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**E.D. de Leeuw, J.J. Hox, and D.A. Dillman (eds.).** *International Handbook of Survey Methodology* (2008). New York: Lawrence Erlbaum Associates, ISBN 978-0-8058-5753-5, 549 pp, USD 34.95.

The *International Handbook of Survey Methodology (IHSM)* is a 26-Chapter, 549-page tome that attempts to describe comprehensively the field of survey methodology so as to make the information applicable to mono- and cross-cultural survey research anywhere in the world. To describe that as a monumental undertaking would understate strongly the chutzpah of the editors. But they were able to gather a "star-studded" cast of survey methodologists and statisticians who—for the most part — achieve that goal at an affordable US\$34.95 (for the paperback version).

IHSM is organized into five sections: Foundations, Design, Implementation, Data Analysis, and Special Issues. Foundations introduces several topics that permeate the book, including a first chapter written by the editors, titled "The Cornerstones of Survey Research," which defines a survey and introduces the primary sources of error within the survey life cycle. Chapter 2, by Norbert Schwarz, Bärbel Knäuper, Daphna Oyserman, and Christine Stich, discusses "The Psychology of Asking Questions" by first introducing the psychological processes that underlie the respondent's interpretation and answering of survey questions, and then discussing how different aspects of the structure of survey questions and questionnaires interact with those processes. In Chapter 3, Peter Lynn presents "The Problem of Nonresponse," describing how nonresponse arises at each stage of the survey life cycle and within different survey modes. He then outlines methods for minimizing nonresponse, estimating nonresponse error, and adjusting survey estimates for nonresponse. Chapter 4, by Janet A. Harkness, introduces "Comparative Survey Research" by first discussing the increase in multicultural and multinational surveys over the past several decades, and then outlining current understanding of best practices for cross-cultural, multi-language surveys. She is careful to point out where research is sparse and, thus, best practices still are in the early stages of development. Eleanor Singer tackles the legal and practical framework for "Ethical Issues in Surveys" in Chapter 5, which includes discussions of the origins of ethical standards for survey research, informed consent, confidentiality and disclosure, and emerging ethical issues.

The second section of *IHSM – Design –* begins with "Coverage and Sampling" in Chapter 6 by Sharon L. Lohr. The chapter includes a discussion of the interaction of survey mode and coverage, nonprobability sampling versus probability sampling, methods of complex sample design, and sampling of rare populations. In Chapter 7, "Choosing the Method of Data Collection," Edith D. de Leeuw discusses the advantages and disadvantages of different survey modes in depth. Three chapters pertaining to questionnaire design follow, beginning with Floyd J. Fowler, Jr. and Carol Cosenza's detailed discussion on "Writing Effective Questions" in Chapter 8. Chapter 9, "The Logic and Psychology of Constructing Questionnaires" by Don A. Dillman, addresses the interaction of questionnaire layout, survey mode, and individual questions during questionnaire design. Finally, Pamela Campanelli leads the reader through both traditional methods and more recent innovations (e.g., behavior coding, cognitive interviewing) for "Testing Survey Questions" in Chapter 10.

Implementation – the third section of IHSM – is divided into chapters based on survey mode. In Chapter 11, Geert Loosveldt specifies the content of appropriate interviewer training and discusses interviewer bias and variance specific to "Face-to-Face Interviews." The history of, sample frames for, and current issues regarding "Telephone Surveys" are discussed in Chapter 12 by Charlotte Steeh. Chapter 13, "Self-Administered Questionnaires: Mail Surveys and Other Applications" by Edith D. de Leeuw and Joop J. Hox, presents some of the issues unique to self-administered surveys, such as visual layout and absence of an interviewer, and then discusses several potential modes for self-administered surveys, including mail out/mail back, Internet-based surveys, and interactive voice response surveys. Chapter 14, by Katja Lozar Manfreda and Vasja Vehovar, continues the discussion of "Internet Surveys," and Chapter 15, by Darby Miller Steiger and Beverly Conroy, continues the discussion of "IVR: Interactive Voice Response" surveys. Finally, Chapter 16 - "Mixed -mode Surveys: When and Why" - is authored by the editors of IHSM and presents reasons for mixing survey modes, types of mixed-mode surveys, and the reduction of and adjustment for mode effects within mixed-mode surveys.

The fourth section of *IHSM* focuses on the analysis of data collected via surveys. In Chapter 17, "Weighting Survey Data," Paul P. Biemer and Sharon L. Christ present a clear outline of the process by which survey weights are created. In Chapter 18, "Analysis of Data from Complex Surveys," Laura Stapleton builds on the concepts discussed in Chapter 17 by introducing the reader to estimation from simple random samples, then expanding into cluster and multistage sampling, variance estimation techniques, and, finally, model-based analysis. In Chapter 19, "Incomplete Data: Diagnosis, Imputation, and Estimation," Susanne Rässler, Donald B. Rubin, and Nathaniel Schenker review the four main approaches to handling incomplete survey data: discarding incomplete records, reweighting complete records, imputation of missing values, and multiple imputation. Finally, Joop J. Hox explores "Accommodating Measurement Errors" in Chapter 20 first by describing the effects of measurement error on statistical tests and then by outlining

methods for including measurement error in statistical analysis (e.g., structural equation modeling, latent class analysis).

The fifth and final section of *IHSM - Special Issues -* focuses on a few final key topics in survey methodology. Chapter 21, "Survey Documentation: Toward Professional Knowledge Management in Sample Surveys," by Peter Ph. Mohler, Beth-Ellen Pennell, and Frost Hubbard, explores methods and tools for documenting both the survey life cycle and also the various data produced via the survey, including metadata and paradata. That chapter is a natural lead-in to Lars E. Lyberg and Paul P. Biemer's chapter on "Quality Assurance and Quality Control in Surveys," in which they define and discuss methods for monitoring, managing, and improving survey quality. Chapter 23, by Judith T. Lessler, Joy Everman, and Kevin Wang, explores "Interviewer Training" by examining the effect(s) of interviewer training on data quality and discussing a model for developing a robust interviewer training process. Gerty Lensvelt-Mulders covers "Surveying Sensitive Topics" in Chapter 24 by first defining what makes a topic sensitive and then describing cross-cultural differences. She then outlines best survey practices for handling sensitive topics. Chapter 25, "Panel Surveys," by Dirk Sikkel and Adriaan Hoogendoorn, overviews reasons for, types of, and sources of bias for panel surveys, and the final chapter, "Surveys Without Questions" by Jelke Bethlehem, explores the use of population registers for direct creation of statistics, as sample frames or in the creation of post-stratification weights, or for creating statistics in combination with survey data.

Finally, the book is supported by a Web site (see www.xs4all.nl/ $\sim$  edithl/surveyhandbook/) that contains a list of suggested additional readings for each chapter, as well as supplementary material for particular chapters.

Clearly, a great deal of thought and effort were spent in developing *IHSM*, and the overall result is excellent. However, I have three concerns about the book that are significant enough to be addressed in this review. The first is relatively minor: the book is lightly peppered with copyediting errors that occasionally detract from a clear understanding of the text. That is not unusual for first editions of technical publications and is likely to be corrected in later printings of the book.

Second, I stated earlier that the authors and editors achieved their goal "for the most part." One subtle but important concern I have about the book is the reconciliation of its ambitious title with the content of its chapters. A few chapters are excellent at conveying their information within a truly international context. For example, "Comparative Survey Research: Goals and Challenges" both presents cross-culture research in a global context and reaches across disciplinary lines to inform the narrative. Chapter 12 challenges the assumption that telephone surveys are the dominant survey mode internationally, pointing out varying rates of telephone penetration across the world — especially in Africa and Asia. Finally, "Mixed Mode Surveys: When and Why" considers differing levels of literacy and access to electricity and technology when discussing reasons for mixing modes in multinational surveys.

In contrast, the integration into the international context in "The Psychology of Asking Questions" seems like an afterthought. Although the chapter certainly is a very thorough and detailed introduction to the topic, cross-cultural issues for each subtopic are presented in a brief final section, rather than integrated into the general text. Such integration certainly is possible. For example, in the discussion of event history calendars for

facilitating temporal recall, issues of using a visual calendar-based cue system with illiterate populations or populations whose time sense is dependent upon agricultural seasons could be discussed. Similarly, although "Ethical Issues in Surveys" presents a very complete picture of professional and legal code related to survey research in the United States and Europe, and the potential consequences of that code with regard to survey quality, issues related to ethics in other countries where such code is not in existence (e.g., developing countries), issues related to health and safety of interviewers in dangerous interview situations (e.g., conflict zones and/or areas with little infrastructure), and the special issues of developing world populations that are vulnerable due to illiteracy and poverty are not addressed, although they certainly represent "emerging ethical issues" for survey research. Other chapters – such as "Writing Effective Questions," "The Logic and Psychology of Constructing Questionnaires," and "Panel Surveys" – make little or no effort to incorporate a cross-cultural or non-Western perspective.

To be fair, *IHSM* by necessity is highly dependent upon survey research from Western Europe and North America. But although research on survey methodology in the developing world – large parts of Africa, South America, and Asia – is sparse, it is there. One notable example is D. J. Casley and D. A. Lury's 1981 book, *Data Collection in Developing Countries* (London, England: Oxford University Press). Another is M. Bulmer and D. P. Warwick's 1993 book, *Social Research on Developing Countries: Surveys and Censuses in the Third World* (London, England: University College London Press). A third book that I have found invaluable in my own work is Stephen Devereux and John Hoddinott's 1993 edited volume *Fieldwork in Developing Countries* (Boulder, Colorado: Lynne Rienner Publishers), and dozens of peer-reviewed journal articles also are available. *IHSM* would have benefited substantially by incorporating more literature specific to surveys in developing countries, in that the manual then truly would represent the state of the art for researchers anywhere in the world.

My final quibble with the book relates to the claim of the editors that the text can serve "as an excellent text for courses and seminars on survey methodology at the masters and graduate level." Setting aside my skepticism that the same book could serve as both a global guide on best survey practices and also an introductory text — albeit for advanced social science students — I still disagree for several reasons. Most simply, although each chapter ends with a glossary of key concepts, that is the only consistent similarity to a textbook that I can find. For example, there are no discussion questions and no homework exercises for any of the chapters. The instructor for such a course therefore would be required to undertake a great deal of auxiliary work in preparing suitable practice material for students.

Some of the 26 chapters in the book are written well for students and provide good, basic information. For example, both "Choosing the Method of Data Collection" and "Self-Administered Questionnaires: Mail Surveys and Other Applications" not only are clearly written, but also summarize main points in text boxes at the end of each section. Additionally, the end of each chapter provides a succinct summary of advantages and disadvantages of different survey modes. "Writing Effective Questions" includes concrete examples for each of the concepts it outlines, facilitating easy absorption of those concepts by students. "Weighting Survey Data" uses an ongoing example to clarify the various stages of survey weight creation and provides examples for the calculation of different

forms of bias. Finally, "Analysis of Data from Complex Surveys" is exceptionally clear and provides robust examples for students to follow.

However, other chapters either contain a depth of material that would be overwhelming in an introductory survey methods course, or remain at a highly conceptual level and are not designed to provide basic operational information. As examples of the former, a comprehensive understanding of "Incomplete Data" requires the student to be familiar with Bayesian data analysis, and a full grasp of "Accommodating Measurement Errors" requires an understanding of item response theory. As examples of the latter, "Face-to-Face Interviews" presents general equations for interviewer variance but not in enough detail to allow a student to practice calculation, and "Testing Survey Questions" provides good descriptive examples to support its section on cognitive interviewing, but its description of traditional field methods for questionnaire testing is sparse and lacking in examples to support the concepts presented.

As an alternative beginning survey methodology text, I recommend a book developed from the experiences of professors associated with the Joint Program in Survey Methodology of the University of Maryland and the University of Michigan: *Survey Methodology* (R. M. Groves et al., Wiley Series in Survey Methodology, John Wiley and Sons, 2004). *IHSM* would better serve either as an auxiliary text for an introductory course or as a base text for a more advanced seminar on current issues in survey methods.

I must reiterate that despite the concerns presented here, I believe *IHSM* is an excellent survey methodology resource and I congratulate the editors and authors on their accomplishment. *IHSM* will be an invaluable addition to the bookshelf of the more advanced survey methodology student and survey practitioner alike, and I hope that it evolves into new editions that come even closer to achieving the lofty goals of the editors.

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J.M. Lepkowski, C. Tucker, J.M. Brick, E.D. de Leeuw, L. Japec, P.J. Lavrakas, M.W. Link, and R.L. Sangster, (eds.). *Advances in Telephone Survey Methodology* (2008). Hoboken, NJ: John Wiley and Sons, ISBN 978-0-471-74531-0, 617pps, \$79.95USD.

Advances in Telephone Survey Methodology is a 26-chapter edited volume that represents a tremendous effort to assemble in a single text the latest methodological and practical advances in telephone surveys (including RDDs of landline and mobile phones). Specifically, this volume is the culmination of the efforts of 8 coeditors and 75 different contributing authors whose works were invited as part of the Second International Conference on Telephone Survey Methodology. The edited volume is dedicated to two of the pioneers of modern telephone survey research, Warren Mitofsky and Joseph Waksberg, and I believe the ideas conveyed in this text would make them both very proud.

The book is organized into five parts: Part I contains a single chapter providing a comprehensive overview of the changes in telephone technology and sample surveys over the last two decades; Part II contains seven chapters relating to sampling and estimation in telephone sample surveys; Part III contains six chapters covering issues of data collection via telephone surveys and various aspects of mode effects; Part IV contains six chapters discussing various aspects of telephone survey operations; finally, Part V contains the remaining six chapters relating to issues of nonresponse in telephone surveys. The remaining 59 pages of the text contain bibliographic material that comprises 980 references spanning nearly six decades of telephone sample survey research. This bibliography is also one of the most comprehensive sources for references on the current uses of mobile phones in telephone sample surveys second only perhaps to a recent special issue of the Public Opinion Quarterly devoted to mobile phones and telephone surveying in the U.S. (Public Opinion Quarterly, 71, 2007. http://www.oxfordjournals.org/our\_journals/poq/special.html).

In Chapter 1 Tucker and Lepkowski provide a broad overview of the changes in telephone sample surveys over the past 20 years since the first International Conference on Telephone Survey Methodology. The chapter addresses changes in technologies, telephone audiences and other factors that relate to the current landscape for RDD surveys. The chapter launches the rest of the discussion in the text by reiterating the obvious growing need in telephone surveys to understand nonresponse and the impact of survey effort on nonresponse bias in the era of less and less survey cooperation.

Part II focuses on technical aspects of survey weighting, designs and coverage beginning with a very accessible description of the overall weighting process for surveys in general with commentary on the rather limited options available for some weighting procedures/models applied to RDD sample surveys given in Chapter 2 by Kalsbeck and Agans. In Chapter 3, Blumberg, Luke, Cynamon and Frankel build on the information presented in Chapter 1 regarding changes in telephone ownership and changes in demographic variables over time for nonlandline telephone households based on the U.S. National Health Interview Survey.

The picture relating to mobile phones expands to the international stage with changes in mobile phone subscribership between 2000–2005 for 26 countries presented in Chapter 4 by Kuusela, Callegaro, and Vehovar. Other aspects unique to mobile phones such as text messaging and the need for more dispositional codes for tracking calls to mobile phones are also discussed, providing some contrasts between landline RDDs and those that involve mobile phones. Coverage of mobile phone surveys continues in Chapter 6 as Tortora, Groves, and Peytcheva describe the use of multiplicity-based sampling to expand coverage of surveys to mobile phone owners in the absence of published directories. This information should be a valuable resource for agencies and survey practitioners who are grappling with how to efficiently include mobile phones in RDD studies.

One obvious way to include mobile phones is via a separate sampling frame – however, the parity of measurement shifts from household to person level in most cases as mobile phones are generally viewed as personal objects. In Chapter 7, Brick and Lepkowski provide a very readable discourse on dual frame samples applied to this scenario and include a clear and concise description of computing estimates from the two frames

accounting for the multiple sources of error in estimation. But even dual frame surveys may not completely solve the coverage problem. In Chapter 8, Lee and Valliant provide a very thoughtful discussion of the application of propensity score models for nonresponse and coverage adjustments applied to telephone surveys. While this chapter provides useful details of the basic mechanics of propensity score methods applied to RDD surveys, a worked example similar to what is provided in Chapter 2 for weight construction would improve the utility of the chapter.

The focus of the text shifts to issues of data collection including interviewer, instrument and mode in Part III. In Chapter 9, Japec describes and evaluates two models of interviewer error and burden; the first model incorporates the roles and processes of both interviewers and respondents in the survey process while the second model examines the relationship between burden factors and data quality from telephone interviews. The validation of these models is based on a survey of 224 interviewers from two facilities of Statistics Sweden. While much of the focus of published survey work involves understanding respondents and nonrespondents, this chapter offers an illuminating discussion of the telephone survey process from the interviewer's perspective. A closer examination of the language and cues provided for clarification and information seeking by both the telephone respondent and interviewer is provided in Chapter 10 by Conrad, Schober, and Dijkstra. Understanding the salient issues like interviewer workload, visual design of the instrument, repetition of questions and the interviewer's interest and skill is fundamental to designing more appropriate training materials for interviewers.

In Chapter 11 Harkness et al. provide relevant and timely information about oral translation in surveys with emphasis on differences between written and oral translation that is fundamentally important for the conduct of telephone surveys. Given the changing cultural dynamic in many industrialized countries, having multiple languages available for telephone surveys may be a fundamental aspect of improving cooperation and response rates now and into the future.

In Chapter 12 Christian, Dillman, and Smyth provide an examination of mode effects and formats on scalar questions for two common data collection modes: telephone and web. This chapter provides a collection of strategies for formatting and presenting scales for telephone and web surveys based on 70 experimental comparisons from one 6-version survey that included 13 scalar questions. While traditional telephone surveys have been more limited than web surveys due to an inability to provide visual benchmarks or cues for scales, many new cell phones offer sophisticated internet browsing capabilities or the ability to receive multimedia messages in which such visual cues could be embedded. While this chapter does not address how this might work in cell phones, it does offer a starting point to think about how one might design such an experiment.

The discussion of mode effects continues in Chapter 14 where Béland and St-Pierre compare computer assisted telephone interviewing (CATI) and computer assisted personal interviewing (CAPI) administration of the Canadian Community Health Survey. The authors nicely connect a discussion of the possible influences of interviewer variability on mode effects with the information on interviewer error discussed in Chapter 9. Further exploration of aspects of CATI programming, including labeling data fields, introductory material length and detail, and CATI screen layout for an establishment survey, is offered by Edwards, Schneider, and Brick in Chapter 13. The chapter closes with

a concise synthesis of the many comparisons made throughout the chapter presented as a series of guidelines for CATI user interface designs. While these recommendations are helpful, one should be cautioned about their general applicability. The study is based on a sample of 16 interviewers and the recommendations are based on a host of comparisons made between several factors without apparent control for increased likelihood of type-I errors.

While some practical advice is provided in the first three parts of the text, perhaps the most pragmatic coverage comes in the fourth part, which examines aspects of telephone survey operations. In Chapter 15 Kelly et al. provide useful details on how one might establish a new call center including size considerations, layout of the center, technology choices and staffing considerations. This chapter in total is a must read "how to" guide for anyone wanting to design (or redesign) a call center. Hansen provides a more elaborate discussion of the uses of CATI management in Chapter 16, including number output and management, call scheduling, reporting and tracking of calls. While CATI management systems can improve the efficiency of an RDD survey, they cannot completely replace the human interviewer component. Tarnai and Moore discuss how to quantify and improve telephone interviewer performance and productivity in Chapter 17. Call center managers who are fairly new at the quality control process will benefit from the clear definitions of interviewer productivity metrics that are discussed here - and these definitions may provide a springboard for designing incentive programs for call center interviewers. A frank discussion of the role of interviewer training and different types of training rubrics is also offered here. Another useful aspect of this chapter includes the results of a survey querying 490 survey organizations about how they conduct telephone interviews and measure productivity. The results of another survey that queried 767 survey research organizations from the U.S., Europe and other parts of the world about survey research practices, facilities, operations and telephone monitoring are presented in Chapter 19 by Steve et al. Of perhaps more value in this chapter is the tangible discussion of a new telephone interviewer monitoring form (and scoring tool). Survey field managers who are new to systematic assessments of interviewer behavior or outcomes-based assessment will find the tool and operational definitions of interviewer behaviors provided in the chapter's appendix to be valuable starting points.

Chapters 18 and 20 represent departures from the practical issues presented by the other chapters in this section of the book. In Chapter 18, Groves et al. describe the results of an observational study that examined the predictive ability of interviewer acoustic measurements such as pitch, speech rate, loudness, degree of masculine tone, and breathiness with regard to survey participation rates. This study represents more in-depth biological and behavioral bases for the interaction between interviewer and survey cooperation in telephone surveys that has been largely invisible in the survey research literature. While this information is interesting, it does not explore whether acoustic attributes of speech have differing degrees of salience when conveyed over cellular or digital mobile phone networks as compared to landlines. Chapter 20 shifts the attention from interviewer attributes to new technologies, including mobile phones and internet based phone lines. Steeh and Piekarski provide a rich discussion of the use of mobile phones within the U.S. and abroad and highlight the methodological survey components of four such studies conducted within the U.S. between 2003 and 2006. Technical aspects of

call design, field period, incentives and cooperation, response and contact rates are succinctly presented in table format, followed by a lengthy discussion providing more qualitative information regarding calling periods, incentives and survey introductions for surveys via mobile phones.

The final part of the text focuses on one of the fundamental issues of modern telephone survey research: nonresponse. In Chapter 24 Battaglia et al. provide a detailed examination of recent trends in nonresponse for the decade spanning from 1995-2004. In Chapter 22, Cantor, O'Hare, and O'Connor provide a detailed review of findings from experiments (conducted between 1997 and 2005) testing various incentive levels and placement in the recruitment protocol (i.e., precontact, preextended interview and refusal conversion) for RDD surveys. The authors provide a very succinct table of general results of all the reviewed studies that would be a useful resource during a study planning phase. It appears that all of the studies in the chapter upon which discussion is based rely on RDD samples of landline phones - consistent with the bulk of studies conducted during the timeframe already mentioned. However, if one follows the advice given in earlier chapters relating to dual frame RDD samples of landline and mobile phones (see Chapters 1, 4, 7, and 20 for example), then more direction is needed in terms of placement and amount of incentives for RDDs of mobile phone users - delivery mechanisms for prepaid incentives for mobile phones are likely to produce more difficulties in reverse address matching because no available directory of working mobile phone numbers is currently available, for example; those wishing to have guidance on incentive use/amount and placement for mobile phones will have to look beyond this chapter.

Chapters 25 (Montaquila et al.) and 26 (Biemer and Link) provide a detailed description of specific analytic methods that can be used to evaluate the impact of nonresponse bias, including examination of early cooperator effects and the impact of call effort and refusal conversion on nonresponse bias. These chapters contain more details regarding the analytic rational and approach taken than is typically found in survey research publications, which will be helpful for those who wish to apply this methodology to their own RDD surveys. Moreover, the material presented in these chapters nicely extends the work presented in Chapters 2 and 8 that cover weighting and propensity score adjustments.

While these six chapters convey a lot of information about nonresponse, overlap among the coverage is quite minimal. For instance, in both Chapters 23 (Holbrook, Krosnick, and Pfent) and Chapter 24, the authors describe response rates over roughly the same time frame from the mid nineties to the later part of this decade; however, the surveys upon which the trends are based are quite different; thus a synthesis of both chapters offers the reader a broader context within which to interpret the nature of nonresponse over the last decade. While overlap is minimal, this section could benefit from a reordering from the perspective of someone trying to understand the issues/nature of nonresponse in RDD surveys. For example, beginning the section with Chapter 24 could introduce the problem of nonresponse historically, followed by Chapters 21 (Singer and Presser) and 23 to discuss factors relating to this problem in RDD surveys, followed by some possible solutions to nonresponse (Chapter 22) followed by a discussion of analytic issues of nonresponse adjustments (Chapters 26 and 25).

In closing, let me say this text is a very comprehensive collection of information regarding current trends, theories and practices in telephone survey research. The book would appeal to a target audience that includes: (a) seasoned survey researchers new to RDD telephone surveys or those wanting to learn more about the impact of mobile phones on telephone sample surveys; (b) statisticians new to weighting methods used in adjusting RDD samples for the sampling design, undercoverage and nonresponse; (c) graduate students planning to use RDD surveys for data collection and/or analysis; (d) survey field/call center managers wanting to improve interviewer efficiency, call center composition and training; (e) survey consultants/survey programmers/web designers wanting to develop or modify surveys for use with CATI, web-based or mixed mode surveys that have a telephone component; (f) researchers needing to translate English surveys into another language for administration over the telephone; (g) any other researcher, student or practitioner wanting to understand key issues regarding the design, use and analysis of data obtained from random digit dial surveys of telephones. Finally if *Advances in Telephone Survey Methodology* could call me on my mobile or landline phone, it would surely be worth my time to respond to the call and chat for a while.

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## References

Lavrakas, P.J., Shuttles, C.D., Steeh, C., and Fienberg, H. (2007). The State of Surveying Cell Phone Numbers in the United States: 2007 and Beyond. Public Opinion Quarterly, 71, 840–854.

AAPOR Cell Phone Task Force Report (2008) http://www.aapor.org/uploads/Final\_AAPOR\_Cell\_Phone\_TF\_report\_041208.pdf; accessed on November 17.

**Pierre Lavallée.** *Indirect Sampling* (2007). New York: Springer Science and Business Media, ISBN 978-0-387-70778-5, 229 pp + references and index, 59.95€.

Indirect Sampling is a translation of the author's book, published in French, Le sondage indirect, ou la méthode généralisée du partage de poids (2002, Editions Ellipse, France). The present English version has some sections added to deal with developments since publication of the French version. The book presents indirect sampling as a method to select a sample of a population (B) for which there is no direct sampling frame, where there exists a sampling frame for another population (A) that can be linked in some way to clusters of the population of interest (B). As long as every member of B belongs to a cluster that can be linked to a member of A, unbiased estimates can be made from survey

(or other) data using the generalized weight share method (GWSM). The GWSM is useful because calculating the probabilities of selection for an indirect sample can be challenging.

Indirect sampling could be a useful tool for the sampling statistician in instances where there is no good sampling frame for the population of interest. However, the book presents mostly simple examples of the application of indirect sampling. Most of the text is devoted to the GWSM. In this sense the book is more about weighting than it is about sampling.

The book contains ten chapters. Chapter 1 (Introduction) reviews sampling theory and weighting, including cluster sampling, and introduces the reader to the concepts of indirect sampling and the GWSM. Chapter 2 (Description and Use of the GWSM) gives more detail about the GWSM and gives some examples of its use. Chapter 3 provides a review of literature, pointing out the precursors of the GWSM (such as the Fair Share Method) and its use in areas such as multiplicity and adaptive cluster sampling.

Chapter 4 (Properties) discusses the unbiasedness of GWSM estimators and the variance of such estimators. It also covers the specific cases of conventional cluster sampling and of censuses. The chapter concludes with a discussion of using weighted links to reduce the variance of GWSM estimators.

Chapter 5 covers the application of the GWSM to two-stage indirect sampling and discusses the formation of clusters. Chapter 6 presents the application of indirect sampling in longitudinal surveys, and Chapter 7 discusses applying calibration methods to GWSM. Chapter 8 discusses issues related to survey nonresponse and Chapter 9 deals with record linkage. Chapter 10 (Conclusion) presents the author's view of the utility of the GWSM and summarizes six specific applications of GWSM.

Indirect Sampling presents a thorough treatment of the GWSM, along with some useful examples. The examples of the uses of indirect sampling are too few, in my opinion, but are clear and easy to follow. The author covers his topics methodically, using many (too many?) equations and frequently presenting proofs. While the book begins with an overview of sampling and weighting, it does not seem to be a text for those who do not have a good background in those areas. However, this book is a useful reference for those with a background in sampling and weighting who deal with survey situations where there is no direct sampling frame or where the GWSM may prove a useful tool for estimation.

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**Howard Schuman.** *Method and Meaning in Polls and Surveys* (2008). Cambridge, MA: Harvard University Press, ISBN 978-0-674-02827-2, 214 pp, \$39.95.

Dr. Schuman succinctly expresses the goal of his new book, and of his career generally, as "to connect method and meaning" in polls and in self-report surveys – especially those

pertaining to attitudes. The volume admirably addresses this goal. Admittedly, some readers may find this objective somewhat narrow, as Schuman purports to provide neither a primer on questionnaires and surveys, nor a comprehensive review of the research literature. As such, the book is not targeted as a didactic how-to guide to questionnaire design for beginning survey researchers. Rather, it serves mainly to provoke thought among researchers already harboring an appreciation of the vagaries of meaning in question design, and to challenge them to consider how methodological tools can be applied to extract the essence of question meaning from survey data.

To this end, Schuman focuses on a key viewpoint, or paradigm – honed over the years as he has sought to unlock the mysteries hiding within survey responses. The "Schuman paradigm" is composed of two key postulates, related to the unraveling of underlying meaning: (a) Survey-based experiments that pose two versions of a survey question can produce data useful for inferring respondent interpretation; and (b) Embedded probe questions requesting elaboration by survey respondents as to *why* they answered a question in a certain way also provide information vital for disentangling an often complex web of meaning.

Through the conduct of a series of experiments encapsulated in the book, Schuman has utilized these basic tools in a pragmatic, straightforward manner. In stating that he endeavors to make no attempt "to construct an overall theoretical framework or to advance a sweeping general theory," he eschews grand theory-building related to the survey response process. Interestingly, although his tenets seem to clearly embody a cognitive perspective, he makes explicit reference to the subfield of CASM (the Cognitive Aspects of Survey Methodology) only once, near the end of the book. Further, although he acknowledges that "At least part of my own research on the question-answer process can be seen as falling within this movement," he takes pains to point out that much of his research occurred prior to the imposition of cognitive theorizing on such work, and suggests that the ubiquitous keyword "cognition" is so general that it provides little specific direction in understanding survey-related phenomena. A key message is that researchers should avoid becoming enamored of the pursuit of overarching models and theories, and instead spend their time "in the trenches" doing battle with mutinous survey questions.

Due to Schuman's preference for the concrete over the abstract, the book has a fairly common-sense and specific feel, as he focuses mainly on selective experiments as case-studies to illustrate his favored approach. These examples span a long history (nearly as long as the history of 20th century survey research), are varied in nature, and are fascinating from both a methodological and a historical perspective. Although it is very tempting to provide a synopsis of each of these, I will leave the reader to go to the source, and simply state that his examples are lively and compelling (although at times, they are presented at a level of detail likely to be fully appreciated only by true connoisseurs of data dissection).

A chapter-by-chapter review of the book reveals a systematic investigation of vital issues in questionnaire design, each clearly framed and addressed within its own chapter. Chapter 1 poses the question "What's unique about survey questions?" in contrast to questions asked by speakers in the course of everyday conversational interaction. Schuman takes an eclectic perspective that borrows elements from social psychology such as the "Fundamental Attribution Error" (Ross 1977), as well as from perennial controversies within the survey methods field (e.g., standardization versus flexibility of survey question administration), in providing a framework for viewing the survey response task. He also introduces several

terms and concepts that serve as useful heuristics, in particular the distinction between "survey fundamentalism" and "survey cynicism."

Chapter 2 covers what appears to be one of the author's favorite topics (or at least, one that he finds intriguing): The "Primordial Distinction between Open and Closed Attitude Questions." Beyond providing a usual review of the attractions and drawbacks of each variant (such as the observation that open-ended questions tend to be vague with respect to communicating the nature of an acceptable response, and produce coding burdens), Schuman evaluates the open-versus-closed conundrum though empirical examples, such as the ascertainment of "moral values" as a reason for favoring a candidate in the 2004 U.S. presidential election. Interestingly, his systematic investigation leads to nuanced conclusions concerning the relative efficacy of each approach, and should be required reading for anyone possessing biases concerning the use of open-ended questions.

Chapter 3 turns to the use of cognitive probes embedded within the field survey, in the form of "Why?" questions requesting that the survey respondent provide further explanation for his or her response to an attitudinal question. Here the book most clearly delves into a conceptual domain that I view as closely related to CASM, and that also directly encompasses the anthropological concept of ethnography. Relying on a historically significant example (attitudes towards U.S. involvement in the Vietnam War), Schuman demonstrates how "why" questions can be used to understand the disparate meanings that a survey question can convey to distinct segments of the population. Most significantly, he illustrates how an appreciation of these fundamental differences embellishes our understanding of the underlying attitude we endeavor to survey. Further, his discussion of the *random probe* technique – a forerunner to more contemporary verbal probes administered through cognitive interviewing – leads the reader to appreciate the value of empirical evidence as compared with simply "listening to the experts," and may even help us to derive pointers concerning effective practice within cognitive interviews.

It is within this chapter that Schuman announces his major departure from survey methodologists who use cognitive techniques to pretest survey questions. He argues that "probes built into the survey itself can be more useful than investing substantial resources in special forms of pretesting, especially when these are carried out in artificial laboratory settings or with convenience samples." As a proponent of cognitive pretesting, I acknowledge the clear benefits of field-based experimentation, but also take issue with the absolutist position that they are always preferable to small-scale qualitative pretesting. In particular, the split-sample approach seems limited in two fundamental ways: (1) It produces data only after the survey is fielded, and is therefore not useful for the purpose of remediation prior to survey administration; and (2) Survey practitioners normally face fairly severe limits on the number of questions, and the range of issues, that can be systematically varied or probed within a fielded survey. I would therefore propose a compromise, and advocate a balanced approach that recognizes the value of both cognitive pretesting and the use of field experiments, and that incorporates mixed methods (i.e., qualitative combined with quantitative).

Chapter 4, "Artifacts Are in the Mind of the Beholder," recapitulates Schuman's classic (1982) article by that name (although, somewhat inexplicly, Schuman does himself a disservice by not directly citing that publication). The theme embodied in that work – that context, wording, and order effects in survey questionnaires are not best viewed as source

of noise, but rather as a means for obtaining more nuanced understanding – remains a key lesson to survey researchers, and a keystone of his contributions to survey methods.

Chapter 5, "The Survey World and Other Worlds," opens the methodological door to between-population comparisons, and is very timely, given the increasing relevance of cross-cultural and multi-national survey research. Again, Schuman views cultural effects as a window into the respondent's mind that serves to provide insight into question meaning. He applies a healthy dose of cognitive psychology (e.g., the observation that the events that people recall as most important are generally those that occurred during their adolescent and young adult years), and once more illustrates by example the process of extracting meaning from data derived through planned experimentation.

Chapter 6, "Hunting a Social Science Snark," reflects the confidence of a seasoned professional with a history of success – as it relates a story of failure. In narrative detail, Schuman leads the reader through the stages of first discovering a tantalizing data relationship; then building this into a general hypothesis; then testing that principle; and finally, experiencing the disappointment of discovering that further data simply refuse to behave as expected, causing us to relinquish our embrace of the initial finding. Any researcher who has had a similar experience (or, who is bound to) will appreciate this tale.

Shuman wraps up by noting that "Insights into the meaning of data are first and foremost the product of thought and imagination." Although a simple statement, I find this observation especially appealing. In particular, it serves as a useful counter to the frequently-expressed sentiment that in any field of science, data "speak for themselves" in a direct and clear manner, if only we design our materials properly, pay attention to principles such as the computation of statistical power, and generally adhere to the rigors of the scientific method. The less straightforward theme – that collection of data is only the beginning of our detective work – reveals a view of the survey field as one that is always demanding and sometimes frustrating, but also compelling and rich in its subtle complexity. In final analysis, Howard Schuman has done great justice to this view.

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## References

Ross, L. (1977). The Intuitive Psychologist and His Shortcomings: Distortion in the Attribution Process. Leonard Berkowitz (ed.). New York: Academic Press, Vol. 10, 173–220.

Schuman, H. (1982). Artifacts Are in the Mind of the Beholder. The American Sociologist, 17, 21–28.