

Workshop on Question Evaluation Methods

October 21-23, 2009

National Center for Health Statistics Hyattsville, Maryland

Sponsored by the National Center for Health Statistics and the National Cancer Institute







Workshop on Question Evaluation Methods

Welcome

Welcome to the Workshop on Question Evaluation Methods (QEM) sponsored by the National Center for Health Statistics and the National Cancer Institute. The purpose of the Workshop is to provide a forum for survey methodologists to compare and contrast various question evaluation methods, including behavior coding, cognitive interviewing, field-based data studies, item response theory modeling, latent class analysis, and split-sample experiments. During the Workshop, participants will engage in an interdisciplinary and cross-method examination of the major approaches used to evaluate survey questions. A specific goal of the Workshop is to provide recommendations to the interagency Q-Bank Steering Committee concerning guidelines and standards for the evaluation studies that will be submitted to the Q-Bank database of question evaluation reports (for further information about Q-Bank, please visit www.cdc.gov/qbank).

Event Format

The workshop agenda has been developed to fulfill the objective of reviewing the background of each question evaluation method and then identifying and discussing current issues surrounding each method. This objective is being fulfilled through presentations by three leading experts in each method within the first half of each session. The initial presenter in each session has written a primary paper that outlines the background and current issues in the field. The following two presenters will deliver papers they have written in response to the primary paper.

Following the three paper presentations within each session, the workshop will feature a discussion of the relevant method. Most of this time will be devoted to discussion among workshop presenters and a small number of invited audience participants who are particularly knowledgeable about question evaluation methods. A short time at the end of each session will be reserved for questions from the general audience.

Agenda

October 21

9:00 a.m.-9:30 a.m. Introduction

NCHS Director: Edward Sondik

Q-Bank Administrator: Aaron Maitland (NCHS)

Moderator: Ken Waters (USDA)

9:30 a.m.-11:30 a.m. Field-Based Data Studies

Chair: Rachel Caspar (RTI International)

Primary: James L. Esposito (BLS) Response: James M. Dalhamer (NCHS) Response: Brian Harris-Kojetin (OMB)

Participating audience discussion General audience discussion

11:30 a.m.-1:00 p.m. Lunch

1:00 p.m.-3:00 p.m. Behavior Coding

Chair: Jennifer Dykema (University of Wisconsin-Madison)

Primary: Floyd J. Fowler, Jr. (UMASS-Boston)

Response: Nora Cate Schaeffer (University of Wisconsin-Madison) Response: Alisú Schoua-Glusberg (Research Support Services)

Participating audience discussion General audience discussion

3:00 p.m.-3:15 p.m. Break

3:15 p.m.–5:15 p.m. Split-Sample Experiments

Chair: David Cantor (Westat)

Primary: Jon Krosnick (Stanford University) Response: Johnny Blair (Abt Associates Inc.)

Response: Stephanie Willson (NCHS) and Theresa DeMaio (Census)

Participating audience discussion General audience discussion

October 22

9:00 a.m.-9:30 a.m. Recap of the First Day

9:30 a.m.-11:30 a.m. Cognitive Interviewing

Chair: Yuling Pan (Census)
Primary: Kristen Miller (NCHS)
Response: Gordon Willis (NCI)

Response: Fred Conrad (University of Michigan)

Participating audience discussion General audience discussion

11:30 a.m.-1:00 p.m. Lunch

1:00 p.m.-3:00 p.m. Latent Class Analysis

Chair: Roger Tourangeau (JPSM)
Primary: Paul Biemer (RTI International)

Response: Frauke Kreuter (JPSM)

Response: Janet A. Harkness (University of Nebraska-Lincoln) and

Timothy Johnson (University of Illinois at Chicago)

Participating audience discussion General audience discussion

3:00 p.m.-3:15 p.m. Break

3:15 p.m.-5:15 p.m. Item Response Theory Modeling

Chair: Jose-Luis Padilla (University of Grenada)

Primary: Bryce Reeve (NCI)
Response: Ron Hays (UCLA)
Response: Clyde Tucker (BLS)
Participating audience discussion
General audience discussion

October 23

9:00 a.m.-9:30 a.m. Recap of the Second Day

9:30 a.m.-11:30 a.m. Multitrait-Multimethod Experiments

Chair: John Eltinge (BLS)

Primary: Willem Saris (Universitat Pompeu Fabra in Barcelona)

Response: Duane Alwin (Pennsylvania State University)

Response: Peter Mohler (Mannheim University)

Participating audience discussion General audience discussion

11:30 a.m.-1:00 p.m. Lunch

1:00 p.m.-2:00 p.m. Conclusions

Moderator: Ken Waters (USDA)

Speaker 1: Norman Bradburn (NORC) Speaker 2: Jennifer Madans (NCHS) Speaker 3: Robert M. Groves (Census)

2:00 p.m.-2:15 p.m. Closing Remarks

Field-Based Data Studies

Speaker: James L. Esposito



Jim Esposito is currently employed as a behavioral scientist at the U.S. Bureau of Labor Statistics (BLS) in Washington, D.C. He has an academic and professional background in civil engineering, clinical psychology, and social psychology. Over the past two decades, he has settled into the role of a survey practitioner and has collaborated as a member of several interdisciplinary teams on such projects as the redesign of the Current Population Survey (CPS), the development or evaluation of a half dozen CPS supplements, a proposed expansion of the CPS reinterview program, and the redesign of interviewing procedures for the Bureau's Mass Layoff Statis-

tics (MIS) program. Prior to arriving at the BLS in February 1990, he had accepted a 12-month position as a Service Fellow at the National Center for Health Statistics (NCHS), where he conducted cognitive research on sensitive questions. In addition to his work on the CPS and the MLS programs, his research interests include the development of a framework that interrelates questionnaire-design-and-evaluation processes with sources of measurement error and explorations into the comparative utility of various questionnaire-evaluation methods (e.g., interviewer and respondent debriefings, behavior coding, cognitive interviews, and re-interviews) within the context of cross-sectional and longitudinal multiple-method evaluation efforts.

Speaker: James M. Dahlhamer

Jim Dahlhamer is a survey statistician within the Division of Health Interview Statistics, National Center for Health Statistics. His primary responsibilities include survey planning and outreach, questionnaire development, and methodological research. Among his current research interests and activities are the use of survey paradata for assessing and monitoring data quality. Jim received his Ph.D. in Sociology from the University of Delaware.



Speaker: Brian Harris-Kojetin



Dr. Brian Harris-Kojetin is a Senior Statistician in the Statistical and Science Policy Branch at the U.S. Office of Management and Budget (OMB). He chairs the Federal Committee on Statistical Methodology and is the lead at OMB on issues related to standards for statistical surveys, survey non-response, survey respondent incentives, and the Confidential Information Protection and Statistical Efficiency Act of 2002 (CIPSEA). He serves as the desk officer for the U.S. Bureau of Labor Statistics and the demographic programs of the U.S. Census Bureau. Brian is also a frequent consultant

with other OMB desk officers on statistical and methodological aspects of OMB "clearance" packages across all federal agencies and led the development of the OMB guidance on surveys. He is also an elected Fellow of the American Statistical Association.

Behavior Coding

Speaker: Floyd J. Fowler, Jr.



Floyd Jackson Fowler, Jr., received a Ph.D. from the University of Michigan in 1966. He has been a Senior Research Fellow at the Center for Survey Research at the University of Massachusetts, Boston, since 1971. He was Director of the Center for 14 years. Dr. Fowler is the author or co-author of four text books on survey methods as well as numerous research papers and monographs. His recent work has focused on question design and applying survey methods to studies of medical care.

Speaker: Nora Cate Schaeffer

Nora Cate Schaeffer is Professor of Sociology at the University of Wisconsin-Madison and Faculty Director of the University of Wisconsin Survey Center. She has over 30 years experience in survey methodology and questionnaire design and has taught Questionnaire Design at the University of Michigan's Summer Institute in Survey Research. Her research has been published in the *Journal of the American Statistical Association, Public Opinion Quarterly, Sociological Methods and Research,* and *Sociological Methodology*. She is co-editor (with Douglas W. Maynard, Hanneke Houtkoop-Steenstra, and Johannes van der Zouwen) of *Standardization and Tacit Knowledge: Interaction and Practice in the Survey Interview.*

Speaker: Alisú Schoua-Glusberg



Alisú Schoua-Glusberg is a cultural and linguistic anthropologist with over 24 years experience in survey research. She has directed large-scale longitudinal surveys at NORC, Harvard Medical School, IMPAQ International, and Metro Chicago Information Center. In 1996, she founded Research Support Services, where she is a General Partner. Dr. Schoua-Glusberg specializes in research on questionnaire translation and qualitative data collection. She has conducted dozens of cognitive interviews for universities, nonprofit organizations, and for federal agencies such as the National Center for Health Statistics (NCHS) and the U.S. Census Bureau. She has participated in mul-

tilingual and cross-national cognitive testing studies, such as the 2007–2008 NCHS/European Social Survey project, to cognitively test questions internationally and to develop joint methods for comparative analysis. She has been a member of the Expert Peer Review Panel for the Statistical Research Division's Program of General Census and Survey Research and Support, the Expert Panel on Translation, and the Expert Review Panel for the AQE Race and Hispanic Origin Items in 2008. She served as a member of the European Social Survey Translation Task Force (2001–2008).

Split-Sample Experiments

Speaker: Jon Krosnick



Dr. Krosnick's questionnaire design work has illuminated the cognitive and social processes that unfold between researcher and respondent when the latter are asked to answer questions, and his ongoing review of 100 years worth of scholarly research on the topic has yielded a set of guidelines for the optimal design of questionnaires to maximize reliability and validity. His recent work in survey methodology has explored the impact of mode of data collection (e.g., face-to-face, telephone, Internet) on response accuracy and the impact of survey response rates on substantive results.

Speaker: Johnny Blair

Johnny Blair is Abt Associate's Senior Survey Methodologist and Director of Cognitive Testing Laboratory. Over the course of his career, he has managed survey operations; designed surveys for both population and business establishment research; and conducted methodological research in several areas including sampling for rare populations, measurement error in proxy reporting, and the design and analysis of cognitive interviews for pretesting.

He has served on committees for the National Academy of Sciences, the American Statistical Association, and NCES, among others. From 1994–1999, he served on the editorial board of *Public Opinion Quarterly*.

His publications include "Survey Pretesting: Do Different Methods Produce Different Results?" (with Stanley Presser), "Aspects of Data Quality in Cognitive Interviews: the case of verbal reports," (with Frederick Conrad), "Dual Frame Web-Telephone Sampling for Rare Groups" (with Edward Blair), and the book *Designing Surveys: A guide to decisions and procedures* second edition (with Ronald Czaja).

Speaker: Stephanie Willson



Stephanie earned her doctorate in sociology at the University of Delaware in 1998. She arrived at NCHS in 2001 and worked on the National Survey of Family Growth before joining the cognitive methods staff in 2004. Her expertise is in qualitative data collection and analysis, and her interests include methodologically advancing the evaluation of survey item construct validity.

Theresa DeMaio has worked as a survey statistician at the U.S. Census Bureau for over 30 years. She has conducted questionnaire pretesting and evaluation using cognitive interviews, split panel tests, behavior coding, and respondent debriefing. Her research interests include best practices and validation of the cognitive interview method.



Cognitive Interviewing

Speaker: Kristen Miller



Kristen Miller is Director of the Question Design Research Lab at the National Center for Health Statistics. In this capacity, she leads the Q-Bank effort, an inter-agency sponsored database housing cognitive testing reports from the federal statistical agencies. She received her Ph.D. in sociology at the University of Delaware. Her research interests include the impact of culture and social structure in question response and bridging qualitative and quantitative methodologies to improve question design.

Speaker: Gordon Willis

Gordon Willis is a Cognitive Psychologist at the National Cancer Institute, National Institutes of Health. He previously worked at Research Triangle Institute and at the Questionnaire Design Research Laboratory within the Centers for Disease Control and Prevention, National Center for Health Statistics, to develop methods for evaluating survey questions. Dr. Willis attended Oberlin College and Northwestern University. He co-authored the Questionnaire Appraisal System for evaluating draft survey questions; wrote *Cognitive Interviewing: A Tool for Improving Questionnaire Design* (Sage Publications, 2005); co-taught a course in Questionnaire Design at



the University of Maryland/University of North Carolina; and regularly presents short courses on Cognitive Interviewing at conferences and workshops. His work involves the development of surveys on cancer risk factors and focuses on questionnaire pretesting. His current research interests focus on sociocultural issues in self-report surveys, with an emphasis on survey translation and on the adaptation of empirical methods such as cognitive interviewing and behavior coding, to the development of survey questions that are comparable across language and culture.

Speaker: Fred Conrad



Fred Conrad is an Associate Research Professor in the Program in Survey Methodology at Michigan and also a Research Associate Professor in the Joint Program in Survey Methodology at the University of Maryland. His current research concerns the impact of new data collection technologies and the way people use them on the quality of survey responses. These technologies include interactive Web surveys and virtual interviewers. In addition to human-technology interaction, Conrad investigates interviewer-respondent interaction, in particular the role of spoken and visual cues of comprehension difficulty. He worked at the U.S. Bureau of Labor Statistics

from 1991–2002, where he began to do research on the quality of information produced in cognitive interviews.

Latent Class Analysis

Speaker: Paul Biemer



Paul P. Biemer holds a dual position as RTI Distinguished Fellow, Statistics and Associate Director of Survey Research and Development at the Odum Institute, University of North Carolina, Chapel Hill. He holds a Ph.D. in Statistics and has over 30 years experience in complex survey design and data analysis. Prior to joining RTI, Dr. Biemer was head of the Department of Statistics at New Mexico State University and held a number of positions at the U.S. Census Bureau. He is an internationally known expert and researcher in survey methodology. His book, *Introduction to Survey Quality* (with Lars Lyberg), is a widely used course text and he has numerous

publications in the field of survey methodology. His research has examined the relationships between survey design and survey error, and statistical methods for assessing survey errors—particularly measurement errors and methods for the analysis of survey data. He co-invented and co-developed Computer Audio Recorded Interviewing (CARI) and pioneered the field of latent class analysis for survey evaluation. At UNC he established the Certificate Program in Survey Methodology, which he directs. His articles have been published in numerous scholarly journals. He has co-edited *Measurement Errors in Surveys, Survey Measurement and Process Quality, and Telephone Survey Methodology*, which were published by John Wiley & Sons. He is a Fellow of the ASA and the AAAS and an Elected Member of the ISI.

Speaker: Frauke Kreuter

Frauke Kreuter is an Assistant Professor in the Joint Program in Survey Methodology (JPSM). She received her Master's in Sociology from the University of Mannheim, Germany, and her Ph.D. in Survey Methodology from the University of Konstanz. Before joining the University of Maryland she held a postdoc at the UCLA Statistics Department. Her research focuses on nonresponse and measurement errors in complex surveys. She is particularly interested in the use of paradata and the application of latent variable models.



Speaker: Janet A. Harkness

Janet A. Harkness holds the Donald and Shirley Clifton Chair in Survey Science at the University of Nebraska-Lincoln and is Director and Graduate Chair of the Survey Research and Methodology Program at the university. She has published, presented, and taught on numerous aspects of cross-cultural survey research and communication.

Speaker: Timothy Johnson

Timothy Johnson's main areas of expertise include survey methodology and health behaviors in disadvantaged populations. Within the field of survey methodology, his work has focused primarily on sources of measurement and nonresponse error. His measurement error work is concerned with cultural variability in the cognitive processing of survey questions. He has also conducted numerous investigations designed to validate self-reported health information. His work on nonresponse error has been directed at developing new methods for identifying the effects of nonresponse mechanisms on the quality of survey estimates, as well as the development and testing of new



approaches to adjusting for nonresponse bias. His research also examines the health behaviors of disadvantaged populations. Johnson is currently Director of the Survey Research Laboratory at the University of Illinois at Chicago (UIC), where he also serves as Professor of Public Administration, Research Professor of Public Health, Vice Chair of the Social and Behavioral Institutional Review Board, and Deputy Director for Evaluation and Tracking of the UIC Center for Clinical Translational Science.

Item Response Theory Modeling

Speaker: Bryce Reeve



Dr. Reeve is a Psychometrician and Program Director at the National Institutes of Health's (NIH) National Cancer Institute (NCI), where he has worked since 2000. At NCI he directs an active program to enhance the use of patient-reported outcomes (PROs, including health-related quality of life (HRQOL) and patient experiences with health care) in clinical research and practice to improve the quality of care for both pediatric and adult cancer patients. With a degree in quantitative psychology from the University of North Carolina at Chapel Hill, his work at NCI is focused on enhancing PRO measures with innovative psychometric methodologies and integrating

PRO data in cancer research and health care delivery to inform decision making.

Dr. Reeve serves as an NIH Science Officer on the Patient-Reported Outcomes Measurement Information System (PROMIS) Network. The PROMIS Network is in the process of building a public domain Web-based resource to dynamically administer, collect, and report data on key HRQOL domains relevant to a variety of chronic diseases. In 2004, he organized an international conference on applying item response theory and computerized-adaptive testing methodology to enhance HRQOL assessment. This effort led to the publication of a special issue in *Quality of Life Research on Applying Item Response Theory to Enhance Health Outcomes Measurement*, co-edited by Dr. Reeve.

In September 2006, he organized an NCI-sponsored conference examining the value and challenges of integrating HRQOL in cancer clinical trials. This effort led to the publication of a special issue in the *Journal of Clinical Oncology on Patient-Reported Outcomes Assessment in Cancer Trials*, co-edited by Dr. Reeve.

Dr. Reeve was elected and now currently serves on the Board of Directors of the International Society for Quality of Life Research (ISOQOL). He also serves on NCI's Symptom Management and Health-Related Quality of Life Steering Committee and the Steering Committee of Assessing the Symptoms of Cancer using Patient-Reported Outcomes.

Speaker: Ron Hays



Ron Hays (Ph.D., University of California, Riverside, in Psychology) is Professor of Medicine at UCLA and a Senior Health Scientist at RAND. Dr. Hays has contributed to the development of research instruments to assess patient evaluations of health care, health-related quality of life, and other health outcomes. He has used these tools to assess individuals with diverse medical disorders and identify determinants of patient outcomes of health care. He has also studied adherence to medical regimens and other issues at the nexus of health, behavior, and the health care system. He is one of the Principal Investigators for CAHPS®,

a project that has developed measures to assess consumer evaluations of hospitals, nursing homes, group practices, and individual physicians as well as tools to report these assessments to health care providers and consumers. Dr. Hays has published over 350 research articles and 31 book chapters. He is a former editor-in-chief of *Quality of Life Research* and former deputy editor of *Medical Care*.

Speaker: Clyde Tucker

Clyde Tucker has been at the U.S. Bureau of Labor Statistics for over 25 years, and he currently serves as the Senior Survey Methodologist. He cochaired the interagency research group that revised the methodology for collecting information on race and ethnicity in all federal surveys, including Census 2000. He served as a statistical consultant to the bipartisan Congressional Commission assessing the impact of the Family and Medical Leave Act. He is a member of the committee overseeing the methodology of the Current Population Survey used to measure the unemployment rate and the



Federal Committee on Statistical Methodology. He is a past winner of both the Herriot Award for Innovation in Federal Statistics from the American Statistical Association (ASA) and the Innovator Award from the American Association for Public Opinion Research (AAPOR).

Dr. Tucker began his career as the Assistant Manager of CBS News Polls, where he worked on the design and analysis of exit polls. His research interests include telephone survey design, survey nonresponse, and measurement error. He has an M.S. in statistics and a Ph.D. in political science, both from the University of Georgia, and he is an elected Fellow of ASA. He is a past chair of the Government Statistics Section of ASA, and he has held numerous positions on the AAPOR National Council. He is a past president of the Washington Statistical Society.

Since 1984, Dr. Tucker has served as a statistical consultant on national election decision desks for television networks. He managed the decision teams for Voter News Service from 1994 to 2002. In 2004, 2006, and 2008, he headed the decision desk for CNN. CNN won the 2007 Emmy Award for best coverage of a breaking story for its 2006 Election Night coverage and a 2008 Peabody for its coverage of the 2008 Presidential Primaries.

Multitrait-Multimethod Experiments

Speaker: Willem Saris



Willem Saris is a Professor at The Universitat Pompeu Fabra and the Escuela Superior de Administracion y Direccion de Empresas (ESADE) in Barcelona, Spain. He is a member of the Coordinating Team of the European Social Survey and was Laureate of the 2005 DesCartes Prize for Best Collaborative Research. He has published on structural equation models and survey research methodology and has over 30 years of teaching experience in the field of survey methodology.

Speaker: Duane Alwin

Duane F. Alwin is the inaugural holder of the McCourtney Professorship in Sociology and Demography and Director of the Center for Life Course Research in the Population Research Institute at Pennsylvania State University. He is an Emeritus Research Scientist and Emeritus Professor of Sociology at the University of Michigan, where he was a member of the Survey Research Center faculty for nearly 25 years. While at Michigan, he served for 15 years as the first director of the SRC Summer Institute in Survey Research Techniques. In addition to his contributions to scholarship on survey methodology, his research interests include a wide range of phenomena concerned with the connection of demographic processes and human devel-



opment. Dr. Alwin has published extensively in his areas of research in the social sciences and is the recipient of more than two dozen prestigious awards, grants, and special university honors. In 2002, he was recognized by the Institute for Scientific Information as among the "world's most cited authors—comprising less than one-half of 1 percent of all publishing researchers" (see http://isihighlycited.com).

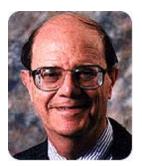
Speaker: Peter Mohler



Peter Mohler, Honoraprofessor at Mannheim University and former Director of ZUMA and its European Centre for Comparative Surveys (ECCS), is a qualitative and quantitative survey methodologist. As codeveloper of TEXTPACK, he published numerous papers on qualitative and quantitative content analysis using computers and brains. As PI of the German General Social Survey (ALLBUS) and collaborator in ISSP and ESS, he designed and analyzed large scale quantitative surveys. More recently he has concentrated on comparative multipopulation and multilingual survey methodology.

Conclusions

Speaker: Norman Bradburn



A social psychologist, Norman Bradburn has been at the forefront in developing theory and practice in the field of sample survey research. He has focused on psychological well-being and assessing quality of life, particularly through the use of large-scale sample surveys, nonsampling errors in sample surveys, and research on cognitive processes in responses to sample surveys. His book, *Thinking About Answers: The Application of Cognitive Process to Survey Methodology* (co-authored with Seymour Sudman and Norbert Schwarz; Jossey-Bass, 1996), follows three other publications on the methodology of designing and constructing questionnaires: *Polls and*

Surveys: Understanding What They Tell Us (with Seymour Sudman; Jossey-Bass, 1988); Asking Questions: A Practical Guide to Questionnaire Construction (with Seymour Sudman; Jossey-Bass, 1982; 2nd edition with Brian Wansink, 2004) and Improving Interviewing Method and Questionnaire Design (Jossey-Bass, 1979).

Speaker: Jennifer Madans

Jennifer H. Madans, Ph.D., has been the Associate Director for Science at the National Center for Health Statistics since May 1996 and is responsible for the overall plan and development of NCHS's data collection and analysis programs. Since Dr. Madans joined the Center, she has concentrated her research efforts on data collection methodology, measurement of health and functioning, and health services research. She has directed two national longitudinal studies (NHANES I Epidemiologic Followup Study and the National Nursing Home Followup Study) as well as the redesign of the National Health Interview Survey questionnaire. She was one of the designers of the DHHS Survey Integration Plan. She is a founding member and chair of the steering committees for three UN sponsored initiatives to develop internationally comparable measures of disability and health. Dr. Madans is a graduate of Bard College (B.A.) and the University of Michigan (M.A. and Ph.D., Sociology). She completed a Postdoctoral Fellowship in the Department of Epidemiology and Public Health at Yale University. She served as a lecturer in the Division of Biostatistics and Epidemiology, Department of Community and Family Medicine, Georgetown University School of Medicine as well as in the Department of Demography at Georgetown. She is a Fellow of the American Statistical Association, an elected member of the International Statistical Institute, and is currently a Vice President of the International Association of Official Statistics.

Speaker: Robert M. Groves



President Barack Obama nominated Robert M. Groves for director of the U.S. Census Bureau on April 2, 2009, and the Senate confirmed him on July 13, 2009. He began his tenure as director, July 15, 2009.

Groves had been director of the University of Michigan Survey Research Center and research professor at the Joint Program in Survey Methodology at the University of Maryland. He was elected a fellow of the American Statistical Association in 1982, elected a member of the International Statistical Institute in 1994, and named a national associate of the National

Research Council, National Academy of Sciences, in 2004. He was the Census Bureau's associate director for Statistical Design, Methodology and Standards from 1990 to 1992. In 2008, he became a recipient of the prestigious Julius Shiskin Memorial Award in recognition for contributions in the development of economic statistics.

Groves has authored or co-authored seven books and more than 50 articles. His 1989 book, "Survey Errors and Survey Costs," was named one of the 50 most influential books in survey research by the American Association of Public Opinion Research. His book, "Nonresponse in Household Interview Surveys," with Mick Couper, written during his time at the bureau, received the 2008 AAPOR Book Award.

Groves has a bachelor's degree from Dartmouth College and master's degrees in statistics and sociology from the University of Michigan. He also earned his doctorate at Michigan.

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