissible hearsay, experts may testify, providing opinions based on the survey results.

492. Morgan, Fred W. “Judicial Standards for Survey Research: An Update and Guidelines.” *Journal of Marketing* 54, no. 1 (January 1990): 59-70.

Although opinion polls once were regarded as hearsay, courts and administrative agencies have increasingly reviewed and accepted survey research into evidence. For example, between 1900 and 1979 there were 159 federal and 109 state reported cases that discussed or considered survey research. The estimate for the decade of the 1980s is 275 federal and 155 state cases, an increase due only partially to the larger number of cases being tried. Morgan’s purpose was to describe a set of principles by combining quasi-statutory and judicially generated

standards, noting that “implicit and explicit rules have evolved that reflect judicial perspectives of survey research methodology” (p. 59). As set forth in the *Federal Rules of Evidence* (1971, #703, #705, and #803), a survey can be introduced into evidence in two ways—directly, or as the basis for expert testimony. The key requirement is that the survey be trustworthy and possess *probative value*, that is, importance or relevance for proving the issue in question. The author discusses six factors that courts use to assess the value of a survey: (1) the definition of the universe and sample selection, with emphasis on the importance of choosing respondents from among the individuals who are potentially involved in the dispute being litigated; (2) the design of the survey instrument, in which deficiencies in construction are often noted; (3) the administration of the survey instrument, an area where courts are alert for research settings that could bias participants; (4) the qualifications and techniques of interviewers; (5) data analyses that support a position favorable to the survey proponent; and (6) the administration of the survey research project in which the credentials of the project director or administrator are reviewed, and the lead researcher is recognized as a qualified expert in the field. These factors are the ones that survey methodologists attempt to control when participating in the “adversarial courtroom process.” (3 footnotes, 91 references)

493. Singer, Amy. “How to Prove Jurors Will Be on Your Side: Surveys of Potential Jurors Can Help Prepare Attorneys for Trial and Can Serve as Effective Catalysts for Settlement.” *Trial* 33 (June 1997): 48-51.

The *litigation intelligence survey* is defined as “a highly focused poll conducted within a jurisdiction where a case will be tried” (p. 48). This type of survey can inform attorneys (within a 5 percent margin of error) as to which side of a case potential jurors will support; assess jurors’ opinions on specific facts and issues of a case; and help determine what jurors expect to see and hear during a particular case. Several types of litigation intelligence surveys are identified and discussed: (1) the *community attitude opinion survey* (measures opinions in a specific jurisdiction); (2) the *case-specific survey* (assesses how the jurisdiction will relate to the issues, facts, and arguments of a case); (3) the *change of venue survey* (helps determine whether a fair trial can be conducted in the jurisdiction); and (4) the *media impact survey* (predicts the impact of negative publicity on a case). Singer discusses the litigation intelligence survey in terms of its usefulness as a settlement tool; how it can function with focus groups and simulation; the importance of early timing (it is usually best to conduct focus group interviews prior to survey-taking); and the necessity of having the survey professionally conducted by firms with good credentials. (5 endnotes)

494. Stewart, David W. “Deception, Materiality, and Survey Research: Some Lessons from Kraft.” *Journal of Public Policy & Marketing* 14, no. 1 (Spring 1995): 15-28.

In an article by Jacob Jacoby and George J. Szybillo ["Consumer Research in *FTC v. Kraft* (1991): A Case of Heads We Win, Tails You Lose?" *Journal of Public Policy & Marketing* 14, no. 1 (Spring 1995): 1-14.], two empirical studies introduced as evidence during the 1991 proceedings of the *Federal Trade Commission v. Kraft, Inc.*, are reviewed. Jacoby and Szybillo criticize the methodologies employed in the studies—the FTC's selective use of the data and whether the FTC had the right to determine what claims were implied in a commercial without relying on extrinsic evidence. Stewart was involved in the critique of a survey designed by Jacoby on behalf of Kraft; was instrumental in designing and interpreting the copy test commissioned by the FTC; and served as an expert witness. At the center of the litigation was the charge by the FTC that Kraft's advertising misrepresented the calcium content of Kraft Singles ("5 oz. milk slice"). Stewart provides details of the case which eventually reached the U.S. Supreme Court (Kraft was unsuccessful). The author responds to Jacoby and Szybillo's criticisms by defending the FTC study in terms of these questions: (1) Was the proper universe identified, and was a representative sample drawn from this universe? (2) Was a fair method of questioning used? (3) Were the questions fair? (4) Was the testing protocol appropriate? and (5) Were the data properly analyzed? Stewart examines Kraft's "materiality" survey and concludes that it did not address the question of materiality of claims and had no probative value for this determination. The use of survey research in litigation is discussed, emphasizing the need for standards for extrinsic research. (3 footnotes, 61 references)

LAW ENFORCEMENT

495. U.S. Bureau of Justice Assistance. *A Police Guide to Surveying Citizens and Their Environment*. Monograph. Washington, DC: U.S. Department of Justice, Office of Justice Programs, Bureau of Justice Assistance, October 1993. 99p. [SuDocJ26.30:P75]

Directed toward the police practitioner having little background or experience with survey research, the manual provides an overview of the basic principles of survey-taking. The purpose is to help police practitioners know not only when to conduct surveys, but also the most cost-effective ways to do so. Part 1 presents a discussion of some survey applications for police use, such as gathering information on the public's attitudes toward police; determining priorities; identifying difficulties in certain neighborhoods or populations; diagnosing community problems; and evaluating police intervention efforts. Information is provided on the basic concepts of sampling (random and nonrandom), how respondents can be contacted (mail, telephone, or face-to-face), what questions should be asked, and how to analyze the data gathered. Part 2 covers *environmental surveys*, that is, surveys that examine the overall physical features of a place (such as buildings, parks, streets, and so forth) in order to gain an understanding of the conditions contributing to a problem. This type of survey is

considered an important component of a larger problem-solving process. The book contains a glossary, a bibliography and further readings, and four appendixes showing examples of effective police surveys.

496. Weisel, Deborah. *Conducting Community Surveys: A Practical Guide for Law Enforcement Agencies*. "A Joint Project by the Bureau of Justice Statistics and the Office of Community Oriented Policing Services." Washington, DC: U.S. Department of Justice, October 1999. 24p. [SuDoc J29.8:C73/4]

Community surveys, conducted at the citywide or county level, can be used for several purposes: to provide law enforcement agencies with feedback as to their performance; to collect data about criminal victimization; and to assess citizens' views toward crime and their willingness to report criminal activity to the police. The community survey discussed has its roots in the National Crime Victimization Survey (NCVS), which has been conducted since 1972 by the Bureau of the Census for the Bureau of Justice Statistics (BJS). The Crime Victimization Survey (CVS) software provided by the Office of Community Oriented Policing Services (COPS) and the BJS duplicates NCVS questions. Weisel offers the reader a step-by-step approach to the survey process, beginning with a determination of the goal(s) of the survey. The CVS questionnaire, administered by telephone, can be modified to fit local requirements. Information is provided on how to select a scientific sample (simple random sampling is recommended); what is considered an appropriate sample size; and how to select, train, and supervise interviewers. Frequencies and cross tabulations are briefly discussed, as are the data analysis packages developed by the CVS to report survey results. Software and a technical "how-to" manual accompany the guide. Four appendixes list terminology, references, the basic steps for conducting a telephone survey, and costs.

LIBRARY SCIENCE

497. Herson, Peter. "Determination of Sample Size and Selection of the Sample: Concepts, General Sources, and Software." *College & Research Libraries* 55, no. 2 (March 1994): 171-79.

Directed toward librarians, the article provides a brief overview of the fundamentals central to determining an appropriate sample size. Herson identifies a number of print and online sources which explain the concepts and provide formulas and procedures capable of ascertaining size and selection. A distinction is made between probability sampling (which includes simple random, stratified random, systematic, cluster, and others), and nonprobability sampling (which includes quota, purposive or judgmental, convenience, and others). Although suggestions are given for the appropriate application of each technique, the author primarily concentrates on probability sampling, whose purpose "is to make a statistical

inference or to select a sample, or portion of the universe that is representative of that universe or population” (p. 172). Sampling error is discussed in terms of minimization, tolerance limits, and standard deviation. (A confidence level of 95 percent is considered an acceptable figure for library and information science research.) A hypothetical sample, set in a college library environment, is used to highlight the range of sampling options available to the librarian when designing a research study. Appendix A provides examples of computer software. (33 references)

498. Powell, Ronald R. *Basic Research Methods for Librarians*. 3^d ed. Contemporary Studies in Information Management, Policy, and Services, edited by Peter Hemon. Greenwich, CT: Ablex Publishing Corporation, 1997. 281p.

In chapter 3, “Survey Research and Sampling” (pp. 57-87), Powell distinguishes between survey research and other research methods (historical and experimental) and lists nine different types of surveys: cross-sectional, trend, cohort, panel, longitudinal, parallel samples, contextual, sociometric, and critical incident. A brief overview of the basic steps in conducting a survey, and information on various designs, are provided. Most of the chapter deals with sampling, with the author advocating probability rather than nonprobability types. The designs discussed include accidental, quota, purposive, self-selected, incomplete, simple random, systematic, stratified, and cluster. The selection of a sampling methodology is situation-specific, depending on certain characteristics of the population or the purpose of the research. Basic statistical formulas for calculating appropriate sample sizes are reviewed, as are the causes and minimization of sampling error. Chapter 4, “Data Collection Techniques” (pp. 89-122), covers three frequently used approaches—the questionnaire, the interview, and observation. Advantages and disadvantages of the questionnaire method are reviewed, with the positives seen to outweigh the negatives. Pretesting the instrument is highly recommended. The format of the question (open- or closed-ended) is considered. Face-to-face and telephone interviewing techniques are reviewed. References are cumulated on pages 255-67.

499. Schlichter, Doris J., and J. Michael Pemberton. “The Emperor’s New Clothes? Problems of the User Survey as a Planning Tool in Academic Libraries.” *College & Research Libraries* 53, no. 3 (May 1992): 257-65.

Although the utility of user surveys as a strategic planning tool is widely acknowledged in the library literature, few libraries are willing to expend the time and resources to conduct them. The results from such surveys frequently proved to be less useful than expected due to difficulties in the design, problems in applying survey results to management decisions, and the failure of many librarians to recognize survey data as a valid research tool. Schlichter and Pemberton offer a number of suggestions for improving user studies: (1) the

survey instrument should be thoroughly pretested; (2) surveys should be carefully designed and focused; (3) data should be obtained for both users and nonusers; (4) academic libraries should consider student opinion as well as faculty; (5) data should be appropriate and relevant to management decisions; and (6) additional research methods courses should be offered by library science programs. Several trends may force a change in librarians' attitudes: users' increased demand for customer-oriented services, competition from private-sector information providers, and increased demand for justification of funding. (50 references)

500. Turner, Anne M. "Opinion Polls: A Savvy Tool to Raise Library Value." *Library Journal* 122, no. 17 (15 October 1997): 40-41.

Questions concerning the library are frequently overlooked by politicians when they hire pollsters to conduct polls on services provided to the public, and, as a result, librarians have little data with which to justify a more favorable allocation of resources. Examples from the Santa Cruz (CA) City County Library System serve to illustrate what steps librarians can take to correct this situation. Constant vigilance of local polls is necessary (even those not sponsored by the library), as well as discussion with the polling consultants who work for clients in the area. The most useful data originate from polls of active voters ("they have the power at the ballot box"), rather than polls of all households or library users. Turner briefly covers cost and hiring issues. Costs include the pollster's time and expertise, the samples purchased, the interviewer, overhead, and data processing. (In 1996, a twelve-minute poll of 300 active voters cost \$10,000 in northern California.) In selecting a pollster, the author suggests considering individuals who have conducted polls for local elected officials.

LOCAL GOVERNMENT

501. Benton, J. Edwin, and John L. Daly. "Measuring Citizen Evaluations: The Question of Question Order Effects." *Public Administration Quarterly* 16, no. 4 (Winter 1993): 492-508.

Since the late 1980s, *citizen surveys* have become an increasingly popular data collection tool for local governments. Data for this analysis were obtained from citizen surveys undertaken in Brooksville and Gulfport, two small cities located in Florida. Telephone interviews were conducted with 808 respondents who were asked to express their views about their cities and to evaluate the quality of municipal services. Demographic information was also collected. The two versions of the survey instrument reversed the sequence of two types of questions: a general evaluation question and a series of service-specific evaluation questions. Benton and Daly found that responses to the general question were influenced by its positioning in the interview schedule. When the general question was asked prior to the series of service-specific questions, responses to the general question tended to be biased downward. Context effects were more

pronounced for several groups of respondents: the less educated, the less attentive, those currently employed, and residents new to the area. The authors discuss the relevance of the findings for elected officials and public managers who depend on citizen surveys to formulate policy and conduct service performance evaluations. (9 endnotes, 35 references)

502. Benton, J. Edwin, and John L. Daly. "A Question Order Effect in a Local Government Survey." *Public Opinion Quarterly* 55, no. 4 (Winter 1991): 640-42.

Two versions of a questionnaire were used to test for potential order or context effects of the following general evaluation question: "On the whole, how would you rate the services and facilities provided by the City of (name of city)—very good, good, adequate, poor, or very poor?" (p. 640). A subsequent question asked respondents to indicate their preference to have a series of twelve specific services reduced, kept about the same, or improved. (The latter question was one of three on the topic.) Telephone interviews were conducted with a sample of 808 respondents residing in Brooksville and Gulfport, two small cities in Florida. The response rates were 73.2 percent and 74.8 percent, respectively. Benton and Daly found that question context had no effect on *opinionation* (that is, "the willingness of respondents to render evaluation, whether positively or negatively"), since 97.7 percent of the respondents to both versions answered the general evaluation question. There was, however, a *directional* effect (that is, "the balance between positive and negative evaluations"). When the service-specific questions were asked first, 71.9 percent of the respondents evaluated the overall quality of services as "very good" or "good"; only 63.8 percent did so if the general question came first. The data failed to clarify whether question context was influenced by respondents' level of education. (1 footnote, 4 references)

503. Miller, Thomas I., and Michelle A. Miller. *Citizen Surveys: How to Do Them, How to Use Them, What They Mean: A Special Report on Designing, Conducting, and Understanding Citizen Surveys*. Special Report (International City Management Association). Washington, DC: International City Management Association, 1991. 213p.

The International City Management Association, a professional and educational association of appointed administrators in cities, counties, and councils of government in the United States, Canada, and other countries, is responsible for this report. The step-by-step guide is intended for local government administrators and officials who are called on to conduct a *citizen survey*, that is, a survey of residents sponsored by local governments. The Millers focus on the *evaluative survey*, a particular type of citizen survey used to collect opinions and views concerning local government services. Chapters 1 through 5 are described as "a kind of Berlitz course in survey research," with discussions on such topics as the purpose(s), timing, and costs of the survey; who the intended audiences should be; the commonly used data collection methods; issues of confidentiality; the

sampling options; question framing and questionnaire construction; coding; data interpretation; and presenting the results. The following chapter covers how to interpret and comprehend survey findings. In an effort to identify and create national norms for many diverse surveys, the authors report on how they collected and analyzed 3,823 questions from 261 surveys from more than 260 U.S. cities, counties, and townships. In the final chapter some additional correlates of service ratings, such as community wealth, crime rates, government expenditures, and number of personnel, are explored in order to explain why some communities obtain more positive ratings than others. There are six appendixes and a one-page bibliography of seventeen citations.

504. Watson, Douglas J., Robert J. Juster, and Gerald W. Johnson. "Institutionalized Use of Citizen Surveys in the Budgetary and Policy-Making Processes: A Small City Case Study." *Public Administration Review* 51, no. 3 (May-June 1991): 232-39.

The small city featured in this case study is Auburn, Alabama, a community of about 35,000 residents. The authors base their findings on *citizen surveys* conducted over a five-year period. This article covers the applications and methodologies of such surveys designed for urban decision makers and managers. Discussion is provided concerning the nonuse of citizen surveys by many local governments, as well as the misuse of the format in which inadequate sampling, poor administration, and faulty question manipulation produced ineffective data. The Auburn survey is described, with citizen funding priorities identified. This type of survey is seen to contribute to more positive attitudes between elected public officials and the community citizenry, as well as to provide the opportunity for citizens to participate in local government. A separate box within the text highlights the Auburn experience, which began in 1985 with a ninety-five-person random telephone survey conducted by the Department of Political Science at Auburn University. In 1990, the annualized survey, administered by students in a political science class, interviewed 226 permanent residents and 55 civic leaders. Copies of the results are distributed to department heads and members of city council. The news media are given access to the data, with local newspapers comparing and contrasting the results with those from previous years. (15 references)

MASS MEDIA

505. Bauman, Sandra L. "Causal Attribution in Election News Stories: How Journalists Explain Public Opinion Polls." Ph.D. diss., Northwestern University, 1996. 321 leaves. [*Dissertation Abstracts International* Order No. DA9632647; *DAI* 57A, no. 6 (December 1996): 2247.]

The phrase *causal attribution* (or *causal explanation*) refers to when journalists "explain public opinion as being the result of some causal, preceding conditions

or as the antecedent to some event or happening” (p. 4). These causal attributions are usually answers to the “why” questions posed by journalists attempting to understand and interpret poll results, such as, “Why did voter support for a particular candidate increase or decrease?” Bauman investigates the factors related to the presence and number of causal attributions about public opinion in election poll stories and how they differ by attribution source within various election campaign contexts. Data from a content analysis of five major U.S. daily newspapers (the *New York Times*, the *Washington Post*, the *Los Angeles Times*, the *Chicago Tribune*, and the *Boston Globe*) from 1988 and 1992 were used to document causal attribution occurrences. The articles were written by ninety-eight different reporters. In addition, in-depth telephone interviews were conducted with six journalists representing the five newspapers (two from the *Los Angeles Times*), who were asked about the use and purpose of causal attributions in election coverage and related topics. Eighteen hypotheses were tested. The analysis indicates that 85 percent of the newspaper stories had at least one causal attribution; on average they had 4.5. Journalists were more likely to use attributions for in-depth stories. Polls were significantly more likely to be presented as a consequence of an event rather than as antecedent. Journalists, as opposed to candidates and opposing candidates, attempted to balance their attributions with those of expert sources. The majority of attributions made by all sources are described as “internal and unstable.” Bauman concludes that “journalists do explain and interpret public opinion by offering causal explanations even though most surveys can only provide evidence of association not causality. Thus, journalists are likely misreporting some correlational relationships as causal relationships” (p. iv). Three appendixes provide the coding sheets, codebook, and interview guide. (201 references)

506. Brady, Henry E., and Gary R. Orren. “Polling Pitfalls: Sources of Error in Public Opinion Surveys.” Chap. 4 in *Media Polls in American Politics*, edited by Thomas E. Mann and Gary R. Orren, 55-94. Washington, DC: Brookings Institution, 1992. 172p.

In the introductory remarks the authors write that “the canons of survey research do not square easily with the canons of journalism. The clash between them means the potential for errors that is inherent in every poll is even greater in polls conducted and reported by news organizations” (p. 58). The “mating” of survey research and journalism is referred to as a “troubled union.” Brady and Orren elaborate on the differences between the two, such as their degree of skepticism, the timeliness requirements, the kinds of errors each would prefer to commit, and the varying audiences that must be satisfied. Three primary types of errors are analyzed: sampling, measurement, and specification. Sampling error, the most familiar threat to poll validity, is discussed in terms of a population (or universe) of respondents, the impact of noncoverage, and the difficulties encountered in the 1992 presidential election. One such election problem was CBS’s use of 800 and 900 telephone numbers to conduct unscientific pseudo-polls using self-selected, unrepresentative samples. Measurement errors are frequently

more problematic than those involving selection. Included in this category are poorly worded questions, the attempt to gauge opinions that do not exist (nonattitudes), and respondents' tendency to change their opinions. Specification errors occur when faulty underlying theories and assumptions are used for the opinion the poll is attempting to measure. The authors offer seven recommendations for improving poll quality, including investing more time and money in fewer surveys. "Speed kills" are the final words of caution. (67 endnotes)

507. Craig, Richard Deran. "The Pulse of Expectations: The Evolution of News Making in U.S. Presidential Campaigns." Ph.D. diss., University of Illinois at Urbana-Champaign, 1995. 252 leaves. [*Dissertation Abstracts International* Order No. DA9624326; *DAI* 57A, no. 3 (September 1996): 0908.]

Rapid changes in television news coverage of presidential campaigns have been due to two factors: the introduction of satellite technology and the recent proliferation of public opinion polls. Craig sums up the situation by stating that "campaign coverage has largely degenerated into a day-to-day series of contests, with candidates portrayed as succeeding or failing each day to meet 'expectations'—the unwritten notions of what a candidate at a given position in the polls should do on the campaign trail" (p. iii). This approach to coverage is referred to as the "Pulse of Expectations." To investigate the development of this phenomenon, a content analysis was made of transcripts of nightly half-hour CBS Evening News broadcasts during presidential election campaigns. The period covered is 1 July to the day before the election for the years 1968 to 1992. From a total of 869 newscasts, 255 stories mentioning results from national public opinion polls about the given year's presidential election were selected. Newscasts in the sample were analyzed for twenty-eight different variables. The study revealed that although the overall number of poll-related stories remained fairly consistent from 1968 to 1980, they rose dramatically from 1984 to 1992, particularly in 1988 and 1992. Stories about polls have become more and more prominent in newscasts in recent campaigns. In 1968, the average poll story was the 8.6th story in the news cast; by 1992 it was the 2.9th. Further, in the more recent polls, positive or negative portrayals of candidates "virtually always" corresponded to candidate standing, and stories mentioning expectations of candidates were much more frequent. Craig concludes that the present system is counterproductive for locating candidates possessing desirable presidential qualities. An appendix provides the tables and graphs for chapter 4 data. (414 references)

508. Dionne, E. J., Jr. "The Illusion of Technique: The Impact of Polls on Reporters and Democracy." Chap. 7 in *Media Polls in American Politics*, edited by Thomas E. Mann and Gary R. Orren, 150-67. Washington, DC: Brookings Institution, 1992. 172p.

To the journalist, much of the criticism directed at polls has merit. For example, polls encourage reporters "to endow politics with a scientific quality" that it does not have, to focus on technique over substance, and to view complex human beings as "mere numbers on sheets of computer printout." Dionne discusses how the decline of political parties has shifted the responsibility of evaluating presidential candidates to the media. The absence of a clear issue agenda allows minor events and issues to have more impact than they otherwise would have. The 1988 tank ride of Michael Dukakis [Governor of Massachusetts and 1988 Democratic presidential candidate] is given as an example of a trivial issue filling a vacuum when no other issue or group of issues was paramount. Dionne comments on the importance of exit polls to the journalist by citing twelve examples from the 1980 through the 1992 presidential campaigns. Two rules are established for media polling: "First, polls are most valuable in challenging and overturning preconceptions; second, polls should be used to describe the complexity of public opinion, not to oversimplify what citizens think" (p. 162). The author concludes by discussing the ways in which polls (especially tracking polls) can impact the democratic process. (15 endnotes)

509. Fitzgerald, Vincent M. "Television Network Newscasts and Their Use of Public Opinion Polls in U.S. Presidential Campaigns (1968-1992)." Ph.D. diss., Rutgers University, 1995. 164 leaves. [*Dissertation Abstracts International* Order No. DA9524178; *DAI* 56A, no. 3 (September 1995): 747.]

The role of the media in utilizing and presenting preelection poll results is considered. A longitudinal content analysis of the evening network television broadcasts of ABC, CBS, and NBC was undertaken for the presidential election campaigns of 1968, 1972, 1980, 1988, and 1992. The goal was to determine if there were changes in the way in which polls were reported in the twenty-four-year time span covered by this study. Comparisons were made between poll and non-poll presidential campaign coverage. Fitzgerald found that coverage via preelection polls more than tripled in the study time frame. The greatest likelihood of poll results being broadcast occurred in the three weeks immediately prior to election day. Issue coverage was less likely to be broadcast during the last critical weeks of a campaign than during any other period. The author maintains that polling as an educational tool should be cast in some doubt, as network polls are presented "almost totally devoid of analysis." An effort is made to distinguish between campaigns and elections. Polls occur during campaigns, that is, the period leading up to the election, and are marked by changes over time. Elections, by contrast, occur on a single day. It could be said that polls are in fact "driving the campaign coverage" (quoting Peter Jennings from ABC World News Tonight, 29 October 1992), with the nightly newscasts increasingly relying on polls to cover presidential campaigns. Network-sponsored polls and in-house polling units increased significantly during the period under consideration. (158 references)

510. Frankovic, Kathleen A. "Technology and the Changing Landscape of Media Polls." Chap. 3 in *Media Polls in American Politics*, edited by Thomas R. Mann and Gary R. Orren, 32-54. Washington, DC: Brookings Institution, 1992. 172p.

Due to public pressure for nearly instantaneous news reporting, news media pollsters are presented with the challenge of balancing the wish for immediacy with the adoption of recognized survey methodologies. Frankovic examines this quandary as well as the problem of how news organizations deal with increasing survey costs and tighter budgets. Several developments, and their historical predecessors, that have altered the coverage of public opinion are discussed: exit polls, advances in computer technology, tracking polls, panel designs, and focus group interviewing. Exit polls, a prominent and continuing feature of election reporting, have "severe" constraints. Such polls can suffer from poorly written questions, inadequate samples, high refusal rates, respondents' failure to provide truthful answers, and the impact of bad weather. Voter Research and Surveys, a creation of ABC, CBS, NBC, and CNN, is currently the sole source of exit poll information for network news broadcasts. Advances in computing have assisted media pollsters with the rapid processing of significant amounts of survey data. The contributions of computer-assisted telephone interviewing are acknowledged, and the implications of 800 and 900 telephone numbers and touch-tone telephones are noted. Tracking polls provide the possibility of public opinion measurement on a daily basis. Panel surveys consist of interviews with the same people on two or more occasions. Focus group interviewing brings together selected individuals to examine issues, products, and advertising themes. The author expresses the view that speed in polling does not necessarily result in inaccuracy. (19 endnotes)

511. Gawiser, Sheldon R., and G. Evans Witt. *A Journalist's Guide to Public Opinion Polls*. Westport, CT: Praeger Publishers, 1994. 171p.

The authors present a comprehensive guide to reviewing poll results for the journalist with no formal training in survey methodology, as well as for others who wish to become more informed consumers. Emphasis is placed on helping the reader detect dishonest, untrustworthy, and poorly conducted polls, and how the results can be misused. Some of the guidelines for evaluating a poll are the following: (1) identify the poll sponsor and who collected the data; (2) secure a copy of the questionnaire; (3) review the sampling methodology; (4) evaluate the weighting scheme; (5) determine the response rate; (6) obtain information on the sampling errors; (7) ascertain who conducted the interviews and when they took place; and (8) request the tabulations to all questions. Gawiser and Witt consider the important role of sampling, with the major types defined. Sampling error is described as the most commonly reported source of error in surveys. Four chapters are devoted to assisting journalists with the challenge of reporting poll results, noting that "even the best poll can be grossly misinterpreted, dramatically misrepresented or just garbled by a poorly done story in the

newspaper or on the television news show” (p. 102). Appendix A is a brief primer in statistics. Appendix B is a summary of twenty questions that need to be answered in order to make an independent evaluation of a poll. A bibliography of thirty-seven titles is included.

512. Henry, Gary T. “Does the Public Have a Role in Evaluation? Surveys and Democratic Discourse.” Chap. 1 in *Advances in Survey Research*, no. 70, edited by Marc T. Braverman and Jana Kay Slater, 3-15. New Directions for Evaluation, A Publication of the American Evaluation Association, edited by Lois-ellin G. Datta. The Jossey-Bass Education Series. San Francisco, CA: Jossey-Bass Publishers, 1996. 110p.

General population surveys are described as “mirrors of the social landscape, reflecting a society’s attitudes and behaviors” (p. 14). The key point in Henry’s presentation is that despite the pervasiveness of surveys, evaluation research has not fully realized the potential of survey methodology. Even though evaluators frequently use survey results, they have been slower in extending, applying, and communicating those results to a wide range of audiences. In addition, evaluators not only fail to seek enough information from the general public, but often do not share the information gathered in a beneficial manner. Three ways in which surveys can be used in evaluation are proposed: (1) the results from general population surveys can be used as one method to gauge opinions and information that subsequently can assist in framing evaluation questions; (2) survey data can help determine opinions about evaluation conclusions, providing a wider arena for decision making; and (3) survey findings can be utilized to inform the public. Discussion also concerns the issue of how and by whom information should be communicated to the citizenry, who often are reluctant to expend much time to obtain evaluation information. The role of the media is highlighted, as it is the journalist who must create news from research data. The author concludes that evaluators can capitalize on the media’s and the public’s interest in survey results—to the benefit of all. (13 references)

513. Holley, Jack K. “The Press and Political Polling.” Chap. 10 in *Polling and Presidential Election Coverage*, edited by Paul J. Lavrakas and Jack K. Holley, 215-37. Sage Focus Editions, vol. 127. Newbury Park, [CA]: Sage Publications, 1991. 244p.

The presentation is divided into three sections: a review of some of the shortcomings of media polling, the findings of selected empirical research conducted by the author, and a discussion of issues relevant to the press and political polling. The concerns raised by the media’s handling of polls include (1) the “horse race” aspects of many preelection poll stories; (2) the tendency of the media to make news rather than to report it; (3) the increasing desire of the media to become more significant players in campaign elections; (4) the ways underinformed journalists can alter survey findings by oversimplifying, exaggerating, and fragmenting survey results; and (5) how polls affect the

outcome of elections. The second section provides details of a 1989 study which was based on a national sample of 129 American daily newspapers ranging in circulation from 25,000 to 250,000. The newspapers' practices and standards regarding poll usage were investigated, as well as how poll results were reported in news stories. Although 40 percent of the newspapers surveyed proved to be directly involved in political polling (either in-house or contracted outside), only 4 percent were found to have appropriate guidelines for reporting poll stories. Only about 12 percent of the political polling stories were written by political reporters; 59 percent were edited by a single person; and the rest were "passed around" the newsroom. Holley urges the media to become more knowledgeable and sophisticated about polling and its effects on the political process. An "enhanced partnership" between pollsters and the press is advocated. (15 endnotes, 12 references)

514. Kagay, Michael R. "The Evolving Use of Public Opinion Polls by *The New York Times*: The Experience in the 1992 Presidential Election." Chap. 9 in *Presidential Polls and the News Media*, edited by Paul J. Lavrakas, Michael W. Traugott, and Peter V. Miller, 143-91. Boulder, CO: Westview Press, 1995. 279p.

Kagay, editor of news surveys at the *New York Times*, reviews the *Times*' coverage of the 1992 (Bush/Clinton/Perot) election campaign, specifically the operational details of how the newspaper used election polls to assist its staff and readers with understanding the personalities, issues, and events of the campaign. Six types of polls are described: (1) frequently conducted national telephone polls; (2) a regional poll in the South; (3) statewide exit polls on primary election days; (4) polls of delegates to the national party nominating conventions; (5) statewide preelection telephone polls in five states; and (6) a national election-day exit poll. Considerable attention is paid to the political setting and mood in 1992, how poll results were reported, how poll findings helped structure the election campaign coverage, and the key factors in the campaign. A content analysis showed that poll results had been used extensively in 50 news articles, to a lesser extent in 150 articles, and as free-standing graphics in many other articles. The lesson reaffirmed by the *Times*' experience is that a poll must be designed to be "responsible, flexible, and adequate to the task it faces." In crucial states, polls should be conducted frequently and as close as possible to election day, utilizing properly drawn samples, well-written questions, high-quality interviewing, and accurate data analysis. There are 169 cumulated references on pages 267-75.

515. Ladd, Everett Carl, and John Benson. "The Growth of News Polls in American Politics." Chap. 2 in *Media Polls in American Politics*, edited by Thomas E. Mann and Gary R. Orren, 19-31. Washington, DC: Brookings Institution, 1992. 172p.

The history, incidence, and use of media polls are the main topics of the chapter. The first news organization to conduct its own polling activities is attributed to CBS News when, in 1975, the network established the precursor of its Election and Survey Unit under the direction of Warren Mitofsky. Also in that year the *New York Times* entered a polling partnership with CBS, an association that is ongoing. In 1990, CBS, NBC, ABC, and CNN joined ranks through Voter Research and Surveys, a consortium which conducts exit polls for the networks. Ladd and Benson cite the findings of a 1989 media survey conducted by the Roper Center. The sampled groups included thirteen major pollsters, 100 newspapers with circulations of 115,000 or more, and fifty-four commercial VHS television stations. The survey found that 82 percent of large-circulation newspapers and 56 percent of television stations were highly involved in news polling, much of it being election coverage—"horse-race" polling to determine which candidate was leading. To demonstrate how newspapers use polls, a content analysis of the *Chicago Tribune's* poll-related stories over a one-and-a-half-year period was conducted. News media polls have now superceded polls from other sources, including those conducted by commercial polling firms such as Gallup and Harris, those emanating from academe, and polls conducted for special interest groups. An appendix provides details of the Roper Center survey. (8 endnotes)

516. Lavrakas, Paul J. "Introduction." Chap. 1 in *Polling and Presidential Election Coverage*, edited by Paul J. Lavrakas and Jack K. Holley, 7-18. Sage Focus Editions, vol. 127. Newbury Park, [CA]: Sage Publications, 1991. 244p.

The compilation deals with the issue of how the news media utilized survey findings in their coverage of election campaigns, particularly presidential election campaigns. The book addresses three questions: How did the media handle polling in the 1988 Bush/Dukakis campaign? What effect does this type of news coverage have on the general public and other groups? and What should the media do with poll results in their coverage of future elections? Lavrakas provides detailed summaries for the chapters that follow.

517. Lavrakas, Paul J., and Jack K. Holley, eds. *Polling and Presidential Election Coverage*. Sage Focus Editions, vol. 127. Newbury Park, [CA]: Sage Publications, 1991. 244p.

The seven contributors to the volume conducted, reported, and/or interpreted public opinion polls, and all participated in a 1989 symposium held at Northwestern University. The book, an outgrowth of the symposium, is directed to pollsters, social scientists, journalists, and politicians. The goal is to improve the way in which members of the news media use survey findings in their coverage of elections and other public policy issues. Most of the chapters contain notes and/or references. The following entries have been selected from the volume, with individual annotations found at the indicated item numbers:

- Chapter 1: "Introduction." [Lavrakas - Item No. 516].
- Chapter 4: "A Short History of Exit Polls." [Mitofsky - Item No. 544].
- Chapter 8: "Media Use of Preelection Polls." [McBride - Item No. 524].
- Chapter 9: "Journalism with Footnotes: Reporting the 'Technical Details' of Polls." [Miller, Merkle, and Wang - Item No. 526].
- Chapter 10: "The Press and Political Polling." [Holley - Item No. 513].

518. Lavrakas, Paul J., and Michael W. Traugott. "Introduction." Chap. 1 in *Presidential Polls and the News Media*, edited by Paul J. Lavrakas, Michael W. Traugott, and Peter V. Miller, 3-19. Boulder, CO: Westview Press, 1995. 279p.

Lavrakas and Traugott introduce the compilation by providing detailed overviews of the thirteen chapters contained within. The current volume reports research findings on news coverage dealing with several recent presidential elections. The intent is to "challenge the conventional approaches" presently used by the news media in poll-based campaign coverage. The book is directed to journalists (including reporters, editors, and producers) as well as to individuals who observe, study, or participate in election campaigns, such as politicians and staff, electoral campaign reformers, media scholars and critics, social scientists, and the interested public. There are 169 cumulated references on pages 267-75.

519. Lavrakas, Paul J., and Michael W. Traugott. "The Media's Use of Election Polls: A Synthesis and Recommendations for 1996 and Beyond." Chap. 13 in *Presidential Polls and the News Media*, edited by Paul J. Lavrakas, Michael W. Traugott, and Peter V. Miller, 257-66. Boulder, CO: Westview Press, 1995. 279p.

The authors discuss several central themes that they view as pervasive throughout the book's preceding chapters. First, they maintain that there is no longer any reason to question the power of the polls, emphasizing that existing documentation attests to the fact that the news media's use of election polls influences democratic political processes. Second, the news media is characterized as "data-rich but analysis poor," noting that most news organizations "barely scratch the surface" of their data. Third, the authors believe that the traditional approaches to formulating and "packaging" election news coverage should be improved, especially in the areas of planning and the allocation of resources. Lavrakas and Traugott reiterate the need for expert political reporters; recommend that quality surveys be conducted throughout the campaign; and encourage the use of the team approach and focus groups. Finally, media executives and journalists "should accept more responsibility for the effects of their work on the values and processes they profess to serve and recommit

themselves and their organizations to doing a better job” (p. 257). There are 169 cumulated references on pages 267-75.

520. Lavrakas, Paul J., and Sandra L. Bauman. “Page One Use of Presidential Pre-Election Polls: 1980-1992.” Chap. 3 in *Presidential Polls and the News Media*, edited by Paul J. Lavrakas, Michael W. Traugott, and Peter V. Miller, 35-49. Boulder, CO: Westview Press, 1995. 279p.

The past two decades of large-scale, routinely conducted, media-sponsored polls are reviewed, commencing in 1975 when CBS and the *New York Times* joined forces. Lavrakas and Bauman comment on the proliferation of poll findings in the coverage of presidential election campaigns: approximately half of all U.S. daily newspapers and nearly all of the largest print and broadcast news organizations report their own preelection polls. In order to systematically investigate and document the perceived increase in poll-related election news, the authors developed a database containing 5,500 front-page news stories from eleven large-circulation U.S. newspapers for the years 1980, 1984, 1988, and 1992. The newspapers examined were the *Atlanta Constitution*, *Boston Globe*, *Chicago Tribune*, *Cleveland Plain Dealer*, *Denver Post*, *Houston Post*, *Los Angeles Times*, *New York Times*, *St. Louis Post-Dispatch*, *Wall Street Journal*, and *Washington Post*. A content analysis of front-page news stories which reported poll results indicates that in 1992 there was a two- and three-fold increase over the three previous election years considered. In addition, the rate of increase in poll findings in 1992 was more than seven times greater than the rate of increase in the election news stories themselves. In a follow-up study of four hundred selected front pages, the authors comment on the placement of poll results on the front page, and in the headline, lead, and story content. (4 endnotes) There are 169 cumulated references on pages 267-75.

521. Lavrakas, Paul J., Michael W. Traugott, and Peter V. Miller, eds. *Presidential Polls and the News Media*. Boulder, CO: Westview Press, 1995. 279p.

The fifteen authors included, some of whom contributed chapters to Lavrakas and Holley’s edited collection of 1991 [Item No. 517], represent both academe and the news media. Consisting of thirteen chapters organized into six main parts, the book is the result of the editors’ efforts to investigate and improve the ways in which election polls are utilized by the news media. There are 169 cumulated references on pages 267-75. The following entries have been selected from the volume, with individual annotations found at the indicated item numbers:

“Introduction.” [Lavrakas and Traugott - Item No. 518].

- Chapter 3: “Page One Use of Presidential Pre-Election Polls: 1980-1992.” [Lavrakas and Bauman - Item No. 520].

- Chapter 7: "Methods of Allocating Undecided Respondents to Candidate Choices in Pre-Election Polls." [Daves and Warden - Item No. 358].
- Chapter 9: "The Evolving Use of Public Opinion Polls by *The New York Times*: The Experience in the 1992 Presidential Election." [Kagay - Item No. 514].
- Chapter 13: "The Media's Use of Election Polls: A Synthesis and Recommendations for 1996 and Beyond." [Lavrakas and Traugott - Item No. 519].
522. McBride, Frank W. "Media Use of Preelection Polls." Chap. 8 in *Polling and Presidential Election Coverage*, edited by Paul J. Lavrakas and Jack K. Holley, 184-99. Sage Focus Editions, vol. 127. Newbury Park, [CA]: Sage Publications, 1991. 244p.

During the 1988 presidential election year, McBride served as a Senior Research Analyst at Market Opinion Research, the polling firm that conducted the preelection polls for George Bush (the Bush/Dukakis presidential race). In this chapter the author discusses how the media used and misused preelection polls during this campaign, noting that there was an abundance of preelection polling and that the use of preference poll results by the various media was controversial. Factors affecting the misuse of poll results, such as poorly timed polls, misinterpretation of the margin of error, and inadequate sample size, are explained. The author stresses the importance of not interpreting preelection polls out of context or ignoring the lessons of history. The impact of media polls is evaluated on three levels: the electorate during the primaries, the electorate at the general election, and the campaigns at the presidential and subpresidential campaigns. Suggestions are offered for improving reporters' use of polling results when preparing election campaign news stories. Primary polls are described as frequently providing more embarrassment than information. The use of such polls is perceived to be "inherently dangerous."

523. Mann, Thomas E., and Gary R. Orren. "To Poll or Not to Poll...and Other Questions." Chap. 1 in *Media Polls in American Politics*, edited by Thomas E. Mann and Gary R. Orren, 1-18. Washington, DC: Brookings Institution, 1992. 172p.

The development of contemporary news media polling is traced to 1975 with the collaborative efforts of the *New York Times* and CBS. Since that time, there has been extraordinary growth in the number of news organizations engaged in polling. Two fundamental questions are addressed: What are the strengths and weaknesses of media polls? and What are the effects of these polls on the political process? Mann and Orren believe the primary benefits of news polls are that they serve as a source of accountability on political and governmental leaders, and enable reporters to question some self-serving claims of segments of the

voting public. Among the shortcomings are inadequate sampling procedures, poorly written questions, and “defective” underlying theories. The differences between the goals and imperatives of media pollsters and academic survey researchers are noted. The impact of news polls on the political process is considerable and can be a “boon” or a “menace” to democracy. The authors stress that “polls should help report news, not create it. They should facilitate the work of political reporters, not substitute for it” (p.17). Some of the major points of the volume’s six other chapters are introduced into the discussion. (12 endnotes)

524. Mann, Thomas E., and Gary R. Orren, eds. *Media Polls in American Politics*. Washington, DC: Brookings Institution, 1992. 172p.

The volume is a joint product of the Brookings Institution and the Joan Shorenstein Barone Center on the Press, Politics, and Public Policy of the John F. Kennedy School of Government at Harvard University. The impetus for the book was a 1989 conference on the use and misuse of polls. The nine authors of the seven chapters investigate the proliferation of media polls; the impact of technology; sources of error; variability in poll results; and the effect of polls on different segments of American society. The following entries have been selected from the volume, with individual annotations found at the indicated item numbers:

- Chapter 1: “To Poll or Not to Poll...and Other Questions.” [Mann and Orren - Item No. 522].
- Chapter 2: “The Growth of News Polls in American Politics.” [Ladd and Benson - Item No. 515].
- Chapter 3: “Technology and the Changing Landscape of Media Polls.” [Frankovic - Item No. 510].
- Chapter 4: “Polling Pitfalls: Sources of Error in Public Opinion Surveys.” [Brady and Orren - Item No. 506].
- Chapter 5: “Variability without Fault: Why Even Well-Designed Polls Can Disagree.” [Kagay - Item No. 437].
- Chapter 6: “The Impact of Media Polls on the Public.” [Traugott - Item No. 527].
- Chapter 7: “The Illusion of Technique: The Impact of Polls on Reporters and Democracy.” [Dionne - Item No. 508].

525. Meyer, Philip. *The New Precision Journalism*. Bloomington, [IN]: Indiana University Press, 1991. 273p.

In the preface Meyer states that 90 percent of the material in the book is new [previous title: *Precision Journalism: A Reporter's Introduction to Social Science Methods*. 2^d ed. Bloomington, IN: Indiana University Press, 1979. 430p.]. The contents have been drawn from the author's classroom experience with journalism students. Chapter 5, "Surveys" (pp. 101-38), covers the elements of a systematic survey and the intricacies of sampling, including telephone, mail, household, and census. Different question formats are considered: open- and closed-ended, middle-category, and balanced. Nonattitudes (that is, "don't know" responses) are described as problematic for the survey researcher. The three primary data collection methods—face-to-face, telephone, and mail—are reviewed, with the strengths and weaknesses of each evaluated. In chapter 9, "How to Do an Election Survey" (pp. 214-35), Meyer discusses how to (1) draw a representative sample; (2) deal with individuals who refuse to participate, and the resulting bias; (3) identify people who are likely to vote, and strategies pollsters have developed for weeding out the nonvoter; (4) ask the proper questions in the correct order; and (5) address the undecided voter issue. In the discussion on weighting a distinction is made between "design weights" which are built into the sampling procedure, and "corrective weights" which are used after the fact to repair sampling flaws. The author considers the impact of election-night projections and exit polls. Recommendations are provided as to what figures a good reporter should use—and when. Footnotes are cumulated on pages 255-62.

526. Miller, Peter V., Daniel M. Merkle, and Paul Wang. "Journalism with Footnotes: Reporting the 'Technical Details' of Polls." Chap. 9 in *Polling and Presidential Election Coverage*, edited by Paul J. Lavrakas and Jack K. Holley, 200-214. Sage Focus Editions, vol. 127. Newbury Park, [CA]: Sage Publications, 1991. 244p.

The "uncomfortable" relationship between the press and public opinion polls is exemplified by the way poll methodology is described in newspaper poll stories. The authors are of the opinion that journalists rarely treat poll methodology as "problematic"—rather, "it is a unique kind of journalism with 'footnotes,' wherein certain facts about polling methods are appended to a discussion of poll findings" (p. 201). Numerous facets of the topic are discussed, from historical context to rationale, parameters, and usefulness. In spite of efforts by the American Association for Public Opinion Research (AAPOR), procedural and performance standards have not been adopted by all members of the polling community. AAPOR's code of disclosure, described as being under review, is discussed in terms of requiring too little, or too much, information to be disclosed. An alternative set of guidelines—perceived to be far less specific than those of AAPOR—has been issued by the National Council on Public Polls. The authors recommend that political reporters develop more polling expertise, become more involved in the formulation of standards, assume a more active role in the polling process, and pay closer attention to how polls are conducted. Journalists should learn to treat poll methodology as part of the story, rather than as a technical appendix. (1 endnote, 10 references)

527. Traugott, Michael W. "The Impact of Media Polls on the Public." Chap. 6 in *Media Polls in American Politics*, edited by Thomas E. Mann and Gary R. Orren, 125-49. Washington, DC: Brookings Institution, 1992. 172p.

Literature dealing with the impact of the release of poll results on political campaigns is reviewed, with emphasis on "bandwagon" and "underdog" effects, "horse-race" journalism, exit polls, and election-night projections. However, the nature and magnitude of poll effects on the general public are less obvious and less well understood. Several factors are seen to contribute to the lack of definitive studies: the problems associated with the research design due to costs and other resources required; many of the effects are indirect and difficult to measure; and some suggest that media polls harm the democratic process. Traugott discusses the pros and cons of the dissemination of poll results, pointing out that for every negative effect there is "at least in principle a compensating benefit." Poll impact varies depending on the timing of the poll and the particular segment of the electorate being examined. The author concludes that media polls do affect the public, but not with major shifts in voter preferences or actual voting behavior that one might expect. The lack of controlled, experimental designs restricts social scientists from knowing conclusively the impact of media polls on voter preference and behavior—at least not conclusively enough to bring about changes in public policies that control the media organizations that conduct and use polls. (58 endnotes)

528. Ward, Jean, and Kathleen A. Hansen. "Using Polls and Surveys." Chap. 8 in *Search Strategies in Mass Communication*, 251-84. 3^d ed. New York, NY: Longman, 1997. 371p.

Polls and surveys, viewed as part of an overall search-strategy process of the communicator, are useful for the following: supplying editorial and news content for the news media; providing a basis for marketing decisions; measuring public opinion for a wide variety of governmental or political uses; and building a social-science theory. The authors comment on some of the major organizations, both public and private, that are active in conducting polls. Poll and survey data relevant to communication researchers are available in (1) libraries and archives; (2) online sources such as POLL, a database maintained by the Roper Center; (3) journals such as *Public Opinion Quarterly*, *Gallup Poll Monthly*, and *American Enterprise*; and (4) indexing and abstracting tools such as *Social Sciences Index*, the *New York Times Index*, and *Findex: The Directory of Market Research Reports, Studies, and Surveys*. In a section dealing with poll and survey evaluation, the authors consider (1) several types of surveys (specifically the data collection methods involving face-to-face and telephone interviews, and mail questionnaires); (2) sampling design options (for example, volunteer, quota, purposive, random, stratified random, and disproportionate); and (3) types of survey questions (for example, the stimulus open/response open, stimulus open/response closed, stimulus closed/response open, and stimulus closed/response closed).

Suggestions are given for writing clear questions and for interpreting poll and survey results. Ward and Hansen close with a list of "caveats." These include, in particular, sampling error, nonsampling error, and reporting error. The authors point out the many challenges communicators must face when dealing with poll and survey data, and urge care before interpreting and presenting the results to a wider audience. (18 endnotes)

MILITARY SCIENCE

529. Renckly, Thomas R., ed. *Air University Sampling and Surveying Handbook: Guidelines for Planning, Organizing, and Conducting Surveys*. 2^d ed. Maxwell Air Force Base, AL: Air University, 1993. 95p.

The publishing history of the book includes a 1985 edition, *Sampling and Surveying Handbook*, edited by Thomas C. Padgett; a 1988 reprint of the first edition; and the current 1993 second edition. Although the techniques and procedures appropriate for self-administered and group-administered surveys have been emphasized, the editor notes that they apply equally well to the face-to-face and telephone interviewing approaches. Following an introductory chapter, Renckly discusses the official policies and procedures for conducting surveys within the Air Force Personnel Survey Program. The Military Personnel Survey Branch of the Air Force Military Personnel Center at Randolph AFB, Texas, is identified as the "controlling and approving" agency for all Air Force military personnel surveys. (However, this rule does not apply to surveys that deal with certain activities that the base commander is authorized to change.) Chapters cover the survey plan, sampling designs and sample size, question writing and questionnaire preparation, bias, and common statistical analysis errors. There are eight appendixes: steps in surveying; a sample timetable; sources for survey data; a table of random numbers; a table of "z" values; a sample cover letter; the Privacy Act statement; rating or intensity scales; and sample sets of response alternatives. (25 references)

POLITICAL PSYCHOLOGY

530. Lipari, Lisbeth. "Polling as Ritual." *Journal of Communication* 49, no. 1 (Winter 1999): 83-102.

The content for this article was drawn from a chapter in Lipari's dissertation [Item No. 611]. Polling history is briefly reviewed, and three perspectives on public opinion are discussed: the *populist*, the *critical*, and the *constructionist*. The "ritual" approach is also explored, with Lipari defining the concept as "a structured social and symbolic activity that invokes, demarcates, or celebrates a community's deepest and most closely held values, of what it holds to be sacred" (p. 88). Polling as ritual is diagrammed in terms of the performance roles of the participants: author (pollster-sponsor); animators (interviewer and subject); and principal (public)

and audience (politicians, journalists, and citizens). The author describes the role of the sacred in polling ritual, noting that ritual serves to “stress unity and similarity and minimize discord and differences” (p. 95). To phrase it more succinctly, this process enables the “domestication of disagreements.” Lipari observes that polling ritual articulates and controls the terms of dissent, and thereby “consolidates differences under an umbrella of unity.” In concluding, the author suggests that rather than constructing public policy, polling ritual is in fact producing social solidarity. The symbols of community, democracy, and vox populi are thus sustained. (55 references)

POLITICS

General

531. Althaus, Scott L. “Who Speaks for the People? Political Knowledge, Representation, and the Use of Opinion Surveys in Democratic Politics.” Ph.D. diss., Northwestern University, 1996. 365 leaves. [*Dissertation Abstracts International* Order No. AAT9714540; DAI 57A, no. 11 (May 1997): 4907.]

The relationship between political knowledge, representation, and political equality in public opinion polls is explored. At the center of the research is Althaus’s belief that the mass public’s low levels and uneven social distribution of knowledge about political issues frequently cause opinion surveys “to misrepresent the mix of voices and interests in a society.” Contrary to pollsters’ and researchers’ views that this situation is relatively benign to the functioning of democracy, the author maintains that many collective policy preferences would have different outcomes if all citizens possessed a similar level of political knowledge. The concern is that bias is introduced by such information effects, with the more knowledgeable respondents (who tend to be older, white, male, and of a higher socioeconomic status) expressing their preferences disproportionately to others without these characteristics. Informed respondents give opinions more frequently and are less likely to provide “don’t know” and “no opinion” answers. Although survey results may accurately represent some views of a population, “subjective preferences may at times reflect little more than the aggregate confusion of poorly informed and ill-considered opinions” (p. 130). A substantial portion of the dissertation covers the development of a theory of information effects with respect to collective policy preferences. The theory seeks to explain how opinion measures can be skewed by the social distribution of political knowledge. Using survey data, a method is presented for simulating “fully informed” collective preferences. Althaus concludes that information effects can “impair the responsiveness” of governments to their citizens, and that survey results should not be equated with the will of the people. (287 references)

532. Brehm, John. *The Phantom Respondents: Opinion Surveys and Political Representation*. Michigan Studies in Political Analysis. Ann Arbor, MI: University of Michigan Press, 1993. 266p.

In the first of eight chapters, Brehm discusses surveys and representation, the pervasiveness of surveys in the United States, and the role of surveys in U.S. political life. The author observes that the number of polls cited in the *New York Times* from 1950 to 1990 reached an all-time high in 1974, with nearly one poll appearing per day. Most of these polls concerned Nixon's possible role in Watergate, whether he should resign, and his approval ratings. In addition to political polls, surveys dominate scientific research in a wide range of disciplines, as judged by the proliferation of the number of articles published in core sociology and political science journals that use survey research as the primary source of evidence. Two surveys emanating from the academic environment are discussed: the National Election Studies (NES) and the General Social Survey (GSS). The problem of survey nonresponse is highlighted, with these questions posed: Why do people participate in surveys? and What difference does nonresponse make to our understanding of political and social life? In chapter 2, the NES, the GSS, and the Detroit Area Studies are discussed in terms of the demographic characteristics of nonrespondents, with the Current Population Survey serving as a benchmark. Brehm develops several models of survey participation in the next two chapters and identifies three stages of the process: contact, eligibility, and compliance. Attention is directed to the components of nonresponse as found in the three studies. The statistical literature on how nonresponse undermines survey data is reviewed in chapter 5. The following three chapters deal with the correction of nonresponse; the steps for remediation if nonresponse rates were to "sink even further"; and a reiteration of the threat of nonresponse as a source of error to both producers and consumers of survey data. There are forty-eight pages of appendixes and a seven-page index. (134 references)

533. Cantrell, Paul D. "Opinion Polling and American Democratic Culture." *International Journal of Politics, Culture, and Society* 5, no. 3 (Spring 1992): 405-37.

Six types of opinion surveys are identified and discussed: incumbent ratings, candidate preferences, hypothetical contests, issue-oriented, campaign-tracking, and exit polls. These types of surveys are viewed as parts of the broader categories of preelection, campaign, and postelection polling. The varieties are differentiated primarily by the various uses clients have for them. Cantrell reviews how polls are utilized by candidates for political office, focusing on three types of interaction between candidates and constituents: debates (now controlled by a panel of news reporters); advertising (television commercials have replaced the traditional political flyer); and commentary (political talk shows such as "Meet the Press"). The role of mass media, particularly television, in contemporary polling and politics is emphasized. The author explores the impact of polling on representation, or how elected officials determine the desires of the constituencies they represent. The

techniques of modern scientific polling can, in great detail, document “the will of the people” on political and social issues. A controversial proposition is discussed in which the government would expand its role in funding poll research, that is, subsidized polls. This practice would ensure that each representative has access to equally reliable data. Due to their proliferation, Cantrell suggests that political polls may have reached a point where they are “sources of confusion.” (39 endnotes)

534. O’Neill, Harry W. “Polling Pitfalls: 10 Cautions.” *Campaigns & Elections* 19, no. 9 (September 1998): 60-61.

The survey research process is described as “easily misunderstood, misused, abused, and overused,” even though the profession itself is “fascinating” and “honorable.” The ten pitfalls referred to in the title are directed to pollsters and their clients. O’Neill maintains that refusal rates can be reduced by explaining the purpose of the survey, allowing interviewers flexibility, making an adequate number of callbacks, and restricting the length of the survey instrument. Pollsters should be concerned about interviewer issues, behave in a professional manner, and balance technological advances with sound judgment. In addition, the author advises asking opinion questions only of those who exhibit awareness of an issue and avoiding poorly written questions and lengthy interviews. Public release of results must be open, direct, and easily comprehended. The reader is reminded that the lowest bid is not always the best value.

535. Ornstein, Norman J., and Amy S. Mitchell. “The Permanent Campaign: The Trend toward Continuous Campaigning Stems from Advances in Technology and the Proliferation of Public Opinion Polls.” *World and I* 12 (January 1997): 48-55.

The *permanent campaign* is defined as one in which “candidates start campaigning for one election before the previous one is over and continue campaigning throughout the election cycle” (p. 48). Three overlapping developments are seen to contribute to this trend: the relationship between the citizenry and the presidency (changes in the nomination and selection process), advances in communication technology (Eisenhower “solidified” the use of television in 1952), and the steady growth of public opinion polls. Ornstein and Mitchell comment that Bush took the connection between polling and politics to “a different level” in 1991 when he appointed his pollster, Robert Teeter, as chairman of his reelection campaign. Clinton’s reliance on polls far exceeded Bush’s, with more than \$1.9 million allocated to conduct national polls and focus groups in his first year in office. Stan Greenberg was Clinton’s pollster. Numerous examples illustrate how polls affected the way the Clinton administration presented policies to the public. The authors are of the opinion that the poll process was “discredited” in the 1996 campaign with “slipshod methodology and quality.”

536. Rucinski, Dianne. "Rush to Judgment? Fast Reaction Polls in the Anita Hill-Clarence Thomas Controversy." *Public Opinion Quarterly* 57, no. 4 (Winter 1993): 575-92.

Public opinion was solidly behind U.S. Supreme Court nominee Clarence Thomas during his 1991 Senate confirmation hearings. Less than a year later, however, three national polls reported a shift in favor of Anita Hill, his accuser. Rucinski reviews the chronology of the case, explores the reasons behind this apparent change in support from Thomas to Hill, and compares the polling techniques used in the context of the survey methodology literature. Based on information from nine cooperating polling organizations, the comparison indicates the following: (1) a random-digit-dialing sampling procedure was used for most household selection; (2) in eight of the eleven 1991 polls, the fieldwork lasted only one evening, but additional time was required for the three 1992 polls; (3) all but one poll used independent samples; (4) three different methods were used for selecting respondents within households (namely, panel, modified last birthday, and gender quota with substitution); (5) interviewer race or gender effects were not controlled in any of the surveys; (6) issues of question wording and context provide "substantial grounds for speculation"; (7) unlike the 1991 polls, the 1992 polls embedded the Hill-Thomas questions within surveys covering a variety of topics; and (8) reported response rates were approximately 50 percent in 1991 and about 30 percent in 1992, although calculation methods varied from organization to organization. The author found widely varying disclosure practices concerning methodological information among the organizations surveyed. Even though professional codes exist—such as the one by the American Association for Public Opinion Research—they are not followed by some prominent polling organizations, thus making comparisons difficult. Rucinski discusses the influence of time pressure in fast reaction polls, a condition perceived as a threat to validity. Appendix A provides the applicable questions by polling organization. (21 references)

537. Sloane, Robert D. "Politics, Polls and the Press: What Are They Doing to the Ballot?" *Communications and the Law* 12 (March 1990): 55-76.

The central theme of the article is whether the American people really know who they elect, how, and why. In support of this perspective, Sloane provides an example of how pollster Richard Wirthlin employed modern communication techniques to shape and elevate President Reagan, upon his reelection in 1984, to a position of extraordinary popularity with the American public. The author writes, "Thus was born the ultimate political figure development of the twentieth century: a president who was a former Hollywood actor, speaking lines he had neither written nor contributed much to, in a manner carefully tailored for optimum impact" (p.55). Several factors are seen to contribute to the higher visibility of candidates and public officials—but who are actually less known by the electorate. These include the methods of invading and reporting candidates' lives, the use of mind-control techniques to place candidates in the most favorable light, and the influencing of the electorate with polls, predictions, and projections. Sloane

also discusses (1) the role of the First Amendment in the electoral process; (2) how the press can make or break a candidate (the “trashing” of Gary Hart is used as one example); (3) the ways that political managers or “handlers” can manipulate the public image of a candidate to the point that voters may have “little true sense” of who their choices actually are (a persona was created for George Bush that would take him from “wimp” to “warrior”); and (4) the effects of polls (preelection and exit) and predictions on voter rights. (112 footnotes)

Computers

538. Selnow, Gary W. “The Anatomy of a Public Opinion Poll.” Chap. 3 in *High-Tech Campaigns: Computer Technology in Political Communication*, 27-43. Praeger Series in Political Communication. Westport, CT: Praeger Publishers, 1994. 225p.

The survey research process is divided into four components: sampling, the questionnaire, data collection, and data analysis. These concepts are interrelated and conducted sequentially. Selnow begins with a discussion of sampling—determining the target population, selecting the respondents, and assessing the impact refusals can have on polling outcomes. The differences between nonrepresentative sampling and representative sampling are explored, the latter being based on the scientific principle of random selection, namely, the notion that every member of the population has an equal chance of being chosen. The second step in the polling process is the development of the survey interview instrument and the items contained within. In gathering data, the third step, the various approaches are evaluated: face-to-face, mail, and telephone. The author is of the opinion that mail surveys, clip-and-return newspaper and magazine surveys, dial-900 surveys, and town meetings do not lend themselves to representative sampling and therefore have little value for campaign polling. The fundamentals of data analysis are covered. In chapter 4, “Technical Advances in Polling” (pp. 45-66), Selnow observes that although the field of survey research had changed in many ways prior to the introduction of the microchip, the decade of the 1980s brought more rapid development than during all of its first fifty years. Technological innovations are discussed in terms of the stages listed above. Sample selection has been facilitated by the availability of vendor-supplied, low-cost, high-quality samples. Computer technology has been applied to questionnaire development, especially in the form of computer-assisted telephone interviewing, which is also used in collecting survey data, with computer-driven telephones selecting respondents, directing the flow of the questionnaire, dialing numbers, checking for ineligible responses, and constructing the database. Technological advances have assisted in the speedy turnaround in analyzing data, an especially important factor in political campaigns. There are 61 cumulated references on pages 215-17.

Congressional Polls

539. Erikson, Robert S., and Lee Sigelman. "Poll-Based Forecasts of Midterm Congressional Election Outcomes: Do the Pollsters Get It Right?" *Public Opinion Quarterly* 59, no. 4 (Winter 1995): 589-605.

The accuracy of midterm (that is, "off year" or nonpresidential) election forecasts from 1950 through 1994 is investigated. The study is based on the "generic" vote question which reads, "If the elections for Congress were being held today, which party's candidate would you like to see win in your congressional district?" Data from POLL, the Roper Center's online database, were used in the present analysis, namely, 227 separate repetitions of the above question by the Gallup Organization. Two definitions are offered for "getting it right," or the amount of error pollsters make. In the first, forecasting error refers to the difference between the percentage of preelection respondents who said they intended to vote for the Democratic House candidate in their district and the percentage of voters nationwide who actually did so on election day. By this definition Erikson and Sigelman believe the pollsters rarely get it "exactly right," often come within a few percentage points on either side, and occasionally get it "very wrong." If the reduction of error means that "answers to the generic vote question, in combination with pertinent contextual information, permit one to make accurate forecasts of the outcomes of midterm elections" (p. 603), then the authors believe that pollsters do forecast accurately. The Gallup experience is thought to produce a midterm vote forecast that is "close to the mark." The authors evaluate the impact of partisan control of the White House; analyze the sources for the pro-Democratic bias; provide a formula for midterm predictions; and discuss the effect of poll timing on the elections. (13 footnotes, 23 references)

540. Erikson, Robert S., and Lee Sigelman. "Poll-Based Forecasts of the House Vote in Presidential Election Years: 1952-1992 and 1996." *American Politics Quarterly* 24, no. 4 (October 1996): 520-31.

The authors examine the degree to which responses to Gallup's "generic" House vote question—"If the elections for Congress were being held today, which party's candidate would you like to see win in your congressional district?"—can be used to generate accurate forecasts of the Republican-Democratic vote split in presidential year congressional elections. Using data from POLL, the Roper Center's online database, Erikson and Sigelman analyzed the two-party division of responses to 143 separate repetitions of the House vote question from 1952 through 1992. The polls were conducted at different times before the elections. The results indicate that the 143 surveys missed the actual vote by an average of 4.4 percentage points, a figure varying only a small amount depending on the time interval between the poll and the election. Late polls were no better predictors than those conducted very early. The forecasting error generally favored Democratic candidates, consistently offering "an overly optimistic" view of the Democrats' prospects of winning the election. As a final exercise, the findings were used to

forecast the 1996 House vote. The results were then compared to data from seven Gallup polls conducted in 1995 and early 1996, which also showed an extremely small Democratic lead. The responses to the generic House vote question are perceived to be useful for election forecasting both in midterm elections and in presidential election years. (5 endnotes, 7 references)

541. Moore, David W., and Lydia Saad. "The Generic Ballot in Midterm Congressional Elections: Its Accuracy and Relationship to House Seats." *Public Opinion Quarterly* 61, no. 4 (Winter 1997): 603-14.

In 1950, George Gallup designed and introduced this question: "If the elections for Congress were being held today, which party's candidate would you vote for in your congressional district—the Democratic Party's candidate or the Republican Party's candidate?" Because the "generic congressional ballot" (as it has come to be called) does not mention the name of any particular candidate, it can be used in a national poll and still refer to all districts. The authors, both associated with the Gallup Organization, assessed the accuracy of the generic ballot as a measure of vote intention and examined the details of a regression model as it was applied to the 1994 congressional election. The findings were then compared with those produced by Robert S. Erikson and Lee Sigelman [Item No. 539]. Moore and Saad criticize the previous research because it (1) included all polls for each midterm election year, rather than just the final poll figures for each year; (2) based the analysis on all respondents in any given survey, rather than on "likely voters" only (the Gallup practice); and (3) arrived at a mean error per poll of 3.4 percentage points for the four previous decades by subtracting the actual vote from the Gallup poll results. The authors discuss the development of a new regression equation to be introduced in 1998 to predict the number of House seats a party will win and the utility of a "dummy" variable (not found to be statistically significant). It is concluded that "the analysis shows a more successful record for this method of measuring voter sentiment in midterm elections than that suggested by Erikson and Sigelman" (p. 603). A footnote provides the information that there still is no accepted measure of generic Senate vote intention. (7 footnotes, 5 references)

Election Prediction

542. Bolstein, Richard. "Comparison of the Likelihood to Vote among Preelection Poll Respondents and Nonrespondents." *Public Opinion Quarterly* 55, no. 4 (Winter 1991): 648-50.

The poll investigated is a 1988 presidential preelection poll conducted one week prior to the election in a Washington, D.C., suburb of 22,000 residents. From a voter registration list of 11,846 names, a systematic sample of 608 names was selected. Of these, 428 were listed in the telephone directory, and a telephone interview was attempted. Voting status was validated following the election: 77.6 percent of the

608 actually voted as compared with 77.8 percent of all 11,846 registered voters. Registered voters with listed telephone numbers were significantly more likely to vote than those without the listing (84 percent to 64 percent). Those who failed to respond were classified as refusals, "call rule exhausted" (that is, the individual could not be reached after three attempts), or unavailable. Bolstein concludes that there was no significant difference between the percentage of voters among respondents and interview refusals. When respondents and refusals were combined, they had a significantly higher percentage of voters than the call rule exhausted group. When the interview refusal group and the call rule exhausted group were combined, they had a significantly higher percentage of voters than those who were unavailable. (5 references)

543. Lewis-Beck, Michael S., and Tom W. Rice. "Prognosticators to Pollsters: Traditional Forecasts." Chap. 1 in *Forecasting Elections*, 1-20. Washington, DC: CQ Press, 1992. 163p.

In the section of the chapter titled "Pollsters" (pp. 10-18), Lewis-Beck and Rice distinguish nonscientific polling (for example, the straw polls conducted by the *Literary Digest*) from scientific polling, emphasizing that probability sampling is the basic principle underlying the latter. Survey organizations sometimes use a modified probability sampling design as a way to reduce costs. Political pollsters face numerous obstacles in their effort to predict election outcomes. These include (1) races that are too close to call; (2) sampling error margins that can vary from survey to survey; (3) the difficulty of sampling respondents who will actually cast a ballot; (4) voters who change their minds between the interview and the election; and (5) issues of interviewer quality, questionnaire design, and cost. In addition, the timing of the poll is seen as crucial for the pollster. The authors write, "If they poll early, they enjoy substantial lead time but they risk erroneous forecasts; if they poll late, they reduce error but their lead time is trivial, making the prediction uninteresting" (p. 18). (4 endnotes) There are 105 cumulated references at the end of the volume.

Exit Polls

544. Mitofsky, Warren J. "A Short History of Exit Polls." Chap. 4 in *Polling and Presidential Election Coverage*, edited by Paul J. Lavrakas and Jack K. Holley, 83-99. Sage Focus Editions, vol. 127. Newbury Park, [CA]: Sage Publications, 1991. 244p.

In the discussion of exit polls, emphasis is placed on the historical perspective, the controversy that surrounds the use of such polls, and the methodology. The development of exit polls in the United States is traced to the year 1967 when CBS News asked Mitofsky to head the statistical research effort for its first in-house election unit. As an alternative to preelection polls, the major networks desired a method for estimating election outcomes before the actual results became

available. The team from CBS News selected a Kentucky gubernatorial election to attempt various election analyses, including an exit poll. The exit poll proved quite accurate. The first significant analytical application occurred with the 1969 New York City mayoral contest. From 1970 to 1980, CBS News continued to conduct exit polls for analysis, and, in 1982, expanded their use for projections. ABC News first conducted exit polls in 1980, with projections in 1982. NBC News is reported to have conducted its first exit poll for analysis purposes in 1972, and projections in the mid 1970s. The exit poll "controversy" concerns NBC's early projection (8:15 P.M. eastern standard time) of the Ronald Reagan victory in the 1980 election (CBS and ABC's projections were based only on actual vote returns). Critics contend that the early declaration of the winner on the East Coast discouraged voter turnout in western states where the polls were still open. A section on exit poll methodology covers the basic procedures, the problems involved, a sample questionnaire, interviewing strategies, and evaluation data. (3 endnotes)

545. Traugott, Michael W., and Vincent Price. "Exit Polls in the 1989 Virginia Gubernatorial Race: Where Did They Go Wrong?" *Public Opinion Quarterly* 56, no. 2 (Summer 1992): 245-53.

The exit poll under investigation is one conducted by Mason-Dixon Opinion Research (MDOR) for the 1989 Virginia gubernatorial election. MDOR predicted that Democrat L. Douglas Wilder, the African-American candidate, would beat Republican J. Marshall Coleman, his white opponent, by a margin of 10 percentage points. Wilder, the first African American to run for the governor's office in Virginia, won the election—by a mere two-tenths of one percentage point. Traugott and Price analyzed an incomplete printed report from MDOR (the actual computer-readable version and questionnaire were unobtainable from MDOR) in order to ascertain what methodological processes might have caused the exit poll predictions to be grossly inaccurate. A number of factors contributing to the faulty data are identified: (1) the fact that only sixty precincts were sampled might not have reflected the shifting demographic patterns occurring across the state; (2) the failure to weight the results for differential turnout statewide could have contributed to the problem; and (3) the poll was conducted with face-to-face interviews, which are seen to promote a social desirability bias, possibility due to the misreporting of votes by whites. In discussing the risks inherent in conducting surveys on politically or culturally sensitive issues, the authors state, "Although it is possible that asking sensitive questions anonymously will reduce bias, exit polls conducted at the end of racially charged political campaigns require careful attention to other potential sources of bias as well" (p. 252). The authors believe that survey data should be preserved and disseminated to permit proper analysis. (6 endnotes, 24 references)

Political Party Affiliation

546. Abramson, Paul R., and Charles W. Ostrom. "Question Wording and Partisanship: Change and Continuity in Party Loyalties during the 1992 Election Campaign." *Public Opinion Quarterly* 58, no. 1 (Spring 1994): 21-48.

To measure partisanship, or political affiliation, the Gallup Organization asks the question, "In politics, as of today, do you consider yourself a Republican, a Democrat, or an Independent?" The other most widely used measure, developed by the Survey Research Center (SRC) at the University of Michigan, reads as follows: "Generally speaking, do you usually think of yourself as a Republican, a Democrat, an Independent, or what?" To determine why Gallup *macropartisanship*, that is, party affiliation at the aggregate level, varies more over time than aggregate measures based on the SRC question, Abramson and Ostrom conducted a series of question-wording experiments as part of six statewide surveys of Michigan residents: a four-wave panel study and two cross-sectional studies. A total of 5,294 interviews and reinterviews were conducted. In the panel studies, the question formats were randomly varied among respondents. Both Gallup and SRC questions were asked of all respondents in the cross-sectional studies. In addition to the partisanship questions, all surveys asked questions designed to measure short-term evaluations and electoral preferences; all used computer-assisted telephone interviewing; and all were conducted between March and October of 1992 (the Bush/Clinton/Perot race). Analysis of the data strongly suggests that the Gallup item responds more to short-term political conditions, thereby reflecting less stability over time. The authors believe that these individual-level results "help explain why Gallup *macropartisanship* varies more over time than aggregate measures of partisanship employing the standard SRC measure..." (p. 21). Researchers are urged to be cautious when generalizing from findings based on Gallup, to studies of partisanship based on the SRC party identification measure. An appendix details the sampling and data collection procedures used. (15 footnotes, 38 references)

547. Abramson, Paul R., and Charles W. Ostrom, Jr. "Macropartisanship: An Empirical Reassessment." *American Political Science Review* 85, no. 1 (March 1991): 181-92.

This article reappraises a study authored by Michael B. MacKuen, Robert S. Erikson, and James A. Stimson ["Macropartisanship." *American Political Science Review* 83 (1989): 1125-42.]. At issue is the Gallup Poll question, "In politics, as of today, do you consider yourself a Republican, a Democrat, or an Independent?" Based on poll results from 1945 through 1987, MacKuen and others analyzed the party affiliations of the U.S. electorate, "measuring the proportion of all partisans who consider themselves to be Democrats, a measure they call *macropartisanship*" (p. 181). The results indicated much variability in partisan preferences, with the variation following structured patterns of change within presidential administrations.

These changes had only short-term electoral consequences and were driven by short-term economic and political factors. The Gallup question and a measure developed by the Survey Research Center (SRC) at the University of Michigan are considered interchangeable by these researchers. The SRC question reads, "Generally speaking, do you usually think of yourself as a Republican, a Democrat, an Independent, or what?" Abramson and Ostrom maintain that the results of the 1989 study have "limited generalizability," represent "sweeping generalizations," and reflect an "exaggerated" degree of reliability. To support their contrasting views, Abramson and Ostrom compare over-time distribution of partisanship, and the correlates of partisanship, employing three measures: the results of the Gallup surveys, and two major academic surveys that use the SRC measure—the National Election Studies (NES) and the General Social Surveys (GSS). Less short-term variation, less total variation, and less volatility were found when the NES and GSS results were compared with those of Gallup. The authors believe that since the SRC measure has different properties from the Gallup question, the two are not interchangeable. (12 endnotes, 18 references)

548. Bishop, George F., Alfred J. Tuchfarber, and Andrew E. Smith. "Question Form and Context Effects in the Measurement of Partisanship: Experimental Tests of the Artifact Hypothesis." *American Political Science Review* 88, no. 4 (December 1994): 945-54, 956-58.

In response to the *macropartisanship* controversy, the authors conducted a series of question-wording experiments and compared results from Gallup and the Michigan Survey Research Center (SRC) concerning political partisanship. The Gallup form of the question reads, "In politics, as of today, do you consider yourself a Republican, a Democrat, or an Independent?" The SRC item reads, "Generally speaking, do you usually think of yourself as a Republican, a Democrat, an Independent, or what?" Since the former version emphasizes the respondent's present feelings ("as of today") and the SRC question emphasizes how the respondent "generally" thinks, political scientists and pollsters have questioned the comparability of the two most widely used measures of partisanship. To examine the similarities and differences of the alternate questions and their impact on the results, data were used from fifteen experimental random-digit-dialed telephone surveys conducted from 1991 to 1993 as part of the Ohio Poll and the Greater Cincinnati Surveys. [A previous conference paper reports the preliminary findings of the first seven experiments; this article focuses on the eight additional replications.] Most of the experiments were carried out during or immediately following the 1992 presidential election campaign. Analysis indicates that the wording of the party identification question had little or no impact on the distribution of party loyalties. Contrary to Abramson and Ostrom's *question-wording artifact hypothesis*, the Gallup item was no more responsive to short-term political forces operating during the campaign than its SRC counterpart. An appendix provides the sampling and interviewing procedures, and the response rates. (13 endnotes, 32 references) A response from Paul R. Abramson and Charles W. Ostrom (pp. 955-56) offers a different perspective—namely, that Gallup's form of the question will accentuate

differences during periods of political volatility, while the SRC measure will lessen them.

549. Green, Donald Philip, and Eric Schickler. "Multiple-Measure Assessment of Party Identification." *Public Opinion Quarterly* 57, no. 4 (Winter 1993): 503-35.

Much of the prior research dealing with measurement error estimation in party identification studies has relied on a test-retest methodology, that is, a single measure of partisanship observed at multiple points in time. Over the past thirty years, most national surveys have used either the Gallup (primarily private polling) or the Michigan (primarily academe) party identification measures. Green and Schickler assess the reliability of the Michigan party identification scale using multiple measures of partisanship at a single point in time. Data were utilized from two surveys: the December 1973 National Opinion Research Center (NORC) Amalgam Survey and the Times-Mirror spring 1990 Political Update. The NORC survey involved face-to-face interviews with a national multistage area probability sample of 1,489 respondents, and included five measures of party identification: the standard seven-point Michigan scale; a fully labeled seven-point self-placement scale; a forced-pair comparison item; a basic self-regard item; and a three-point Gallup item. The Times-Mirror survey, also conducted face-to-face, used a multistage probability sample of 3,004 respondents, and included two measures of party identification: a seven-point Gallup scale and a party difference score. The results of the research were found to support those of previous test-retest studies. Further, the authors believe that multiple measures can enhance the accuracy with which partisanship predicts candidate preferences. The use of a labeled seven-point self-placement continuum is advocated to "supplement and illuminate" some of the "lost predictive capacity" of the Michigan scale. The self-placement scale is perceived to be "relatively immune" to "don't know" responses, easily administered, and reliable. An appendix provides the question wording for the NORC and Times-Mirror surveys. (14 footnotes, 51 references)

550. Krosnick, Jon A., and Matthew K. Berent. "Comparisons of Party Identification and Policy Preferences: The Impact of Survey Question Format." *American Journal of Political Science* 37, no. 3 (August 1993): 941-64.

The authors evaluate the effects of *verbal labeling* of response alternatives and the use of *branching questions* on the reliability of National Election Studies (NES) measures of party identification and policy preferences. Branching questions encourage respondents to first report attitude *direction* and then to report attitude *intensity*, as opposed to a one-step procedure in which respondents place themselves "directly on bipolar attitude scales, thus indicating attitude direction and extremity simultaneously" (p. 943). Verbal labeling refers to labeling all points on a rating scale, rather than only the endpoints. Much prior research suggests that citizen's political party affiliations (generally measured with branching questions and verbally

labeled response alternatives) are more “persistent” over time as well as more “psychologically consequential” than are their attitudes toward government policies (generally measured with nonbranching questions and incomplete labeling of response alternatives). Krosnick and Berent investigate a possible alternative interpretation of these findings by conducting eight experiments which presented a variety of methodological approaches, such as (1) the study respondents (local and national samples, and college students); (2) the data collection mode (telephone and face-to-face interviews, and self-administered questionnaires); (3) the question format (partially labeled nonbranching, and fully labeled nonbranching, and fully labeled branching); and (4) the attitudes measured (party identification, ideology, and party issues). Analysis indicates that decomposing questions into fully verbally labeled component questions which measure both direction and extremity enhanced the reliability for both party identification and policy preference attitudes. This effect was demonstrated across survey data collection methods, with a variety of populations, and for a range of political attitudes. The findings suggest a “reinterpretation” of the differences between party identification and policy preference attitudes in terms of over-time consistency in NES surveys. The authors advocate the implementation of verbal labeling and branching whenever possible. (8 footnotes, 36 references)

551. MacKuen, Michael B., Robert S. Erikson, and James A. Stimson. “Question-Wording and Macropartisanship.” *American Political Science Review* 86, no. 2 (June 1992): 475-86.

The term *macropartisanship* is defined as “the two-party division of party identifiers.” Reference is made to an earlier article by the same authors [“Macropartisanship.” *American Political Science Review* 83 (1989): 1125-42.] in which a case was presented for macropartisanship as a political indicator. The concept was seen to respond to changing presidential approval ratings and perceptions of the economy, and was effective at predicting national election results. For the 1989 research MacKuen and others analyzed quarterly Gallup Poll figures dating back to World War II. Major variation over time was observed in the Gallup-based party identification question which reads, “In politics, as of today, do you consider yourself a Republican, a Democrat, or an Independent?” Paul R. Abramson and Charles W. Ostrom, Jr., in the “Response” section of this article (pp. 481-85) and in other papers [Item Nos. 546 and 547], disagree with these conclusions, maintaining that MacKuen and others would have obtained different results if another version of the question—one from the Survey Research Center (SRC) at the University of Michigan—had been used. It reads, “Generally speaking, do you usually think of yourself as a Republican, a Democrat, an Independent, or what?” Abramson and Ostrom analyzed data from nineteen National Election Studies (NES) from 1952 to 1988, plus sixteen General Social Surveys (GSS), each of which asked the SRC form of the macropartisanship question, claiming that it encourages more stable response and is less sensitive to short-term influences from presidential approval or consumer sentiment. To address this criticism MacKuen and others present new data from CBS News and *New York Times* telephone surveys

(asking the SRC question) to support their earlier analysis, arguing against substantial effects from the different question wordings. The authors conclude that “macropartisanship is important: it moves over a meaningful range, it responds to identifiable political forces, and it affects electoral outcomes...and does not depend on any particular question wording for its substance” (p. 479). (12 references)

Presidential Polls

General

552. Eisinger, Robert Martin. “The Illusion of Certainty: Explaining the Evolution of Presidential Polling.” Ph.D. diss., University of Chicago, 1996. 349 leaves in 2 volumes. [*Dissertation Abstracts International* Order No. DA9636791; *DAI* 57A, no. 7 (January 1997): 3224-25.]

Eisinger presents a theory of how and why the executive branch wishes to independently gauge public opinion. Since the advent of scientific polling methodology in the 1930s, every president except Truman has used public opinion polls. Before the mid 1930s, various institutions (including Congress), as well as newspapers, political parties, and interest groups, collected, evaluated, and relayed poll information to the president. Eisinger traces the evolution of presidential polling from the administration of Franklin Delano Roosevelt (FDR) through the presidency of Bill Clinton. Central to the dissertation is the presidential use of private, rather than public, polls, commencing with Hadley Cantril’s polling for FDR, an event described as a “turning point in American politics.” Eisenhower’s attempts to manipulate the polls conducted by others, and the State Department’s “illegal and secret” polling are reviewed. Eisinger discusses the rapid changes in polling which occurred during Kennedy’s presidential campaign and administration. Louis Harris, Kennedy’s pollster, helped advance presidential polling beyond the early stages of the Eisenhower era, promoting their development as an important technique for gauging public opinion. Johnson’s polling standards are described as “notably lax,” functioning as “tools to reinforce the administration’s predilections.” In the Nixon White House, poll results were an important asset, with H. R. Haldeman keeping much of the data confidential. Nixon’s polls were conducted by the Opinion Research Corporation and Market Opinion Research. Nixon had a “voracious appetite” for poll information, which frequently was used to intimidate members of Congress. The roles of Robert Teeter and Richard Cheney are discussed in relation to Gerald Ford who primarily used polls for his campaign against Carter. Throughout Eisinger’s review of poll usage during multiple presidencies, an attempt is made to link presidents’ gauging of public opinion to a theory of presidential polling. The author believes that by using private polls, presidents no longer have to rely on traditional methods, a process resulting in the “institutionalization” of presidential polling. (330 references)

553. Mattes, Robert Britt. "The Politics of Public Opinion: Polls, Pollsters and Presidents." Ph.D. diss., University of Illinois at Urbana-Champaign, 1992. 470 leaves. [*Dissertation Abstracts International* Order No. DA9236535; *DAI* 53A, no. 7 (January 1993): 2530.]

Using several foreign policy cases from the administrations of Presidents Carter and Reagan, Mattes examines the impact of public opinion polling on contemporary American politics. Three questions are posed: How did pollsters, the media, and White House pollsters ask questions concerning these issues? How were the findings disseminated and interpreted? and How were the data actually used by policy makers? The author presents a perceptual and interpretive model of public opinion and reviews the political importance, legitimacy, limitations, and usefulness of polls, noting that they "appear to foster and achieve many of the cherished goals of the American democratic tradition" (p. 64). Supporting evidence is provided for the widespread acceptance of polling in changing the manner in which we view public opinion. The interpretations and applications of public opinion polls are considered, as well as the impact of polls on consumers, politicians, and the media. Mattes concludes that (1) the way in which pollsters asked the questions had a significant impact on the results obtained; (2) the news media often reached consensus on poll findings which were unsupported by available data; (3) polling data were widely used by the government to "support its allies, persuade uncommitted politicians, and delegitimize political opponents" (p. iii); and (4) polling has come to play a significant role in politics, with pollsters and others who interpret data now shaping political reality "as much as they reflect it." Each chapter has endnotes, and there is a bibliography on pages 437-67.

554. Sigelman, Lee. "Answering the 1,000,000-Person Question: The Measurement and Meaning of Presidential Popularity." *Research in Micropolitics* 3 (1990): 209-26.

The conceptualization, measurement, and meaning of Gallup's presidential popularity question are explored. The question, first appearing 1938, asks respondents whether they approve or disapprove of current presidential performance. Sigelman's approach was twofold: to examine problems with the measure due to the changing context surrounding each repetition of the survey, and to point out questionable reliability and validity standards when a single question serves as the only indicator for a complex concept (a much more difficult problem for the survey researcher). Estimates of presidential popularity are affected by a number of factors: subtle question wording differences; polling organizations conducting their surveys at different points in time; varying calibrations of the items; and the impact of other potential sources of variance, for example, the mode of administration and sampling error. The author weighs the advantages and disadvantages of three traditional explanations for presidential popularity: (1) the *scorekeeper approach* (indicates current opinion, with the public closely monitoring the president's activities and then adjusting their ratings to reflect the flow of information they have been receiving); (2) the

general mood approach (assumes the average citizen only minimally and superficially follows presidential activities, and measures citizens' personal mood at the time of the survey); and (3) the *shifting salience approach* (maintains that at any given time, presidential popularity reflects the most important issues of the day, such as war, inflation, unemployment, and government corruption, with the presidential popularity question acquiring different meanings at different times. (37 references)

555. Voss, D. Stephen, Andrew Gelman, and Gary King. "Preelection Survey Methodology: Details from Eight Polling Organizations, 1988 and 1992." *Public Opinion Quarterly* 59, no. 1 (Spring 1995): 98-132.

Methods for collecting polling data are detailed for these eight survey organizations: (1) CBS and the *New York Times*; (2) Chilton Research Services, which conducts polls for ABC News and the *Washington Post*; (3) the Gallup Organization; (4) Louis Harris and Associates; (5) Media General, which conducted the 1988 polls for the Associated Press; (6) ICR Survey Research Group, which conducted polls for the Associated Press and sometimes ABC News and the *Washington Post* in 1992; (7) Roper Starch Worldwide; and (8) Yankelovich Partners. The authors observe that the various polls "actually differ along a limited number of procedures," and "rather than simply listing the methodology of each organization separately, we introduce the main variables across which professional polls tend to differ" (p. 100). The presentation covers how the organizations generate their lists of telephone numbers and deal with busy signals, refusals, and calls answered by electronic devices. Recommendations are provided for deciding which household members are eligible for interviewing and which respondent should be selected from those eligible. Weighting procedures utilized by the organizations are addressed in the last section on data adjustment. The results from fifty 1988 preelection polls serve to highlight the importance of weights and how the different methods produced quite different outcomes. In Appendix A the authors explain their methodology. Appendix B covers thirteen processes Roper employs for face-to-face presidential election polls. (30 footnotes, 16 references)

1988

556. Cantril, Albert H., in collaboration with Susan Davis Cantril. *The Opinion Connection: Polling, Politics, and the Press*. A Project of the National Council on Public Polls. Washington, DC: CQ Press, a Division of Congressional Quarterly Inc., 1991. 285p.

The foreword was written by Burns W. Roper and Harry W. O'Neill, chairman and president, respectively, of the National Council on Public Polls (NCPP) at the time of the publication of this book. The NCPP is a professional association [founded in 1969] of public opinion research organizations dedicated to improving both poll methodology and the quality of publicly disseminated poll-based

information. Cantril, a past president in of the NCPP, directs the book to pollsters, journalists, scholars, and the politically informed general public. The volume was written in response to the “crescendo” of criticisms levied at public opinion polls following the 1988 presidential election. The material presented covers several main themes: polling’s fifty-year background; the role political polling within the political and democratic processes; the relationship of political polling to the media; the factors contributing to a quality poll; how political polling serves and influences the public; and issues of standards and accountability. Chapter 3, “Polls, Politics, and the Press: Reciprocal Effects,” is the most pertinent to the polling methodology literature. It provides an overview of the fundamentals of reliable and valid polling—a “nontechnical recapitulation” of the salient features of political polling. Among the issues covered are sample quality, control, selection, and error; question wording and context; interviewing and response rates; mode comparisons; voter turnout; opinion crystallization; and tracking and exit polls. Appendix A presents miscellaneous statistics relevant to the text. Appendix B reprints the professional codes of three organizations: the “Principles of Disclosure” of the NCPP; the “Code of Professional Ethics and Practices” of the American Association for Public Opinion Research; and the “Code of Professional Ethics” of the American Association of Political Consultants. (405 endnotes)

557. Shelley, Mack C., II, and Hwang-Du Hwang. “The Mass Media and Public Opinion Polls in the 1988 Presidential Election: Trends, Accuracy, Consistency, and Events.” *American Politics Quarterly* 19, no. 1 (January 1991): 59-79.

Shelley and Hwang analyzed the results from forty-eight national public opinion polls in order to examine a number of methodological issues which arose during the 1988 presidential campaign (Bush/Dukakis). The polls were conducted or reported by five major media polling organizations (with the number of polls indicated): *Wall Street Journal/NBC News* - 9; *New York Times/CBS News* - 12; *Washington Post/ABC News* - 17; *Newsweek/Gallup* - 5; and *Time/Yankelovich Clancy Shulman* - 5. The time period covered was 1 January 1988 to 7 November 1988 (the day before the election). The authors respond to criticisms levied at polls during this period, namely, that poll results may disagree with each other, preelection polls may fail to predict the actual election-day outcome, and poll results can be reported or published inaccurately and/or only partially. To assess accuracy over time, the polls were divided into seven key periods defined by important political events occurring during the year. Comparisons were then made across the time periods, the findings were combined into continuous longitudinal data, and time series events were used to determine the impact of key events. Statistically significant positive effects on Bush support were obtained for the Republican convention as well as for the second presidential debate. The most influential events impacting changes in poll support for Dukakis were the Republican convention (support decreased) and the Democratic convention (support increased). The important role of the undecided voter is discussed. (7 footnotes, 24 references)

1992

558. Lau, Richard R. "An Analysis of the Accuracy of 'Trial Heat' Polls during the 1992 Presidential Election." *Public Opinion Quarterly* 58, no. 1 (Spring 1994): 2-20.

Based on the results of fifty-six national "trial heat" polls conducted during October 1992, Lau identifies six methodological factors (those directly under the survey researcher's control) and two external factors (those that relate to the nature of the opinion being measured), that are contributors to survey error. The methodological factors examined are the size of the sample, the sampling frame, the response rate, the use of tracking polls (a small sample interviewed daily), polling only on weekdays, and having survey organizations probe not only for the favorite candidate but also for the strength with which the support is held. The external influences are the degree of crystallization of public opinion (the percentage of undecideds) and the proximity of the election (the closer the election, the more certain the public should be of their favorite candidate). Lau's analysis suggests that the most important variables affecting survey accuracy are the following: (1) sample size was unrelated to accuracy; (2) sampling frames of likely voters tended to overestimate support for George Bush; (3) additional days of polling increased total accuracy by one-half of a percentage point per day; (4) tracking polls increased accuracy by approximately 1.5 points; (5) weekday-only polling reduced overall accuracy rates by 1-plus percentage points and overestimated votes for Bush; and (6) probing for different levels of support was more detrimental for Ross Perot and Bill Clinton than for Bush. The author questions the well-established practice of reporting margins of error based solely on sample size, since size had little bearing on misestimation rates in the research. (13 footnotes, 29 references)

1996

559. Erikson, Robert S., and Christopher Wlezien. "Presidential Polls as a Time Series: The Case of 1996." *Public Opinion Quarterly* 63, no. 2 (Summer 1999): 163-77.

The evolution of electoral sentiment is traced through the campaign cycle by analyzing the results of 194 separate national polls from thirty-one different survey organizations for a single election in a single year—the Clinton/Dole/Perot presidential race of 1996. Two specific questions are addressed: (1) Does the variation in poll results represent genuine movement in public preferences, or does it reflect survey sampling error? and (2) To the degree that polls reflect real change, can "noise" from error be filtered out to detect this movement over the course of the campaign? Various procedures were used for the analysis, including "lowess" (locally weighted scatter-plot smoothing) and *pooling* (in

which the results for all polls that span a particular day are aggregated, instead of by the midpoint of the polling period). Erikson and Wlezien conclude that survey error—from house effects, but primarily from statistical sampling—contributed most to poll variation in 1996. Campaign events for this particular election had little significance, with the effects small, short-lived, and occurring during the first half of the election year. The authors comment on the generalizability of the single-year findings to presidential election campaigns of previous years. A brief appendix provides comments on the study methodology. (18 footnotes, 15 references)

560. Meyer, Philip, and Deborah Potter. "Preelection Polls and Issue Knowledge in the 1996 U.S. Presidential Election." *Harvard International Journal of Press/Politics* 3, no. 4 (Fall 1998): 35-43.

Preelection candidate-standing polls, sometimes referred to as "horse-race" polls, have come under recent scrutiny by both journalists and pollsters who question whether such polls are useful. These "tracking" polls, often conducted on a daily basis, are thought by some to be without merit, as attention is shifted away from substantive issues (the *attention displacement theory*). However, others feel that polls have the effect of making the contest interesting to citizens (the *catalytic model*). Meyer and Potter address the question of whether polls improve issue knowledge by reanalyzing data from a longitudinal study designed for another purpose. Twenty markets in the United States were selected on the basis of their media's election coverage philosophy. Data were collected through surveys of newspaper stories, and with interviews of approximately 1,000 respondents in August and November 1996 and reinterviews with 623 respondents in November. Two questions were used to measure attention to polls in the August survey; three questions assessed issue knowledge in both August and November; and a fourth question was added in November. Four variables were controlled for: age, education, prior issue knowledge, and interest in the election. Respondents' poll knowledge in August was found to have a "small, positive, and decidedly significant effect" on issue knowledge in November. The authors advocate the elimination of "journalism's folklore belief" that media publication of horse-race polls causes individuals to know less about campaign issues, thereby supporting the catalytic model rather than the displacement theory. (7 endnotes, 9 references)

561. Mitofsky, Warren J. "Was 1996 a Worse Year for Polls Than 1948?" *Public Opinion Quarterly* 62, no. 2 (Summer 1998): 230-49.

The author criticizes two articles published by Everett Carl Ladd, Jr. ["The Election Polls: An American Waterloo." *Chronicle of Higher Education* (22 November 1996): p. A52; and "The Pollsters' Waterloo." *Wall Street Journal* (19 November 1996): p. A22.]. Mitofsky quotes Ladd as saying that "election polling had a terrible year in 1996. Indeed, its overall performance was so flawed that the entire enterprise should be reviewed by a blue-ribbon panel of experts" (p. 230). Many copycat articles followed Ladd's "extraordinary" statement. Mitofsky reviews the eight measures for poll accuracy established by the Social

Science Research Council (SSRC) in 1948, and then evaluates nine final preelection presidential polls from 1996 using four of the eight SSRC measures. The nine polls were conducted by ABC News, CBS News/*New York Times*, Gallup/CNN/*USA Today*, Harris Poll, *Hotline/Battleground*, NBC/*Wall Street Journal*, Politics Now/IRC, Princeton Survey Research/Pew Research Center, and Zogby Group/Reuters. The author compares and contrasts the 1948 and 1996 elections, comments on the National Council on Public Polls' criticisms of Ladd's "erroneous and unsupported" claims, and concludes that the 1948 polls had the poorest performance of any preelection polls and that 1996 "was not the best but was far from the worst year for polls." (11 footnotes, 16 references)

State Polls

562. Applied Research Center. *The Invisible Franchise: Polling and Public Policy in California*. Working Paper Series. Oakland, CA: Applied Research Center, Fall 1996. 22p.

The "invisible" franchise refers to the exclusion of some categories of Americans (for example, the young, the poor, immigrants, and people of color) from participation in public opinion polls, in spite of the ever-increasing prominence of polling in the United States. A brief history of political polling is provided, beginning with the straw polls conducted by newspapers for the 1824 presidential election. Four major groups engaging in polling are identified and discussed: independent for-profit market research and polling companies, major print and broadcast news media, government agencies, and nonprofit organizations and universities. Polling in the state of California is discussed, with comments on who lives there, who votes there, and who conducts polls in the state (the two main sources are Mervin Field and the *Los Angeles Times*). The report covers some of the systematic errors to which polling is prone and how questionnaire construction can skew results. Nine suggestions are offered for establishing an annual "Emerging California Poll," with the purpose of informing the primary participants—the public, community and advisory organizations, and key decision makers. According to the report, pollsters should conduct two thousand interviews per year at a cost of about \$535,000 for the first year and \$485,000 for subsequent years. The poll should reflect the "full range and complexity of public thinking in California." (29 references)

563. Cohen, Jeffrey E. "State-Level Public Opinion Polls as Predictors of Presidential Election Results: The 1996 Race." *American Politics Quarterly* 26, no. 2 (April 1998): 139-59.

The goals of the research were to (1) construct a model of state-level voting behavior; (2) evaluate the use of commercial polls and the pooling of surveys from different organizations; (3) assess the value of polls for modeling voting behavior; and (4) determine the potential of statewide polls for forecasting presidential

elections. Cohen analyzes two types of 1996 state poll data: trial heats (for forty-nine states) emanating from commercial, newspaper, and university polling centers; and favorable/unfavorable respondent recognition data surveys (for forty-three states) conducted by Mason-Dixon, a commercial polling organization. The trial heats were administered on different dates, employed several different sampling frames, and may have used different question wording and context. In the Mason-Dixon surveys, respondents were asked if they recognized a name, and, if affirmative, whether their opinions were favorable, unfavorable, or neutral. Based on this data and other variables, Cohen constructed a short-term effects model of state-level voting behavior. The author discusses the strengths and weaknesses of the model and concludes that statewide polls and trial heats can be usefully employed in future modeling and perhaps for forecasting elections. Question wording is described as an area requiring additional attention. Two appendixes provide information on the trial heats and the recognition polls. (10 endnotes, 21 references)

564. Howell, Susan E., and Robert T. Sims. "Survey Research and Racially Charged Elections: The Case of David Duke in Louisiana." *Political Behavior* 16, no. 2 (June 1994): 219-36.

Several questions form the basis for the research: (1) Do white respondents provide honest answers to pollsters' questions on racial matters? (2) Can preelection polls accurately measure voter intention in racially charged elections? (3) Is there a social desirability bias present (that is, respondents' fear of appearing racist to the interviewer)? and (4) How can the measurement of support for racially conservative candidates be improved? To examine these issues Howell and Sims analyzed two preelection telephone polls conducted during David Duke's 1991 campaign for governor of Louisiana. Because of Duke's "extremist" views—namely, his "background in the KKK and association with neo-Nazi groups"—he would "presumably" be unacceptable to most voters. However, when preelection poll results were compared to actual election outcomes, preelection poll support for Duke had been repeatedly underestimated. The preelection polls, one associated with the gubernatorial primary and the other with the runoff, were conducted by the Survey Research Center at the University of New Orleans in September and October 1991. The polls were based on random samples, one for African Americans and one for whites, drawn from voter registration lists. There were 745 registered voters in the first survey and 703 in the second. Three approaches were tested for measuring support for racially conservative candidates, with each making different theoretical assumptions about the "hidden" vote. The first approach allocated undecided voters solely by race (whites to Duke, African Americans to [Edwin W.] Edwards). Descriptive adjectives were used for the second approach. It was thought that hidden supporters of Duke would "reveal themselves" in their responses to image questions. The last approach compared the image of Duke, as measured by adjectives, to that of the other candidates. The findings suggest that the candidate image variables produced more accurate and valid voter-intention measures than methods which simply allocated undecided voters based

only on race. The implications for biracial contests are discussed. An appendix provides information on the survey design. (2 endnotes, 45 references)

565. Mitofsky, Warren J. "The State of State Election Polls." *Chance: New Directions for Statistics and Computing* 6, no. 1 (1993): 9-16.

Two developments are seen to have dramatically increased the number of state election polls conducted since 1978—the practice of sampling by telephone and the formation of two polling partnerships: CBS News and the *New York Times*, and NBC News and the Associated Press. Mitofsky based the assessment of state polls on estimates from all preelection polls conducted by fifty-eight survey organizations during the final thirty-four days of the 1992 campaign, and whose results were published in *Hotline*, a political newsletter. These survey organizations were asked to provide details about the poll methodologies used. The author then evaluated the techniques according to five criteria: (1) household selection by random digit dialing; (2) random selection within the household from among all adults; (3) the use of callbacks, when necessary, to reduce bias; (4) weighting for respondent selection; and (5) weighting for multiple telephone numbers in the household. Polls conducted by academic polling centers were found to adhere most frequently to the criteria, followed by the media, and then by the commercial polling firms. Mitofsky concludes that even poorly conducted polls yield useful information, and that many of the polls provided the same information with respect to trends in the election.

566. Rahn, Wendy M., Jon A. Krosnick, and Marijke Breuning. "Rationalization and Derivation Processes in Survey Studies of Political Candidate Evaluation." *American Journal of Political Science* 38, no. 3 (August 1994): 582-600.

Selection considerations on voters' choices at the polls, and the models devised to assess them, are reviewed. Some researchers have examined answers to open-ended questions that asked respondents what might encourage them to choose or reject a particular candidate, while others have studied the processes by which respondents combine their candidate preferences into overall choices. Recent developments in the field of cognitive social psychology, however, create doubt about the assumptions underlying the use of open-ended likes-dislikes questions. The authors offer explanations as to why previous models may have faulty premises, observing that "people's overall candidate evaluations may bias their recollection and/or generation of beliefs about a candidate as they answer the likes-dislikes questions" (p. 586). To determine whether voters' answers reflect *derivation* of overall evaluations from beliefs about candidate attributes, and/or *rationalization* of preexisting evaluation processes, the authors analyzed data from a survey conducted by the Polimetrics Laboratory at The Ohio State University. The survey was conducted during the 1990 Ohio gubernatorial contest (George Voinovich versus Anthony Celebrezze). The sample was generated by a random-digit-dialing method. Three waves of telephone interviewing took place:

the first wave, involving 1,277 respondents, was conducted two months prior to the election; in the second wave, 492 respondents from a selected subsample from wave 1 were interviewed, with interviews occurring during the final week before the election; of these, 449 were interviewed again following the election. The response rates were 57 percent, 76 percent, and 91 percent, respectively. This analysis is based on the 270 respondents who said they had voted in the gubernatorial race. Open-ended likes-dislikes questions and 101-point feeling thermometers were used in waves 1 and 2. The results of the panel survey indicate that voters' reports of why they voted as they did were principally rationalizations. This trait was especially strong among two categories of voters: those who were politically involved and those who had minimal exposure to the media. Significant evidence of derivation was found for only one group of voters—the late deciders. The authors conclude that open-ended questions about respondents' likes and dislikes do not reveal the real reasons for voters' preferences. (9 footnotes, 51 references)

Voter Overreporting

567. Gronke, Paul. "Overreporting the Vote in the 1988 Senate Election Study: A Response to Wright." *Legislative Studies Quarterly* 17, no. 1 (February 1992): 113-29.

The data at the center of the controversy are from the 1988 National Election Study's Senate Election Study (NES/SES). Gronke comments on an article by Gerald C. Wright [Item No. 570] who maintained that there was systematic error in reports of the prime dependent variable—the vote for U.S. senator; that more respondents said they voted for the Senate winner than the outcome of the election indicated; and that as the time between the election and the interview increased, so did the probability of erroneous reports. Further, these factors produced biased coefficients in voting models, with overestimates for candidate-based effects and underestimates for the influence of the presidential vote on the Senate vote. Gronke questions Wright's conclusions concerning both the cause and effect of the misreported vote, noting that inadequate explanations are offered for the reasons respondents overreport only their Senate vote and not others, and that Wright's model is fundamentally flawed and "misspecified" (a "dummy" variable for measuring voting for the Republican candidate is called "inappropriate"). A final criticism concerns how Wright demonstrated the effects of bias, that is, by comparing NES/SES data with that obtained from exit polls conducted by ABC News and CBS News. The "danger" in comparing two very different surveys is discussed. Gronke presents evidence to support his views on each of these points and offers an alternate model of overreporting which implicates the survey instrument and certain characteristics of the voter (for example, confusion, exaggeration, and the election results). The NES/SES response rate is termed "unacceptably low," with bias resulting. (13 endnotes, 8 references)

568. Presser, Stanley, and Michael Traugott. "Little White Lies and Social Science Models: Correlated Response Errors in a Panel Study of Voting." *Public Opinion Quarterly* 56, no. 1 (Spring 1992): 77-86.

Presser and Traugott begin with the following statement: "One interpretation for the common survey finding that the background characteristics of vote overreporters resemble those of actual voters is that misreporters usually vote" (p. 77). The focus of the research is whether or not those individuals who misreport their voting behavior in one election had regularly voted in prior elections. To test this hypothesis the authors analyzed data from the 1972, 1974, and 1976 Michigan Election Panel. (The data were originally collected by the Institute for Social Research at the University of Michigan.) A national sample of individuals, interviewed face-to-face following the November 1976 election, were asked if they had voted that year. These responses were then validated by actual voting records for 1976, as well as for 1972 and 1974. The results indicate that (1) the hypothesis that misreporters regularly voted in earlier elections was unsupported; (2) the prior turnout level for the 1976 misreporters was significantly lower than that for the 1976 validated voters; (3) the 1972 and 1974 validated turnout of the 1976 misreporters was very low; (4) misreporting was a "fairly stable" respondent characteristic in that respondents who misreported in one interview tended to do so in each of the other two interviews; and (5) education was related to self-reported voting but not to validated voting. The authors conclude that respondent errors can lead researchers to incorrect conclusions about the correlates of voting, and that self-reporting can distort resulting data "in favor of commonsense models of the world." (5 footnotes, 12 references)

569. Wright, Gerald C. "Errors in Measuring Vote Choice in the National Election Studies, 1952-88." *American Journal of Political Science* 37, no. 1 (February 1993): 291-316.

The primary source of data for the analysis was the 1952-1988 National Election Studies (NES) cumulative study. The seventeen studies included represent the major data resource used by political scientists during the last thirty-plus years for researching U.S. electoral behavior. Based on this body of literature, it is generally assumed that the information respondents provide to NES interviewers reflects how they actually voted in an election. Wright maintains that systematic measurement errors in vote choice seriously undermine the utility of NES data, with a significant number of respondents overstating their support for the winning candidate (that is, "a bias for the winner"). The reported votes for four offices—president, U.S. senator, U.S. representative, and governor—were compared to actual election outcomes. The assumption was that misreports occur among the politically least sophisticated voters, with failed recall as the basis of the problem. A modest overall prowinner bias was found for the presidency, serious bias throughout for senator and governor, and serious bias in House elections only since 1978, when there was a change in question format. The level of

misreporting in favor of the winner was 1.5 percent across presidential contests, and 4 to 7 percent for senator, representative, and governor. Other topics addressed include the effect of question wording and context, the role of nonvalidated voters, the presence of a proincumbent bias, and the impact of interview timing. Some options for addressing misreporting are to “do nothing, make adjustments at the point of estimation, obtain better data, and ask research questions that avoid the problem” (p. 312). Wright observes that knowledge acquired about individuals does not translate into “insights about the behavior of electorates.” (11 footnotes, 34 references)

570. Wright, Gerald C. “Misreports of Vote Choice in the 1988 NES Senate Election Study.” *Legislative Studies Quarterly* 15, no. 4 (November 1990): 543-63.

The focus of the presentation is the 1988 National Election Study’s Senate Election Study (NES/SES). According to Wright, systematic error exists in reports of the prime dependent variable in the dataset—reported vote for candidates to the U.S. Senate. The problem is identified in this way: respondents overstate support for the winning candidate, with the probability of misreports increasing as the gap between the interview date and election day widens. Data from the NES/SES were compared to that obtained from state exit polls conducted by ABC News and CBS News on election day in 1988. The results of these exit polls indicated no evidence of bias for either the presidential or senatorial votes. Although the NES/SES state presidential totals showed no apparent bias, the Senate winner’s vote was exaggerated by a factor of 50 percent. The author examines three possible sources of misreporting: bandwagon effects, survey instrument effects, and time effects. Neither bandwagon nor instrument effects were found to account for the nature of misreports in the NES/SES. However, with regard to time effects, the winning candidates appeared to do better with the passage of time, as some people do not wish to be associated with losing candidates. Wright concludes that the processes generating the misreports are time related and that interviewing should be completed much closer to election day. Two consequences of misreport bias for explanations of voting in senatorial elections are “overestimation of the impact of incumbency-related variables and underestimation of the effects of national forces” (p. 543). Implications for NES methodology are discussed. (8 endnotes, 22 references)

571. Wright, Gerald C. “Reported versus Actual Vote: There Is a Difference and It Matters.” *Legislative Studies Quarterly* 17, no. 1 (February 1992): 131-42.

Wright responds to criticisms of his 1990 article [Item No. 570] by Paul Gronke [Item No. 567]. Gronke believes that the problem in the vote for U.S. senator in the 1988 National Election Study’s Senate Election Study (NES/SES) is far less serious than Wright indicates—perhaps statistically insignificant. Further, Gronke maintains that misreporting does not yield substantive biases, and that Wright’s

model is “misspecified.” Wright defends his research in terms of the time effects model utilized; the appropriateness of the dependent variable selected; the degree of seriousness of the misreporting and the consequences arising from it; and the value of comparing media-produced exit-poll data to that generated by the NES/SES. (8 endnotes, 2 references)

POPULATION STUDIES

572. Dillman, Don A. “Recent Advances in Survey Data Collection Methods and Their Implications for Meeting Rural Data Needs.” Chap. 3 in *Rural Information Systems: New Directions in Data Collection and Retrieval*, edited by Rueben C. Buse and James L. Driscoll, 52-71. Ames, IA: Iowa State University Press, 1992. 458p.

The author reviews some of the important developments in survey research during the past two decades, noting in particular the widespread use of telephone and mail surveys as the data collection methods of choice. Recent comprehensive bibliographies are cited that identify over 500 publications on telephone surveys and about 400 on mail surveys. The traditional face-to-face interview, described as both costly and labor intensive, has become not only a victim of the information age, but also of certain societal trends such as working women and concerns about safety. In addition, declining response rates and the low survey literacy of society have impacted the survey process. Dillman discusses the implications of several recent data collection advances. These are the capability to conduct cost-effective surveys of small groups and geographic areas, shorter turnaround time with overnight surveys now commonplace, and the proliferation of survey organizations. A number of concerns are expressed about contemporary surveys, including increased error possibilities, incomplete reporting of survey methodology by the media, the lack of an “official” academic field of survey research, and too much specialization within the survey process. Mixed-mode responding and dual-frame sampling are seen as challenging techniques for the 1990s. (2 endnotes, 27 references)

573. Dillman, Don A. “Surveys and Rural Data Needs.” Chap. 9 in *Rural Data, People, and Policy: Information Systems for the Twenty-First Century*, edited by James A. Christenson, Richard C. Mauer, and Nancy L. Strang, 145-60. Rural Studies Series of the Rural Sociological Society, edited by Forrest A. Deseran. Boulder, CO: Westview Press, 1994. 232p.

Dillman maintains that, on the eve of the twenty-first century, two issues are converging that will change the manner in which surveys have been conducted to meet rural data requirements and to develop rural information systems. The first deals with changes in the type of data collected; namely, a transition from traditional surveys focusing on agricultural statistics to broader-based surveys of specific issues and small geographic regions. The second issue is the need to

collect and analyze data rapidly. Comments are made on the shift from face-to-face interviewing to telephone and mail options becoming the prevailing collection modes since the 1970s, and how the federal government has been reluctant to adopt new collection and analysis procedures relevant to rural environments. To reduce measurement error, Dillman advocates the use of mixed-mode surveys, that is, those that feature some combination of the primary data collection methods. A division of labor between the federal government and university-based survey organizations is recommended. (1 endnote, 19 references)

574. Ebeling, Jon S., and Frederick Shockley. "Evaluating Survey Research for Cities." *Western City* 73, no. 8 (August 1997): 7-8.

Surveys can be used as a tool for city administrators seeking to obtain feedback as to whether community members are adequately informed about an issue on which they will vote. Surveys provide a way to connect with the citizenry and to assess the quality of city services. The standard techniques for collecting data are reviewed, noting that each has advantages, disadvantages and associated costs. Mail surveys, although less costly than the alternatives, do not permit interviewer-respondent interaction. Telephone interviews allow for the clarification of questions and broader coverage of the population of interest. Face-to-face interviewing is expensive, and interviewer supervision is more difficult. Suggestions are offered for negotiating a successful contract with a survey organization: check the references of the company; insist on intelligible reports and clearly labeled tables and graphs; be certain that demographic information is also collected; insist on adequate sampling; inquire about callback practices; and require complete computer analysis.

575. McBeth, Mark K., "Using a Survey in the Rural Planning Process." *Economic Development Review* 11, no. 2 (Spring 1993): 75-80.

Much of rural America retains the values, traditions, and characteristics of preindustrial America, thereby requiring special consideration when being surveyed. Rural surveys "often become little more than bureaucratic reports conducted to meet federal, state, or local mandates or to please democratically-minded community planners" (p. 77), and often do not involve citizen input in the planning process. McBeth demonstrates how a survey, originating from the Center for Rural Economic Development at Idaho State University, can assist in obtaining citizen data. The survey is divided into three sections: quality of life, economic development, and demographics. The author demonstrates how rural leaders and planning groups can use the method for determining a community's value structure, for consensus building and conflict resolution, and for identifying the age, income, years lived in the community, and so forth, of the residents. The article is directed toward the economic development professional whose role is one of researcher, mediator, trainer, and resource provider. (15 endnotes)

PSYCHOLOGY

576. Krosnick, Jon A. "Survey Research." Chap. in *Annual Review of Psychology*, vol. 50, edited by Janet T. Spence, John M. Darley, and Donald J. Foss, 537-67. Palo Alto, CA: Annual Reviews, 1999. 773p.

Krosnick covers a wide array of core issues in survey research, and, in most cases, presents contemporary research which significantly challenges conventional wisdom. Major areas addressed include (1) the options available for sampling design; (2) rigid [that is, standardized] interviewing versus conversational interviewing; (3) questionnaire design and pretesting, including behavioral coding, "think-aloud" protocols, and other cognitively oriented approaches; (4) the labeling of rating-scale points (Krosnick recommends that all points on the scale be labeled with words rather than numbers); (5) the prevalence and impact of the social desirability bias; (6) the concepts of "satisficing" and "optimizing"; (7) question format and context effects; (8) response rates; (9) the nature and effects of acquiescence (that is, the tendency of some respondents' to agree with any assertion made in a question, regardless of content); (10) the discrepancy between ratings and rankings; and (11) how the selection of no-opinion response options impacts the reliability of the data obtained. The prejudice against low response rates is called into question. When interviewers are permitted to explain a question and the corresponding answer options, the validity of the results is substantially increased. Satisficing is the manner of response in which respondents "compromise their standards and expend less energy." Optimizing is the opposite—a process in which the respondent carefully considers the question, searches memory, forms a judgment, and selects one of the options provided. Considering these last two forms, a new theory of satisficing is being used to explain a range of response patterns. (233 references)

PUBLIC ADMINISTRATION

577. Braverman, Marc T., and Jana Kay Slater, eds. *Advances in Survey Research*, no. 70. *New Directions for Evaluation*, A Publication of the American Evaluation Association, edited by Lois-ellin G. Datta. The Jossey-Bass Education Series. San Francisco, CA: Jossey-Bass Publishers, 1996. 110p.

The contributions to this quarterly sourcebook, a publication that concentrates on the empirical, methodological, and theoretical aspects of evaluation and related fields, cover a wide range of topics—government performance, tax policy, energy, the environment, mental health, education, job training, personnel evaluation, and public health—all emphasizing evaluation and assessment issues. The editors focus on current theories and research related to survey methodology and conclude that "the considerations relating to good survey research apply also to good use of surveys in evaluation" (p. 1). Brief overviews of the presentations are provided. The

following entries have been selected from the volume, with individual annotations found at the indicated item numbers:

- Chapter 1: "Does the Public Have a Role in Evaluation? Surveys and Democratic Discourse." [Henry - Item No. 512].
- Chapter 2: "Sources of Survey Error: Implications for Evaluation Studies." [Braverman - Item No. 408].
- Chapter 4: "Understanding Differences in People's Answers to Telephone and Mail Surveys." [Dillman, Sangster, Tarnai, and Rockwood - Item No. 273].
- Chapter 5: "Household-Level Determinants of Survey Nonresponse." [Couper and Groves - Item No. 386].
- Chapter 6: "Applications of the Rasch Model to Evaluation of Survey Data Quality." [Green - Item No. 427].
- Chapter 7: "Translating Survey Questionnaires: Lessons Learned." [McKay, Breslow, Sangster, Gabbard, Reynolds, Nakamoto, and Tarnai - Item No. 86].

578. Folz, David H. *Survey Research for Public Administration*. Thousand Oaks, CA: Sage Publications, 1996. 193p.

According to Folz, public officials can benefit from "well-planned, carefully designed, and efficiently implemented" surveys. The type of survey under consideration is the *citizen survey*, a practical method of inquiry that asks a sample of citizens (or a representative subset thereof) about their opinions, attitudes, perceptions, and behaviors. The book is organized into seven chapters which follow the stages of the survey process. Initially, Folz discusses the reasons why surveys should be conducted, as well as how they can be misused. The author then examines survey planning, describing this step as the most critical aspect. Topics discussed include identifying the target population, selecting the data collection mode, and deciding on the purposes and objectives of the study. Sample size, sampling designs, and the importance of weighting are considered in the following chapter. The design of the survey instrument, covered in chapter 4, deals with issues of question order, the types of questions, how to construct indices and scales, and the importance of pretesting. Folz next describes the coding process, the three basic methods of data entry, and computer-assisted telephone interviewing. Procedures required for summarizing and analyzing survey findings using SPSS [Statistical Package for the Social Sciences] for Windows software are discussed. In conclusion, suggestions are offered for preparing a well-organized, clearly written, and concise report, appropriate for use by public administrators, elected officials, and interested citizens, and press

releases for “everyone else.” The volume was designed primarily as a textbook, but the arrangement also permits use as a reference book. The appendixes list random numbers and include an example of an interviewer’s call sheet. (41 references)

579. Folz, David H. *Surveying Citizens: A Handbook for Municipal Officials Who Want to Know What Their Citizens Think*. Knoxville, TN: University of Tennessee, Municipal Technical Advisory Service, 1995. 103p.

The approach taken is to provide a handbook appropriate for varying levels of expertise—from easy-to-understand instructions for the less experienced official who needs to conduct a survey—to statistical explanations and detailed descriptions of software for the more sophisticated reader. The *citizen survey* is seen as a useful tool for decision makers at nearly all stages of the policy-making process, including formulation, implementation, and evaluation. In addition, this type of survey can encourage citizen participation in government decision making. Several inappropriate applications would be to substitute sample surveys for popular votes, to use them to “get ammunition for or against a particular cause or action,” or to duplicate information readily found elsewhere. Folz describes and discusses eight stages of the survey process: planning, design, sampling, staff organization and training, pretesting, data coding and processing, data analysis (including a section on how to use SPSS [Statistical Packages for the Social Sciences] for Windows), and report writing and media releases. Throughout, it is emphasized that attention to the details of questionnaire construction and implementation, combined with adequate resources, should produce a survey with valid, reliable, and useful results. Each chapter contains explanatory examples and figures to guide the reader through the survey process. An appendix includes a list of assistance resources available at the University of Tennessee; an example of a callback sheet; and tables of random numbers, normal distributions, and chi-square values. (18 references)

580. Simpson, Antony E. *Information-Finding and the Research Process: A Guide to Sources and Methods for Public Administration and the Policy Sciences*. Westport, CT: Greenwood Press, 1993. 491p.

Two sections of the guide are of interest to the present bibliography: “Surveys and Opinion Polls” (Section 2.7.2, pp. 294-97), and “Polls and Questionnaires” (Section 2.2, pp. 356-58). In the first, Simpson cites twenty titles covering general information about polls and surveys, various approaches for conducting polls and surveys, and sources for presenting survey results, such as Gallup and Harris. Brief annotations accompany the citations. (5 endnotes) In section 2.2, seven annotated references are included. Other parts in the book, especially chapter 12, contain citations to relevant resources available in print and computerized formats. Both sections reference Walden’s 1990 annotated bibliography [Item No. 17].

RELIGION

581. Chaves, Mark, and James C. Cavendish. "More Evidence on U.S. Catholic Church Attendance." *Journal for the Scientific Study of Religion* 33, no. 4 (December 1994): 376-81.

The authors contribute new evidence to the controversy surrounding church attendance rates in the United States. Some previous research indicates widely varying rates for Protestant and Catholic weekly church attendance. At the center of the disagreement is whether self-reported church attendance rates are accurate, or reflective of serious overreporting as compared to actual head counts. (Both Gallup and the General Social Survey report high rates of attendance—45 percent for Protestants and 51 percent for Catholics.) Chaves and Cavendish review a study by C. Kirk Hadaway, Penny Long Marler, and Mark Chaves [Item No. 583] that collected head-count data from eighteen Catholic dioceses. The present authors continued this line of investigation by collecting data on an additional thirty-one dioceses, thereby permitting calculation based on a total of forty-eight dioceses which conducted head counts in a systematic way circa 1990. These dioceses represent 28 percent of 174 territorial dioceses in the continental United States and contain approximately 38 percent of all U.S. self-identified Catholics. The data were then compared to survey-based estimates of attendance. The authors found that in only two dioceses were the attendance rates at or above the Gallup figure of 51 percent. When aggregated, the figure is 26.7 percent, or about half that of self-reports. The results are thought to lend empirical support to the notion of overinflated self-reports, and that the findings can be generalized to the Protestant population. (6 footnotes, 12 references)

582. Hadaway, C. Kirk, Penny Long Marler, and Mark Chaves. "Overreporting Church Attendance in America: Evidence That Demands the Same Verdict." *American Sociological Review* 63, no. 1 (February 1998): 122-30.

The authors reply to comments by Michael Hout and Andrew Greeley [Item No. 585] (and to two other authors not selected for inclusion in this bibliography). Hadaway and others presented evidence in a 1993 article [Item No. 583] to support their claim that self-reported church attendance figures are substantially overstated, and that actual church attendance is far below the 40 percent level reported by most social surveys and public opinion polls. Hout and Greeley, using data from the General Social Survey, write from the perspective that survey-based rates are not substantially overstated. They question the accuracy of the "actual counts" methodology, the impact of a social desirability bias on overreporting, and the "quasi-official estimate" provided by pastors, secretaries, and other officials. In the present article Hadaway and others respond that new evidence from continuing research on church attendance indicates that "their [Hout and Greeley's] criticisms are groundless, their survey-based 'internal checks' are not persuasive, and that church attendance is indeed overreported by many Americans" (p. 123). The authors maintain that "every piece of available evidence" points to a substantial gap

between self-reports and actual counts. Other points of criticism are defended. (8 footnotes, 16 references)

583. Hadaway, C. Kirk, Penny Long Marler, and Mark Chaves. "What the Polls Don't Show: A Closer Look at U.S. Church Attendance." *American Sociological Review* 58, no. 6 (December 1993): 741-52.

Several sources are cited that indicate a high level of church attendance (as much as 40 percent) in the United States. American religious participation is often characterized as "strong and stable," with Americans being "an exceptionally religious population, little affected by secularizing trends" (p. 741). Other research, however, suggests that self-reported attendance figures are substantially overstated. Hadaway and others provide empirical evidence to support this latter perspective by using a variety of data sources and data collection procedures to compare attendance rates based on counts of attendees, to rates based on random samples of respondents who were asked to self-report. The setting selected was Ashtabula County, Ohio, a site located in northeastern Ohio with about 100,000 residents. A telephone survey indicated that 66.4 percent of the respondents identified themselves as Protestant, as compared to 24.8 percent for Catholics. Of the Protestants, 35.8 percent self-reported church attendance. Attendance counts were obtained from denominational yearbooks, telephone interviews, letters, church visits, and newspaper advertisements. Based on the estimate of the number of Protestants and the attendance count, the authors estimated that only 19.6 percent of the Protestants attended one of the 159 churches in the county during an average week. Gallup figures were 130 percent higher; the Ashtabula survey was 83 percent higher. Of the Catholic residents in the county, 53 percent reported church attendance in the last week. Since the Catholic churches in Ashtabula County did not collect attendance data, statistics from eighteen dioceses located in various regions around the country were analyzed. Actual attendance was about half of Gallup and General Social Survey data, with approximately 25 percent being the "true" attendance rate. Factors such as nonresponse, over- or underreporting, a social desirability bias, and errors in recall of frequency behaviors are discussed in terms of their impact on the estimates. Based on a review of trend data for various denominations, the authors maintain that there is a decline in church attendance rates. (22 footnotes, 52 references)

584. Hooker, Clarence. "Opinion Surveys and Demographic Profiles: Toward Understanding Cultures of Popular Religion?" *Journal of Popular Culture* 32, no. 1 (Summer 1998): 81-90.

The role of public opinion surveys and demographic data in the study of popular religion is discussed. Hooker maintains that much prior literature published in the *Journal of Popular Culture* (JPC) has failed to utilize some of the newer methodological approaches and fields of inquiry available to social science researchers, concentrating instead on methods of literary criticism and content analysis studies. In addition, the meaning of popular culture has largely been

ignored. Two articles were selected from *JPC* to demonstrate how opinion surveys (such as those by conducted by Gallup, Harris, and others), and census data [by superimposing Area of Dominant Influence (ADI) counties over Bureau of Economic Analysis (BEA) boundaries] may be profitably employed in popular culture studies. The articles examined were written by Douglas T. Miller ["Popular Religion in the 1950s: Norman Vincent Peale and Billy Graham." *JPC* 9 (Summer 1975): 66-76.], and Stephen W. Tweedie ["Viewing the Bible Belt." *JPC* 11 (Spring 1978): 865-75.]. These papers were selected for analysis because they raised questions and/or reached conclusions having a direct impact on cultures of popular religion. In addition, the articles dealt with a time period when large amounts of survey and/or census data were available. When Gallup data were compared to Miller's figures, and ADI/BEA boundaries were applied to Tweedie's data, quite different patterns emerged with regard to church attendance; the popularity of religious figures of the time; what segments of the population were influenced by religious enthusiasm; and how estimates of religious orientation should be obtained. (18 endnotes)

585. Hout, Michael, and Andrew Greeley. "What Church Officials' Reports Don't Show: Another Look at Church Attendance Data." *American Sociological Review* 63, no. 1 (February 1998): 113-19.

Hout and Greeley write in response to a 1993 article by C. Kirk Hadaway, Penny Long Marler, and Mark Chaves [Item No. 583] regarding church attendance by Protestants and Catholics in the United States. Hadaway and others used "actual counts" of Protestant church attendance in Ashtabula County, Ohio, and official Catholic head counts from eighteen dioceses, to demonstrate that self-reported survey data are substantially overreported (by a factor of two). Hout and Greeley question the accuracy of the actual counts methodology, providing reasons why the data are "neither as direct nor as reliable as the term implies." Also disputed is the importance in overreporting of the social desirability factor (that is, respondents' perceptions that the interviewer expects them to say they attend church). Spousal reports of church attendance, based on statistics from the 1986-1989 General Social Surveys (GSS), suggest "no bias in data," but married respondents reported different attendance rates for their spouses than their spouses reported for themselves. In a second internal check, the authors examined data on "intellectuals"—that is, those they identify as having completed at least twenty years of education. Again, data from the GSS (1972-1993) were analyzed. The figures suggest that the ratio of actual attendance to survey reports is closer to 1.1 to 1 than 2 to 1. The authors suspect that part, if not all, of the discrepancy is due to Hadaway and others' reliance on the "quasi-official estimates" provided by pastors, secretaries, and other church officials for the actual count. The view that bias in self-reports has increased in recent years is rejected. (12 footnotes, 9 references)

586. Jelen, Ted G., Clyde Wilcox, and Corwin E. Smidt. "Biblical Literalism and Inerrancy: A Methodological Investigation." *Sociological Analysis* 51, no. 3 (Fall 1990): 307-13.

Different survey questions posed by a variety of national polling organizations reflect "diverse understandings" concerning the authority of the Bible. Two frequently used alternatives are, "The Bible is the Actual Word of God, and is to be taken literally, word for word," and "The Bible is God's Word and all that it says is true." Although the first format is seen to be acceptable to a biblical *literalist*, it might be problematic for an *inerrantist* or an *infallibilist*—groups that believe to varying degrees that biblical authority is free from error. The second version of the question might be acceptable to all three perspectives. Jelen suggests that neither measure allows respondents to choose directly between a literal and an inerrant response. A new item is tested in which the respondent is offered both choices in a single statement. The data come from a larger survey concerning the political and religious beliefs of urban African Americans. The sample, consisting of 271 randomly selected African Americans residing in Washington, D.C., was weighted by educational attainment, as the respondents were somewhat better educated than census data revealed for the area. African Americans were chosen because they "may be more likely than whites to be exposed to messages from religious elites that distinguish among conservative theological positions" (p. 309). All interviews were conducted by telephone. Four statements about the authority of the Scriptures, reflecting both a literalist response and an inerrantist alternative, were presented. The results indicate that respondents were able to make "relatively precise" distinctions between various interpretations of the Bible. The differences between literalism and inerrancy were found to be meaningful to most "doctrinally conservative" respondents. (4 footnotes, 9 references)

587. Presser, Stanley, and Linda Stinson. "Data Collection Mode and Social Desirability Bias in Self-Reported Religious Attendance." *American Sociological Review* 63, no. 1 (February 1998): 137-45.

The authors comment on an article by C. Kirk Hadaway, Penny Long Marler, and Mark Chaves [Item No. 583], who found that church attendance counts for 159 Protestant churches in Ashtabula County, Ohio, and for eighteen Catholic dioceses around the nation, were only about half the level reported in surveys. Further, Hadaway, Marler and Chaves speculated that over the past fifty years there has been a decline in religious attendance in the United States. Presser and Stinson review possible sources of respondent misreporting, such as memory lapses, social desirability pressures, and misinterpretation of the question. The latter type of error can be avoided by asking respondents about how they used their time on a specific day, rather than for a specific activity, such as church attendance. The level of religious attendance reported from an Environmental Protection Agency survey conducted with time-use items from 1992 to 1994 by the Survey Research Center at the University of Maryland was compared to

results from Gallup surveys and the General Social Survey (GSS) conducted by the National Opinion Research Center for the same time period, but using direct items. Self-administered and time-use items were found to reduce claims of weekly religious attendance by about one-third. To assess longitudinal change, the authors compared a wide variety of additional surveys: several time-use studies, Gallup, the GSS, and two longitudinal surveys of young people. Little change was noted over the past thirty years in reports to the direct items posed by Gallup and the GSS. However, the time-use items showed “a dramatically different pattern,” with substantial declines in religious attendance over the past three decades. Self-administered items about church attendance, as compared to interviewer-administered questions, were found to minimize social desirability pressures, thereby reducing misreporting errors to a similar amount as time-use items. The results support the findings by Hadaway, Marler, and Chaves that respondents substantially overreport church attendance, that misreporting is due primarily to social desirability pressures associated with face-to-face interviewing, and that misreporting has increased in the past thirty years, thus distorting trends in religious attendance. (13 footnotes, 21 references)

588. Smith, Tom W. “A Review of Church Attendance Measures.” *American Sociological Review* 63, no. 1 (February 1998): 131-36.

Responding to claims that church attendance is “grossly overreported” in surveys, Smith reviews several recent studies of church attendance [Item Nos. 581-83, 585, and 587] and the results of several public opinion polls which produced conflicting estimates according to whether head-count approaches, or self-report survey-based methods were employed (the head-count rates were approximately half those of self-reports). The author reports on a series of experiments conducted on the 1996 General Social Survey (GSS), which used a standard item and a series of variant items. The standard item read, “How often do you attend religious services?” The experimental questions, designed to minimize telescoping and reduce social desirability effects, asked respondents the following: (1) their overall activities during the last seven days; (2) on what day(s) religious services were attended during that time period; (3) if they had attended a weekly worship service; (4) whether they had watched a religious program on television or listened to a religious program on the radio; and (5) if they had attended some other type of religious event or meeting during the last seven days. Although the results of the GSS experiment (which indicated moderate levels of overreporting) and other experiments were mixed, the utilization of methods designed to reduce telescoping and social desirability biases produced lower reported levels of church attendance. Smith suggests that it is possible that respondents’ broader definition of the word “attend” than that intended by researchers contributed to differences in church attendance rates. Other factors, such as the difficulty the head-count method has in separating adult attendance from total attendance, and the frequent exclusion of non-weekend religious activities, also impacted overreporting. Underreporting was not a factor, although it was found that 22.7 percent of the nonattenders “were religiously active in some way during the week.” A table lists some prior

study comparisons of church attendance estimates. Appendix A provides the 1996 GSS question wordings. (9 footnotes, 11 references)

SEX RESEARCH

General

589. Bancroft, John, ed. *Researching Sexual Behavior: Methodological Issues*. The Kinsey Institute Series, vol. 5, edited by John Bancroft. Bloomington, [IN]: Indiana University Press, 1997. 461p.

The volume includes revised and expanded versions of papers presented at a small international meeting held from 26-28 April 1996 at the Kinsey Institute for Research in Sex, Gender, and Reproduction at Indiana University. The attendees represented most of the recent large-scale surveys conducted in the United States and Europe, as well as other researchers with expertise in methodological procedures. In the introduction (pp. ix-xvi), Bancroft attributes the "unprecedented surge" of survey research into sexual behavior primarily to world concern over HIV/AIDS. Summaries are provided for the twenty-six contributions contained within. There is a discussion section following each of the parts. (2 footnotes) The following items have been selected from the volume, with individual annotations found at the indicated item numbers:

Part 1: Linking Research to Policy

"Sexuality Research in the United States." [Di Mauro - Item No. 592].

Part 2: Methodology for the Individual

"Survey Measurement of Sexual Behavior: Problems and Progress." [Turner, Miller, and Rogers - Item No. 598].

Part 3: Methodology in Specific Contexts

"Measuring Sexual Behavior among Teenage Males in the United States." [Sonenstein, Ku, and Pleck - Item No. 605].

"Item Nonresponse in the National AIDS Behavioral Surveys among African American and White Respondents." [Peterson and Catania - Item No. 391].

"The Effects of Question Wording, Interviewer Gender, and Control on Item Response by African American Respondents." [Catania, Binson, Peterson, and Canchola - Item No. 129].

“Researching Sexual Behavior: Methodological Issues for Hispanics.” [Sabogal, Binson, and Catania - Item No. 604].

“Sexual Research with Latino Men Who Have Sex with Men: Methodological Issues.” [Carballo-Diéguez - Item No. 600].

“Sexual Behavior Research: Studying Bisexual Men and Women and Lesbians.” [Doll - Item No. 601].

Part 9: Conclusions

“Sex Surveys in the Context of Survey Research.” [Kennedy - Item No. 594].

Part 10: Postconference Papers

“Measuring Social Networks Using Samples: Is Network Analysis Relevant to Survey Research?” [Laumann and Schumm - Item No. 142].

“A Model for Investigating Respondent-Interviewer Relationships in Sexual Surveys.” [Catania - Item No. 189].

590. Catania, Joseph A., David R. Gibson, Dale D. Chitwood, and Thomas J. Coates. “Methodological Problems in AIDS Behavioral Research: Influences on Measurement Error and Participation Bias in Studies of Sexual Behavior.” *Psychological Bulletin* 108, no. 3 (November 1990): 339-62.

Although an “unprecedented” number of studies on human sexuality have been initiated in response to the AIDS epidemic, methodological developments have not kept pace in meeting the requirements of AIDS research focusing on certain diverse populations at risk for infection—namely, adolescents, gay men, intravenous drug users, ethnic minorities, and elderly transfusees. In addition, prior research findings may not generalize to the unique problems posed by the epidemic. Through a review of existing literature on measurement error and participation bias in sex research, the authors discuss the problems of gathering sexual information in the context of AIDS. Four general indices of measurement error are described: item refusal, overreporting, underreporting, and test-retest reliability. Each is discussed in terms of how they are influenced by the interviewer, the respondent, the survey instrument, and the method of data collection. In the concluding remarks the authors identify numerous areas in need of future investigation. Foremost, researchers need to “map” the terminology associated with AIDS-relevant sexual behavior in such a manner as to be readily comprehended by diverse groups of people. The second priority is to reduce the threat associated with questions about sex, thereby encouraging participation and enhancing overall data quality. (1 footnote, 127 references)

591. Catania, Joseph A., Diane Binson, Ariane van der Straten, and Valerie Stone. "Methodological Research on Sexual Behavior in the AIDS Era." *Annual Review of Sex Research* 6 (1995): 77-125.

Current techniques for assessing adult sexual behavior, particularly AIDS-relevant sexual behaviors, are discussed, with the authors observing that methodological research has not kept pace with the demand for data that has been stimulated by the AIDS epidemic. The major sex surveys reviewed initially are grouped into two broad categories: general surveys covering an array of sex topics, and health surveys devoted primarily to HIV and contraception. Specific issues endemic to AIDS-related surveys are identified. The authors also consider existing research on the reliability and validity of self-reported sexual behavior. Respondents' motivation, comprehension and memory problems, privacy requirements, and their need to embellish actual sexual experiences are factors contributing to data accuracy. The pretesting of the survey instrument is vital for identifying question wording and context difficulties. The use of focus groups, cognitive interviewing, and expert panels is advocated. Indices of measurement error include test-retest reliability, recall reliability, self-preservation bias, motivation, and race and cultural issues. The advantages and disadvantages of the primary approaches for data collection—face-to-face and telephone interviews, and self-administered questionnaires—are evaluated, with each said to provide different mixes of anonymity, privacy, and credibility. The authors maintain that it is unclear if one mode has a distinct advantage over the others when questions of a sexual nature are involved. The role of interviewer variables is discussed. Prior studies have found few interviewer effects on responses to sexual questions, although gender effects have been observed. Appendix A provides the measures for the perceived change study. Appendix B provides the questions for the National AIDS Behavioral Methodology Study. (2 footnotes, 167 references)

592. Di Mauro, Diane. "Sexuality Research in the United States." In *Researching Sexual Behavior: Methodological Issues*, edited by John Bancroft, 3-8. The Kinsey Institute Series, vol. 5, edited by John Bancroft. Bloomington, [IN]: Indiana University Press, 1997. 461p.

Di Mauro presents an overview of the Sexuality Research Assessment Project [*Sexuality Research in the United States: An Assessment of the Social and Behavioral Sciences*. New York, NY: Social Science Research Council, 1995. 100p.]. The author, who was director of the project, writes that the report "highlights the important research trends, priority topic areas and issues, obstacles, and gaps in sexuality research" (p. 3). Sex research in this country is viewed as fragmented and problem-driven, primarily due to concerns over teenage pregnancy and sexually transmitted disease. Consequently, other vital areas of research are frequently neglected. Numerous methodological issues are reviewed, such as design and execution, the operationalizing of concepts, sample size and selection, participation and self-report biases, and the impact of gender and ethnicity on data quality. The need to utilize both qualitative and quantitative

methods is emphasized. Among other recommendations the author suggests providing comprehensive training in sexuality, and the use of research methodologies that involve specialized programs of study and teaching fellowships. (1 reference)

593. Ericksen, Julia A., with Sally A. Steffen. *Kiss and Tell: Surveying Sex in the Twentieth Century*. Cambridge, MA: Harvard University Press, 1999. 270p.

The authors identify the surveys conducted during the last one hundred years that included questions about sexual behavior. Approximately 750 examples were located, a number significantly larger than expected. The chapters of the book having the greatest direct bearing on the practice of survey research are the first, "Asking Questions about Sex" (pp. 1-13), and the last "Reforming Sex Research" (pp. 219-30). In between are considerations of such topics as sex before marriage, gay men and AIDS, and the relationship between politics and the manner in which sex surveys can be conducted. Ericksen and Steffen explore the impact of the researcher on the results, starting with overall prejudices and biases, to the writing and interpretation of the data. The history presented documents how biases in both directions (liberal and conservative) have had major consequences with respect to our understanding of human sexuality. There are thirty pages of endnotes.

594. Kennedy, John M. "Sex Surveys in the Context of Survey Research." In *Researching Sexual Behavior: Methodological Issues*, edited by John Bancroft, 355-60. The Kinsey Institute Series, vol. 5, edited by John Bancroft. Bloomington, [IN]: Indiana University Press, 1997. 461p.

The context for Kennedy's comments was a 1996 international meeting held by the Kinsey Institute for Research in Sex, Gender, and Reproduction at Indiana University. Kennedy, writing about the papers presented from the perspective of both a sociologist and a survey researcher, contends that issues of methodology are forefront in the minds of sex survey researchers, and that they are highly aware of the concept of *total survey error* (especially sampling error) and its impact on data quality. The author advocates research on nonhousehold populations—namely, the military, students in resident halls, prisoners, the homeless, and people confined to mental institutions. Additional consideration should be given to nonparticipation rates; concept formation and definition difficulties; cognitive interviewing techniques; interviewer monitoring; and "researcher error" (that is, the approaches and values each researcher brings to her/his research).

595. Miller, Peter V. "They Said It Couldn't Be Done: The National Health and Social Life Survey." *Public Opinion Quarterly* 59, no. 3 (Fall 1995): 404-19.

The National Health and Social Life Survey (NHSLs), better known as "the Sex Survey," is considered to be the most extensive sexual behavior survey,

utilizing a national household sample of 3,400. The pretest for a much larger study, the Survey of Health and AIDS-Related Practices (SHARP), became the researchers' final product—now called the NHSLs. Miller describes the survey, conducted in 1992 by the National Opinion Research Center at the University of Chicago, as a “groundbreaking” study of sexual behavior—one that “reinforces belief in ‘tried-and-true’ survey practices applied in a novel setting” (p. 404). NHSLs findings are published in book format under two titles: *The Social Organization of Sexuality: Sexual Practices in the United States* (Laumann, Edward O., and others, 1994), and *Sex in America: A Definitive Study* (Michael, Robert T., and others, 1994). Miller reviews the NHSLs in a number of contexts—historical, political, and methodological—and discusses the relationship between this survey and SHARP, an ill-fated project developed to assist the federal government in gathering data on sexual activity during the AIDS epidemic. The demise of SHARP is attributed primarily to lack of federal funding. Miller also comments on the National AIDS Behavioral Surveys (NABS), a study that focuses on groups more at risk for AIDS than the general population. NHSLs interviews were conducted face-to-face by field interviewers, although there was also a self-administered component. The questionnaire covered many aspects of sexuality including practices, fantasies, social networks, and sexually transmitted diseases. The response rate approached 80 percent—an impressive figure for any national survey not conducted by the Bureau of the Census. Miller believes the NHSLs demonstrates that traditional survey approaches can be applied to the study of sexual behavior, and that the topic of sexuality is not “off limits” to national sample survey research. (14 references)

596. Stone, Valerie E., Joseph A. Catania, and Diane Binson. “Measuring Change in Sexual Behavior: Concordance between Survey Measures.” *Journal of Sex Research* 36, no. 1 (February 1999): 102-8.

Two methods were compared for assessing sexual behavior change. The first approach, the *retrospective change method*, asks respondents about change explicitly by asking whether they have made any changes in their sexual behavior in a past time period, and if so, what were they. (This is the most commonly used technique for evaluating AIDS and STD prevention programs.) By contrast, the *longitudinal or panel method* asks respondents on two different occasions about their sexual behavior, and then compares the two sets of answers. The authors note that longitudinal research is often expensive and difficult to conduct, and studies combining the two approaches are rare. The challenges inherent in measuring sexual behavior are reviewed, such as reliance on the accuracy of self-reports, problems with the data collection mode and survey instrument, respondents' over- and underreporting of sexual activities, and the impact of the social desirability bias. For comparison, data were analyzed from the AIDS in Multi-Ethnic Neighborhoods (AMEN) Cohort Survey, a longitudinal population survey designed to assess AIDS risk behaviors and attitudes. The AMEN samples consisted of 962 heterosexual men and women and 596 gay men, all residing in high-risk neighborhoods in San Francisco. The measures examined were condom use and change in the

number of sex partners. Panel/longitudinal methods were used in waves 1 and 2; retrospective techniques were employed in wave 2, occurring about a year later. The findings indicate that, among heterosexual men and women, and gay men, there was concordance between the panel and retrospective measures for condom use. However, a small but significant level of disagreement was found among both heterosexuals and gay men on the two measures of change for the number of partners. The authors offer possible reasons for the outcome and recommend the use of more than one method for assessing change in sexual behavior studies. (26 references)

597. Turner, Charles F., Rose D. Danella, and Susan M. Rogers. "Sexual Behavior in the United States, 1930-1990: Trends and Methodological Problems." *Sexually Transmitted Diseases* 22, no. 3 (May-June 1995): 173-90.

The authors analyzed sexual behavior reports obtained in surveys of large probability samples of the U.S. population. These figures were then compared to determine changes and trends in the age of onset of sexual intercourse, and patterns of heterosexual and same-gender sexual behaviors of individuals who entered adulthood from 1930 to 1990. Secondary analysis was performed on data from four sources: (1) the 1988 through 1991 administrations of the General Social Survey; (2) the 1970 Kinsey Institute Survey; (3) the 1989 National Household Seroprevalence Survey Pretest; and (4) the 1982 and 1988 National Surveys of Family Growth (only women were interviewed). Two other surveys, the 1991 National Survey of Men and the National Survey of Adolescent Males, are briefly considered. The authors found that sample size ranged from 1,372 to 8,450 respondents; data were collected by face-to-face interviews and self-administered questionnaires (primarily the latter); and response rates ranged from 74 to 88 percent. The comparison indicates a sharp increase in women having their first heterosexual intercourse during early and mid adolescence. There was also an increase in the number of heterosexual partners for both men and women. Male-male sexual contact was relatively stable, but preliminary evidence suggests a substantial increase in female-female sexual contact. The authors acknowledge a variety of methodological challenges encountered in the analysis, such as those associated with imprecise terminology, difficulties with adolescent measurements, and problems with interviewer administration of sensitive items. Several new technologies, such as audio computer-assisted self-interviewing, are suggested for reducing measurement bias. The implications of the trends for the prevalence and incidence of sexually transmitted diseases are discussed. (57 references)

598. Turner, Charles F., Heather G. Miller, and Susan M. Rogers. "Survey Measurement of Sexual Behavior: Problems and Progress." In *Researching Sexual Behavior: Methodological Issues*, edited by John Bancroft, 37-60. The Kinsey Institute Series, vol. 5, edited by John Bancroft. Bloomington, [IN]: Indiana University Press, 1997. 461p.

The authors observe the “underinvestment” in methodological research on sexual behavior during the past four decades, noting that existing information on measurement bias has come from studies measuring other sensitive behaviors, such as illicit drug usage. However, the HIV/AIDS epidemic has prompted many groups to support survey research that examines both sexual and drug use behavior. Some of the factors (such as over- and underreporting) impacting the quality of sex surveys are reviewed. Discussion continues on the evidence of measurement bias in face-to-face and telephone surveys that ask respondents to report sensitive behavior. The use of self-administered questionnaires to reduce self-disclosure bias has drawbacks as well, including cost, inability of some respondents to follow detailed instructions, illiteracy, missing data, nonresponse, and inconsistent replies. Two new advances in survey technology offer promise for reducing the measurement bias that has plagued previous surveys: audio computer-assisted self-interviewing (audio-CASI) and telephone audio-CASI (T-ACASI). Preliminary data indicate that respondents are more prepared to reveal sensitive personal information when interviewed by a computer than by a human interviewer. (18 footnotes, 69 references)

599. Wiederman, Michael W., David L. Weis, and Elizabeth Rice Allgeier. “The Effect of Question Preface on Response Rates to a Telephone Survey of Sexual Experience.” *Archives of Sexual Behavior* 23, no. 2 (April 1994): 203-15.

The goals of the study were to examine the effects of a prefatory statement on response rates; to investigate the relationship between rates of response and certain demographic variables; and to determine the differences between responders and nonresponders in reported sexual experience. A random-digit-dialing procedure was used to generate a sample of 400 individuals—166 men (ages 18 to 87 years) and 234 women (ages 18 to 92 years)—who were asked a series of demographic questions as well as four sexual experience questions placed at the end of the telephone interviews. Respondents were randomly assigned to one of two configurations: a general preface statement or a general preface statement plus a statement referring to the public’s concern over AIDS. The following results were observed: (1) for questions regarding sexual partners and extramarital sex, women who received the AIDS preface were significantly more likely to respond than women who received only the general preface; (2) however, when both men and women were considered, the variant prefaces produced no differences; (3) all men, especially those with higher incomes, were more likely to respond to the sexual items; (4) education, age, marital status, and religious affiliation were unrelated to response rates; and (5) nonresponders consistently reported less sexual experience. (26 references)

Specific Populations

Gay/Lesbian/Bisexual

600. Carballo-Diéguez, Alex. "Sexual Research with Latino Men Who Have Sex With Men: Methodological Issues." In *Researching Sexual Behavior: Methodological Issues*, edited by John Bancroft, 134-44. The Kinsey Institute Series, vol. 5, edited by John Bancroft. Bloomington, [IN]: Indiana University Press, 1997. 461p.

Identified and discussed are five methodological issues encountered when conducting sexual research with Latino men who have sex with men (MSM), a group characterized as having a "clear presence" in the United States because of the high incidence of AIDS among this population. One important issue concerns the sexual identity of the target population and how their various sexual orientations should be categorized. In addition, there are cultural, behavioral, and sociodemographic differences among Latino MSM, possibly due to national ancestry. Controversy and confusion surround the labels applied to Latinos and Hispanics, thereby making survey-research with these groups more difficult. Additionally, language problems (the choice of vernacular versus formal language) and respondents' low levels of education impact both data collection and data quality. Because most studies of Latino MSM are based on convenience samples, serious limitations are imposed on the generalizability of the results. Carballo-Diéguez advises that interviewers involved with this group need to be "fully bilingual, hopefully bicultural, and gay sensitive." Ethnic matches between interviewer and respondent have both advantages and disadvantages. (6 references)

601. Doll, Lynda S. "Sexual Behavior Research: Studying Bisexual Men and Women and Lesbians." In *Researching Sexual Behavior: Methodological Issues*, edited by John Bancroft, 145-58. The Kinsey Institute Series, vol. 5, edited by John Bancroft. Bloomington, [IN]: Indiana University Press, 1997. 461p.

Although extensive amounts of data have been produced on the prevalence and sexual behavior of male and female heterosexuals and homosexual men, studies on the sexual behavior of bisexual men and women and lesbians have generated limited information. Doll uses two methods to evaluate recent trends in sexual behavior research on the latter two groups: reports from national probability surveys of the general population published in books and peer-reviewed journal, and computer searches conducted in PSYCHLIT and MEDLINE databases of peer-reviewed journals from 1986 through July 1996. An examination of the national surveys reveals that "almost no such data have been reported for subpopulations of the three populations covered in the chapter" (p. 147). The surveys that were identified exhibited methodological limitations, terminology

ambiguities, and varying reporting periods, thereby making comparisons across studies difficult. The content analysis component of the research indicates that 166 journal citations mentioned bisexual men (only 5 percent were devoted exclusively to bisexual men); 61 citations mentioned bisexual women (only 5 percent reported exclusively on bisexual women); and 396 citations mentioned lesbians (85 percent featured lesbians exclusively). The references retrieved cover a wide range of behavioral and social issues, including sexual behavior, for these populations. The author reviews the topics as well as the methodological approaches utilized in the literature retrieved. Studies on bisexuality have been overwhelmingly quantitative; however, for lesbians, it is both quantitative and qualitative in approach. (24 references)

602. Herek, Gregory M., and John P. Capitanio. "Sex Differences in How Heterosexuals Think about Lesbians and Gay Men: Evidence from Survey Context Effects." *Journal of Sex Research* 36, no. 4 (November 1999): 348-60.

The findings of several prior studies indicate that heterosexual men, as compared to heterosexual women, manifest more prejudicial and negative attitudes toward homosexual men than both their attitudes toward lesbians and heterosexual women's attitudes toward either lesbians or gay men. Herek and Capitanio point out the methodological flaws in previous research and test an alternative approach which examines the impact of context effects on responses to items concerning gay men and lesbians. Two experiments were embedded in a 1997 telephone survey with a national cross-sectional sample of households. The first experiment used a series of 101-point feeling thermometers, while the second employed a series of statements presented in agree-disagree format. Telephone numbers were generated by random-digit-dialing techniques, resulting in 1,246 completed and 63 partially completed interviews (45 percent men, 55 percent women). There was a response rate of 65.1 percent. An oversample of 403 African Americans was also recruited (40 percent men, 60 percent women). Half of the respondents were asked to respond first to one or more items about lesbians, followed by comparable items about gay men. The other half were asked the gay male items first. The results indicate the following: (1) for both white and African-American men, attitudes toward lesbians were significantly more favorable when they were assessed without reference to homosexual men; (2) attitudes of white men toward gay men tended to be less negative when assessed following the items about lesbians; (3) African-American men's responses did not consistently indicate this pattern; (4) for some items, women provided more favorable ratings of lesbians and less favorable ratings of gay men when the lesbian items were asked first; and (5) women's responses, overall, were found to show fewer effects of item order. Explanations are offered for the context effects noted. (6 footnotes, 32 references)

603. Michaels, Stuart Kenneth. "Queer Counts: The Sociological Construction of Homosexuality via Survey Research." Ph.D. diss., University of Chicago,

1997. 193 leaves. [*Dissertation Abstracts International* Order No. DA9800628; *DAI* 58A, no. 7 (January 1998): 2855.]

While most of this dissertation deals specifically with an analysis of the 1992 National Health and Social Life Survey (NHSLs), a review of prior literature—notably that of Alfred C. Kinsey, Martin Weinberg, and others—is of significance in that it traces the earliest applications of survey research to the assessment of sexual behavior. Michaels covers the background of the techniques used to determine percentages of homosexuals and explains the shortcomings of each. The NHSLs involved 3,432 ninety-minute, face-to-face interviews (with a self-administered component) dealing with sexual partners and practices over the life of the respondent (an area-probability sample of English-speaking adults between 18 and 59 years of age, living in households). Michaels discusses the multidimensional approach to homosexuality taken by the NHSLs, which independently measured behavior, desire, and self-identification. Bisexuality is also considered. Subsequent sections cover the construction of the survey instrument, interviewer characteristics and training, sample size, and response rates. The authors write that in order to gain a greater understanding of the complexities of the subject, samples as large as 100,000 or large national longitudinal studies of adults would be needed. (110 references)

Hispanics

604. Sabogal, Fabio, Diane Binson, and Joseph A. Catania. "Researching Sexual Behavior: Methodological Issues for Hispanics." In *Researching Sexual Behavior: Methodological Issues*, edited by John Bancroft, 114-33. The Kinsey Institute Series, vol. 5, edited by John Bancroft. Bloomington, [IN]: Indiana University Press, 1997. 461p.

Identified and discussed are numerous challenges, problems, and methodological issues affecting survey response validity of Hispanic and Latino residents of the United States. These include the following: (1) the lack of methodological studies, especially those involving sensitive and threatening questions; (2) inconsistent terminology used to classify this population and the way in which Hispanics have been identified in sex research surveys (for example, the Hispanic/Latino population in the United States consists of these groups: Mexican, Puerto Rican, Central American, Cuban, Spanish, other Hispanic, and Dominican); (3) the extensive diversity and varying levels of acculturation among Hispanic subgroups; (4) the influence of cultural values that may lead respondents to provide socially desirable answers; (5) instruments unsuited to the translation procedures necessary when interviewing respondents with limited English language skills, with *back-translation* (that is, "the process by which original instruments are translated into another language, then translated back into the first language..."), and *decentering* (that is, "the process of simultaneous translation of instruments into both languages, adjusting both until they have

equivalent meaning...”) procedures needed when necessary; (6) the impact of low levels of literacy in Spanish or English language and low educational achievement; and (7) the problem of nonresponse bias as evidenced by the sensitive questions in the National AIDS Behavioral Surveys and the Family of AIDS Behavioral Surveys. Eight suggestions are offered for improving survey research with Hispanics. (83 references)

Teenage Males

605. Sonenstein, Freya L., Leighton Ku, and Joseph H. Pleck. “Measuring Sexual Behavior among Teenage Males in the United States.” In *Researching Sexual Behavior: Methodological Issues*, edited by John Bancroft, 87-105. The Kinsey Institute Series, vol. 5, edited by John Bancroft. Bloomington, [IN]: Indiana University Press, 1997. 461p.

The data analyzed are based on the 1988 National Survey of Adolescent Males (NSAM) and two follow-up surveys conducted in 1990-1991 and 1995 using the original cohort of males fifteen to nineteen years of age. A new survey was also conducted in 1995. The authors summarize the strategies developed to measure sexual and contraceptive behavior (particularly condom use), largely motivated by the increase in teenage pregnancy rates and sexually transmitted diseases. Central to the research are the methodological challenges encountered, beginning with the problem of gaining access to teenage respondents. The necessity to obtain parental consent for respondents under the age of eighteen was found to be problematic. The NSAM offered incentives in the form of small gifts or cash. The authors discuss how to select appropriate question terminology; the development of the survey instrument; the various approaches to collecting data; and interviewer selection and training. The goal was to produce a sixty- to seventy-five minute questionnaire which replicated items previously found in female fertility behavior surveys. Standard survey procedures were found to be as effective with young people as with other populations. Overall, there was high consistency among interviewing approaches. The authors recommend that survey data be validated by external standards. (3 footnotes, 36 references)

Sexual Violence

606. Scott, Kathryn D., and Carol S. Aneshensel. “An Examination of the Reliability of Sexual Assault Reports.” *Journal of Interpersonal Violence* 12, no. 3 (June 1997): 361-74.

Inaccurate reporting is seen as detrimental to estimates of the prevalence of sexual assault as well as to the risk factors associated with assault. Reliability is brought into question if respondents withhold information, retract reports, or disclose assaults that previously had been concealed. Scott and Aneshensel analyzed data

collected by the Epidemiologic Catchment Area Program, a series of five longitudinal, community-based, epidemiologic research studies on mental health. (The article deals exclusively with data obtained from the Los Angeles site.) A two-stage probability sampling procedure was used to identify a baseline sample of 3,132 individuals between 18 and 96 years of age, composed of approximately equal percentages of Hispanics and non-Hispanic whites. Respondents' language preferences (Spanish or English) were adhered to. On average, four of ten respondents had some post-high-school education, but half had less than a high-school education. Of the total, 53 percent were women. Face-to-face interviews were conducted in 1983, yielding a response rate of 66 percent. Of the total respondents, 2,406 (76.8 percent) were reinterviewed one year later for the follow-up component of the study. The questions on sexual assault were asked near the end of the interview. The sexual assault reports that were consistent over time (that is, positive on two occasions or negative on two occasions) were compared to reports that were inconsistent over time (that is, positive on one occasion and negative on the other). Among the findings are that (1) consistency was a function of the respondent's position in society; (2) respondents' willingness to disclose sexual assault was associated with higher levels of education; (3) prevalence estimates appeared stable over time and were based on positive reports by differing groups of respondents; (4) there was high consistency in negative reports; and (5) the single filter question posed proved to be the prime threat to validity. (15 references)

607. White, Jacquelyn W., and Richard Farmer. "Research Methods: How They Shape Views of Sexual Violence." *Journal of Social Issues* 48, no. 1 (1992): 45-59.

Researchers focusing on sexual violence have a variety of methodological approaches from which to choose. White and Farmer review some of the assumptions underlying sexual assault research, establishing boundaries "on that which is explored and explained." (Early research centered on rape as an aspect of sexual deviancy and on characteristics of the victim as a precipitator of the assault.) The authors adapt Runkel and McGrath's *circumplex typology* of research strategies as an organizing framework for distinguishing and clarifying the relationships among the research approaches. The model identifies eight basic research methods, including the sample survey. (The others are judgment task, laboratory experiment, experimental simulation, field experiment, field study, interpretive study, and formal theory.) Sample surveys and formal theory are the strategies most concerned with generalizability. Sample surveys are frequently undertaken to investigate the prevalence and/or incidence of sexual assault, with police records, census data, national and local samples, and convenience samples used to collect and verify data. Each technique is reviewed in terms of strengths and weaknesses, and supported by examples from the sexual aggression literature. A multiple-strategies approach is advocated as the best means of investigating sexual assault issues. (44 references)

Terminology

608. Binson, Diane, and Joseph A. Catania. "Respondents' Understanding of the Words Used in Sexual Behavior Questions." *Public Opinion Quarterly* 62, no. 2 (Summer 1998): 190-208.

The terms considered are "vaginal intercourse" and "anal intercourse." Binson and Catania sought to determine to what degree respondents have difficulty in understanding these words, the implications for data quality, and how errors can be minimized in future studies. Several questions using the terms were embedded in the National AIDS Behavioral Surveys II (NABS II), a follow-up interview to the National AIDS Behavioral Survey. [Wave 1 of the survey is reported in Joseph A. Catania, et al. "Prevalence of AIDS-Related Risk Factors and Condom Use in the United States." *Science* 258 (1992): 1101-6.] Two wave 1 random-digit-dialed samples, the National (18 to 75 years of age) and the High Risk Cities (HRC) (18 to 49 years of age) were reinterviewed in wave 2. For the present research, only respondents 18 to 49 years of age from the National sample were considered in order to achieve comparability with the HRC sample. [In wave 1 there were 1,553 completed interviews for the National sample (a response rate of 69.7 percent), and 6,163 completed interviews for the HRC sample (a response rate of 65.2 percent).] In wave 2 there were 1,062 completed interviews for the National sample (a response rate of 73.7 percent), and 3,728 completed interviews for the HRC sample (a response rate of 66.4 percent). A total of 95 percent of the respondents in wave 2 reported that vaginal intercourse and anal intercourse were easy-to-understand terms. Men, minorities, and individuals with fewer than twelve years of education were more likely to experience difficulty with the terms. The HRC respondents who had comprehension problems were more likely to report having no vaginal or anal intercourse in the past twelve months. The authors discuss the implications of the study for STD/HIV intervention programs "in that some demographic groups may appear less sexually active than they really are" (p. 190). An appendix provides the sequence of the questions in the sexual behavior section of the survey instrument. (5 footnotes, 13 references)

609. Smith, Tom W. "The *JAMA* Controversy and the Meaning of Sex." *Public Opinion Quarterly* 63, no. 3 (Fall 1999): 385-400.

On 15 January 1999, George D. Lundberg, editor of the *Journal of the American Medical Association (JAMA)* for the past seventeen years, was dismissed from his position due to the scheduled publication in *JAMA* of a Kinsey Institute report on sexual terminology. [The report was authored by Stephanie A. Sanders and June Machover Reinisch. "Would You Say You 'Had Sex' If...?" *JAMA* 281 (January 1999): 275-77.] Smith examines (1) the actions of the American Medical Association; (2) the pros and cons of the report; (3) its relation to the Clinton-Lewinsky affair; (4) how the findings were reported by the press; (5) what survey researchers have learned about question wording on sexual behavior; and (6) what terms and methodologies are typically found in contemporary surveys. Numerous

examples illustrate how respondents' misinterpretation of sexual terminology contributes to discrepancies between partners' reports, underreports of risky behavior, and differences in prevalence estimates of homosexuality. Some of the approaches used by researchers to improve accuracy are cognitive pretests, focus group interviewing, ethnographic studies of subgroups, and question wording and context experiments. Sex surveys should provide explicit and detailed definitions and ask separately about various types of sexual behavior, a practice not followed by polls that include only a few items on sexual behavior and attitudes. The importance of terminology to AIDS and sexually transmitted disease surveys is highlighted. Appendix A lists the Kinsey Institute questions; Appendix B provides examples of the sexual behavior questions found in the 1992 National Health and Social Life Survey and in the 1996-98 General Social Survey. (8 footnotes, 62 references)

SOCIAL WORK

610. Finkelhor, David, David Moore, Sherry L. Hamby, and Murray A. Straus. "Sexually Abused Children in a National Survey of Parents: Methodological Issues." *Child Abuse & Neglect* 21, no. 1 (January 1997): 1-9.

The vast majority of studies on sexual abuse have asked adults about their childhood experiences, rather than asking them directly about contemporaneous acts (within the last year) which they or other adults may have committed against their children, as has been the case in studies of physical abuse. With the latter approach, current information can be gathered that is "less subject to the distortions of time and memory." To test the feasibility of the contemporaneous method, 1,000 parents participated in a national random-digit-dialed telephone survey dealing with child discipline and child abuse conducted in 1995 by the Gallup Organization. The parents were asked to take part in a survey about child-raising practices, with no mention made of sexual abuse at this point in the interview. The response rate was 52 percent. The child asked about in each household approximately matched census data on children under age 18 pertaining to age, gender, race, geographical region, and the parent's level of education. Two items on the survey instrument concerned the respondent's own sexual abuse experiences and two inquired about the respondent's child. A preamble alerted respondents that the questions were of a highly sensitive nature. The results indicate that (1) 1.9 percent of respondents acknowledged that their child had been sexually abused within the last year; (2) 5.7 percent revealed that sexual abuse had occurred at some point in the child's life; (3) 2 percent of boys and 1.7 percent of girls had been sexually abused within the last year; (4) 6.1 percent of boys and 5.3 percent of girls had been abused over their lifetimes; (5) no girls between the ages of 9 and 12, and only one boy in this age group, were reported as abused in the last year; (6) a family income under \$30,000 was found to be a risk factor; and (7) the respondent's own history of sexual abuse (23 percent) was the characteristic most closely associated with the reporting of a

sexually abused child. The “outstanding anomaly” was the greater number of sexually abused boys, a figure “contrary to nearly every epidemiologic survey on sexual abuse.” (7 references)

611. Lipari, Lisbeth. “Rituals of Identification: A Critical Discourse Analysis of Public Opinion Polls about Welfare.” Ph.D. diss., Stanford University, 1996. 185 leaves. [*Dissertation Abstracts International* Order No. AAT9702931; *DAI* 57A, no. 8 (February 1997): 3312.]

Polls are viewed as having an impact on the “shape, scope, and very terms” of the opinion they purport to determine. Lipari examined the polling data on welfare from 1992 to 1994 and ascertained that polls both elicit and convey symbols and information, and that, when viewed in terms of political ritual, polls “construct the idea of public.” The dissertation opens with a review of the history of the perspectives of public opinion polling in the twentieth century. Three views on public opinion polling are presented—namely, the *populist*, the *critical*, and the *constructionist*. The relationship among polls, language, the press, and policy are considered. Polling as “communication interaction” is discussed, along with a “functionalist discourse” model of polling that incorporates the role of the speaker as well as the “syntactic and semantic features” of the poll questions. The author continues by examining the “persuasive communication” form of polling with particular attention to “ideologically conservative presuppositions” concerning welfare, work, and dependency. Polling as political “ritual” is explored, along with the significance of the word “public.” Structural and content features of poll questions on welfare are considered in terms of the strength and ideological direction of the response. A statistical analysis indicates that structural and form features “account for at least 38 percent of the variance in aggregate conservative response to polls conducted in 1994” (p. v). (207 references)

612. McMurtry, Steven L. “Survey Research.” Chap. 14 in *Social Work Research and Evaluation: Quantitative and Qualitative Approaches*, by Richard M. Grinnell, Jr., 333-67. 5th ed., edited by John Beasley. Itasca, IL: F. E. Peacock Publishers, 1997. 640p.

This textbook is directed to advanced undergraduate and beginning graduate social work students enrolled in single-semester research methods courses. McMurtry describes survey research as one of the most common data collection methods—frequently chosen to examine groups and social phenomena by gathering information on individuals, organizations, and communities. The discussion follows the steps in conducting a survey: (1) planning, with emphasis on formulating the research questions and hypotheses; (2) developing and implementing a sampling strategy (chapter 10); (3) constructing and pretesting the interview schedule and questionnaire; (4) selecting a data collection method by evaluating the strengths and weaknesses of face-to-face, telephone, and mail approaches; and (5) analyzing the data (chapter 21). [Reporting the results is not considered.] Computer-assisted telephone interviewing and other technological advances are briefly described.

The chapter contains a number of checklists, examples appropriate to the social work setting, tables and figures, informational “boxes” to complement and expand the text, and a reading list of thirty-two titles.

613. Mindel, Charles H. “Designing Measuring Instruments.” Chap. 9 in *Social Work Research and Evaluation: Quantitative and Qualitative Approaches*, by Richard M. Grinnell, Jr., 212-33. 5th ed., edited by John Beasley. Itasca, IL: F. E. Peacock Publishers, 1997. 640p.

Design and construction principles for survey instruments are discussed with the goals of maximizing response rates while minimizing measurement error. Mindel reviews survey research applications to social work, observing that surveys can be an effective and efficient method of acquiring large amounts of data about individuals, organizations, and communities. Further, surveys can help identify and assess unobservable variables such as attitudes, beliefs, feelings, and ethical standards. To best achieve external validity, the author suggests stating precisely the purpose of the study, asking only relevant questions, and avoiding sensitive questions. For enhancing internal validity, Mindel provides a checklist of procedures for producing effective questions, such as pretesting, and writing clear, short items which emphasize simple terms and concepts. Suggestions are made concerning wording and context, the appearance of the survey instrument, and content organization. (18 references)

614. Rosenthal, James A. “Reliability and Social Work Research.” *Social Work Research* 18, no. 2 (June 1994): 115-21.

Although a reliability level of .80 (or a figure approximating this) is recommended as a minimum standard by most social work researchers, Rosenthal emphasizes that the required level of reliability depends on several factors—the nature of the task at hand, its purpose, the characteristics of the research, and the sampling design selected. In some situations, such as descriptive survey research with large samples, a reliability level of .80 is deemed acceptable. However, in other cases, the .80 reliability criterion is “unnecessarily restrictive,” with much lower levels sufficing. In research which involves important decisions about individuals, .90 provides a better standard. Following a brief review of reliability theory, the author discusses standard error and confidence intervals; the impact of reliability on statistical power; univariate and bivariate analyses; the effect of reliability on single-subject designs; and the cost-effectiveness of various options. Stated concepts are supported by examples from the Child Behavior Checklist, an instrument consisting of both behavioral and social items, and the Computer-Assisted Social Services Scales, a set of attitudinal measures developed within the field of social work. Rosenthal recommends the use of shorter instruments which would benefit all participants—practitioners, researchers, agencies, and clients. (19 references)

615. Royse, David. "Survey Research." Chap. 6 in *Research Methods in Social Work*, 145-79. 2^d ed. Nelson-Hall Series in Social Work, edited by Charles Zastrow. Chicago, IL: Nelson-Hall Publishers, 1995. 357p.

Directed to both the social work student and the practicing social worker, this textbook emphasizes the use of surveys to identify the needs of both special client groups and the community at large, as well as for program evaluation. Royce maintains that surveys may well be the most common research technique used by social workers. Surveys are divided into three categories: exploratory, descriptive, and explanatory. The primary data collection approaches—mail questionnaire, telephone, and face-to-face—are compared and contrasted, noting that each has its own particular set of strengths and weaknesses. The discussion of sampling includes comments on theory, the accuracy of probability samples, sample size and determination, the disadvantages of nonprobability samples, and special sampling designs such as longitudinal, trend, cohort, and panel. Given time and resources, the author advocates the implementation of a probability sampling design over a nonprobability one. A distinction is made between scientific sampling and "person-in-the-street" interviews, the latter also known as convenience, accidental, or available samples. (37 references)

616. Rubin, Allen, and Earl Babbie. "Survey Research." Chap. 11 in *Research Methods for Social Work*, 344-70. 3^d ed. Pacific Grove, CA: Brooks/Cole Publishing Company, 1997. 758p.

This volume offers comprehensive coverage of the range of research methodologies and of all aspects of the research process. Rubin and Babbie provide a brief history of the precursors to surveys in social work, tracing their origin to the earnings and expenditures studies of the working poor in mid-nineteenth-century Europe. The authors compare and contrast the three commonly used data collection modes—self-administered questionnaires, face-to-face, and telephone—emphasizing the impact of computer technology on the latter. The choice of approach depends on the goal of the particular research as well as the available resources. The strengths and weaknesses of survey research as a method of observation in social scientific research are reviewed. A new feature of the third edition is a "box" illustrating how quantitative survey methods and qualitative methods serve to complement each other. There are ten appendixes, a glossary, a cumulated bibliography, and an index.

WOMEN'S STUDIES

617. Reinharz, Shulamit, with the assistance of Lynn Davidman. "Feminist Survey Research and Other Statistical Research Formats." Chap. 4 in *Feminist Methods in Social Research*, 76-94. New York, NY: Oxford University Press, 1992. 413p.

The historical roots of feminist research practices are briefly reviewed, acknowledging the contributions of Maria Mitchell, Marion Talbot, Mary Roberts Smith, Jane Addams, Helen L. Sumner, Crystal Eastman, and Mari Sandoz. Comments are made concerning the pros and cons of quantitative research, primarily survey research, for the development of feminist theory and political action. Survey research can facilitate problem identification, document differences among groups and changes over time, test hypotheses and theories, and provide quantitative evidence. Three types of surveys—magazine, attitudinal, and local—are discussed in terms of their ability to assess public sentiment toward a variety of feminist issues. Some of the criticisms directed at survey research by feminists include the areas of gender problems, question format challenges, inaccurate statistics, and sexist research methods. In the chapter's concluding remarks, Reinharz and Davidman discuss the concepts of *ambivalence* (that is, why some feminist researchers find survey research and other statistically based forms of research useful while other express distrust) and *dual vision* (that is, a feminist way of viewing survey research that features positive connotations and a synthesis of political and scientific concepts). (153 endnotes, 76 references)

Appendix A: Source Journals

The numbers following each journal title refer to item numbers in the text.

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Journal of Operations Management, 451
Journal of PeriAnesthesia Nursing, 477-78
Journal of Policy Analysis and Management, 457
Journal of Popular Culture, 584
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Journal of Sex Research, 152, 239, 244, 355, 596, 602
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Journal of Social Issues, 406, 607
Journal of Social Service Research, 211
Journal of the American Dietetic Association, 264, 284
Journal of the American Planning Association, 453
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- Legislative Studies Quarterly*, 567, 570-71
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- Occupational Therapy Journal of Research*, 290
Oregon Law Review, 489
- Palimpsest*, 1
Personnel Psychology, 393
Political Behavior, 177, 345, 564
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Psychological Bulletin, 590
Public Administration Quarterly, 501

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Southern Economic Journal, 456

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Appendix B: Organizations

Academy of Political Science (APS)
475 Riverside Drive, Suite 1274
Demetrios Caraley, President
New York, NY 10115-1274
(212) 870-2500
FAX: (212) 870-2202
E-mail: aps321@aol.com
URL: <http://www.psqonline.org>
Year Founded: 1880

American Academy of Political and Social Science (AAPSS)
Jaroslav Pelikan, President
3937 Chestnut Street
Philadelphia, PA 19104-3110
(215) 386-4594
FAX: (215) 386-4630
E-mail: aapss@netaxs.com
URL: <http://www.asc.upenn.edu/aapss/>
Year Founded: 1889

American Association for Public Opinion Research (AAPOR)
Marlene Bednarz, Administrator
PO Box 1248
426 Thompson Street
Ann Arbor, MI 48106-1248
(313) 764-1555
FAX: (313) 764-3341

E-mail: aapor@umich.edu
URL: <http://www.aapor.org>
Year Founded: 1947

American Political Science Association (APSA)
Catherine E. Rudder, Executive Director
1527 New Hampshire Avenue NW
Washington, DC 20036-1527
(202) 483-2512
FAX: (202) 483-2657
E-mail: apsa@apsanet.org
URL: <http://www.apsanet.org>
Year Founded: 1903

American Psychological Association (APA)
Patrick H. DeLeon, President
750 First Street NE
Washington, DC 20002-4242
(202) 336-6071
Toll Free: (800) 374-2721
FAX: (202) 336-6069
E-mail: executiveoffice@apa.org
URL: <http://www.apa.org>
Year Founded: 1892

American Sociological Association (ASA)
Felice Levine, Executive Officer
1307 New York Avenue NW, Suite 700
Washington, DC 20005-4712
(202) 383-9005
FAX: (202) 638-0882
E-mail: levine@asanet.org
URL: <http://www.asanet.org>
Year Founded: 1905

American Statistical Association (ASA)
Ray A. Waller, Executive Director
1429 Duke Street
Alexandria, VA 22314-3415
(703) 684-1221
Toll Free: (888) 231-3473
FAX: (703) 684-2037
E-mail: asainfo@amstat.org
URL: <http://www.amstat.org>
Year Founded: 1839

Council of American Survey Research Organizations (CASRO)

Diane K. Bowers, Executive Director

3 Upper Devon

Port Jefferson, NY 11777-1224

(631) 928-6954

FAX: (631) 928-6041

E-mail: casro@casro.org

URL: <http://www.casro.org>

Year Founded: 1975

Midwest Association for Public Opinion Research (MAPOR)

Douglas Blanks Hindman, Secretary/Treasurer

Department of Communications

North Dakota State University

Fargo, ND 58105-5075

(701) 231-7300

E-mail: db_hindman@ndsu.nodak.edu

Year Founded: 1977

National Council on Public Polls (NCPP)

Edward J. Efchak, Secretary/Treasurer

The Record

150 River Street

Hackensack, NJ 07601

(201) 646-4379

FAX: (201) 646-4772

E-mail: info@ncpp.org

URL: <http://www.ncpp.org>

Year Founded: 1969

World Association for Public Opinion Research (WAPOR)

Salma Ghanem, Secretary/Treasurer

University of Texas Pan American

1405 Driftwood 1

Mission, TX 78572

(956) 618-4048

FAX: (956) 618-4943

E-mail: wapor@unl.edu

URL: <http://www.wapor.org>

Year Founded: 1946

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