



TSMII

2nd International Conference on

TELEPHONE SURVEY METHODOLOGY

January 11-15, 2006

Miami, Florida

American Statistical Association,
Section on Survey Research Methods
American Association for Public Opinion Research
Council of American Survey Research Organizations
Marketing Research Association
International Association of Survey Statisticians

Many TSMII contributors are onsite presenting their company information and services. Please stop by and thank them for their contributions. Contributor and exhibitor tables are located throughout the Regency Ballroom Prefunction Area and the Upper Promenade.

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The Pew Research Center
WAPOR—World Association for Public Opinion Research

TSMII will bring together survey researchers and practitioners concerned with telephone survey methodology and practice in order to:

Contribute to the science of measuring and reducing errors attributable to poor telephone survey design

Document current practices

Stimulate new ideas for further research and development

The 1987 International Conference on Telephone Survey Methodology generated a widely read book about telephone survey methodology (Groves, Biemer, Lyberg, Massey, Nicholls, and Waksberg, 1989). Because of rapid changes in telephone survey methodology and telecommunications throughout the past 15 years, the volume has become increasingly dated. Therefore, state-of-the-art research and practices related to telephone survey methodology will be presented in a new, edited monograph based on papers from TSMII. The monograph will be published by Wiley as part of the Wiley Series in Survey Methodology.

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Clyde Tucker, Bureau of Labor Statistics
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Information

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Web: www.amstat.org/meetings/tsmii/2006

Activities: Wednesday, January 11, 2006

7:00 a.m.–5:00 p.m.	Lower Promenade	Conference Registration
8:30 a.m.–5:00 p.m.	(SC1) Tuttle North (SC2) Tuttle South (SC3) Brickell North (SC4) Brickell South	SHORT COURSES (SC1) Introduction to Survey Quality, (SC2) Telephone Sampling, (SC3) Introduction to Writing Questions for Standardized Interviews, (SC4) Multilevel Analysis for Grouped and Longitudinal Data
6:00 p.m.–7:00 p.m.	Riverwalk, Outdoor Terrace Level	Welcome Reception

Activities: Thursday, January 12, 2006

7:00 a.m.–5:00 p.m.	Lower Promenade	Conference Registration
7:00 a.m.–8:30 a.m.	Jasmine	Continental Breakfast
8:30 a.m.–10:00 a.m.	Jasmine	P1 – Telephone Survey Methods: Adapting to Change
10:00 a.m.–10:30 a.m.	Refreshment Break	
10:30 a.m.–12:00 p.m.	(CS01) Brickell (CS02) Tuttle North (CS03) Tuttle South	Concurrent Sessions: (CS01) Invited Session I (CS02) Cognitive Processes (CS03) Nonresponse Bias
12:00 p.m.–1:30 p.m.	Jasmine	Keynote Speaker/Conference Luncheon
1:30 p.m.–3:00 p.m.	(CS04) Brickell (CS05) Tuttle North (CS06) Tuttle South	Concurrent Sessions: (CS04) Invited Session II (CS05) Sampling and Coverage (CS06) Response Rates I
3:00 p.m.–3:30 p.m.	Refreshment Break	
3:30 p.m.–5:00 p.m.	(CS07) Brickell (CS08) Tuttle North (CS09) Tuttle South	Concurrent Sessions: (CS07) Invited Session III (CS08) Interviewer Performance (CS09) Multimode Data Collection I

Activities: Friday, January 13, 2006

7:00 a.m.–5:00 p.m.	Lower Promenade	Conference Registration
7:00 a.m.–8:30 a.m.	Jasmine	Continental Breakfast
8:30 a.m.–10:00 a.m.	(CS10) Brickell (CS11) Tuttle North (CS12) Tuttle South	Concurrent Sessions: (CS10) Invited Session IV (CS11) Estimation (CS12) Mobile Phones I
10:00 a.m.–10:30 a.m.	Refreshment Break	
10:30 a.m.–12:00 p.m.	(CS13) Brickell (CS14) Tuttle North (CS15) Tuttle South	Concurrent Sessions: (CS13) Invited Session V (CS14) New Approaches to Survey Management (CS15) Establishment Surveys
12:00 p.m.–1:30 p.m.	Jasmine	Conference Luncheon
1:30 p.m.–3:00 p.m.	(CS16) Brickell (CS17) Tuttle North (CS18) Tuttle South	Concurrent Sessions: (CS16) Invited Session VI (CS17) Coverage (CS18) Response Rates II
3:00 p.m.–3:30 p.m.	Refreshment Break	
3:30 p.m.–5:00 p.m.	(CS19) Brickell (CS20) Tuttle North (CS21) Tuttle South	Concurrent Sessions: (CS19) Invited Session VII (CS20) Using Technology To Improve RDD Surveys (CS21) Call Scheduling

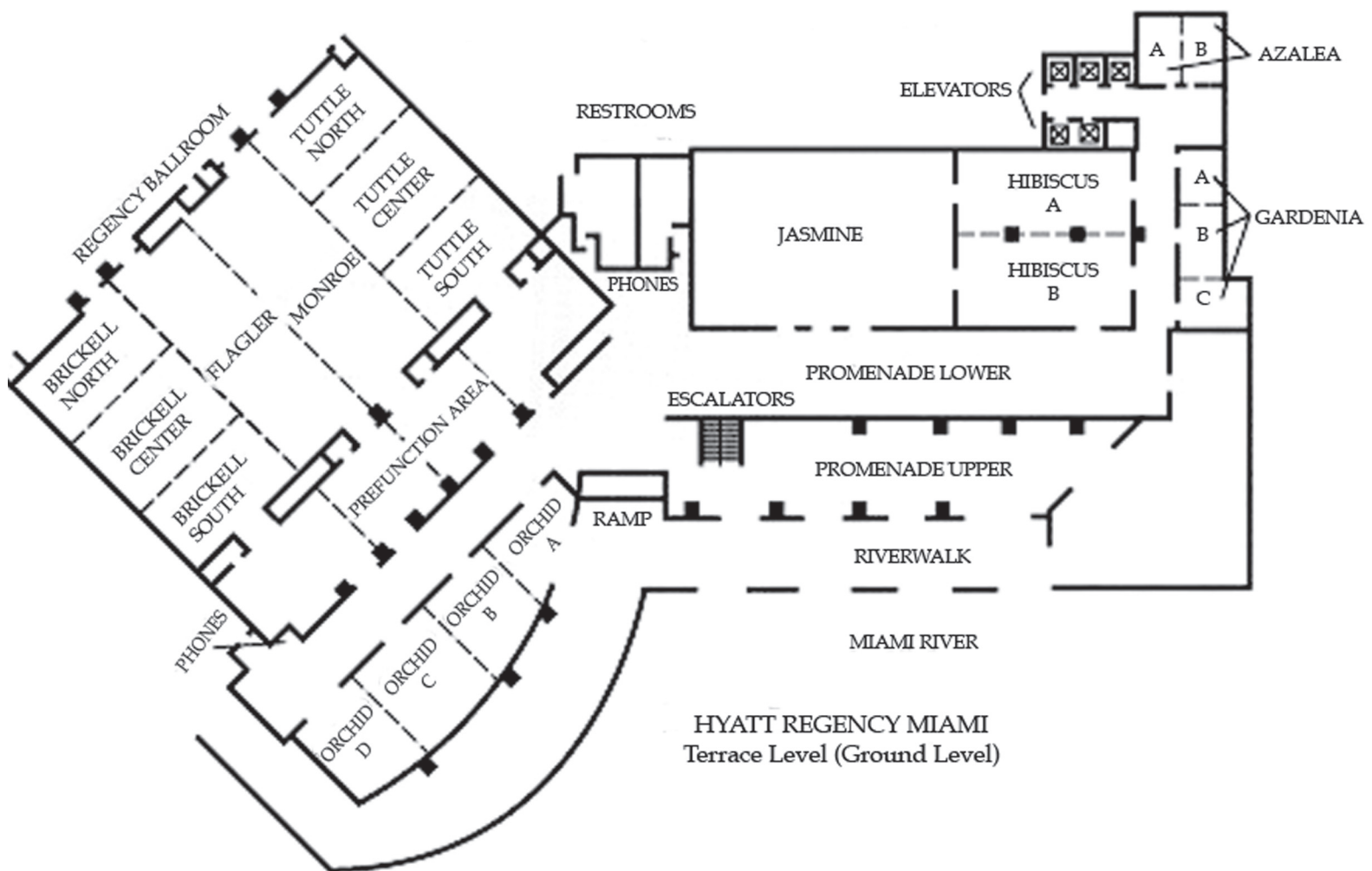
Activities: Saturday, January 14, 2006

7:00 a.m.–5:00 p.m.	Lower Promenade	Conference Registration
7:00 a.m.–8:30 a.m.	Jasmine	Continental Breakfast
8:30 a.m.– 10:00 a.m.	(CS22) Brickell (CS23) Tuttle North (CS24) Tuttle South	Concurrent Sessions (CS22) Invited Session VIII (CS23) Sampling (CS24) Response Rates III
10:00 a.m.– 10:30 a.m.	Refreshment Break	
10:30 a.m.–12:00 p.m.	(CS25) Brickell (CS26) Tuttle North (CS27) Tuttle South	Concurrent Sessions (CS25) Invited Session IX (CS26) Interviewing and Technology (CS27) Multimode Data Collection II
12:00 p.m.–1:30 p.m.	Jasmine	Conference Luncheon
1:30 p.m.–3:00 p.m.	(CS28) Brickell (CS29) Tuttle North (CS30) Tuttle South	Concurrent Sessions (CS28) Invited Session X (CS29) Election Surveys (CS30) Call Center Management
3:00 p.m.–3:30 p.m.	Refreshment Break	
3:30 p.m.–5:00 p.m.	(CS31) Brickell (CS32) Tuttle North (CS33) Tuttle South	Concurrent Sessions (CS31) Invited Session XI (CS32) Multimode Data Collection III (CS33) Getting a Foot in the Door

Activities: Sunday, January 15, 2006

7:00 a.m.–12:00 p.m.	Lower Promenade	Conference Registration
7:00 a.m.–8:30 a.m.	Jasmine	Continental Breakfast
8:30 a.m.–10:00 a.m.	(CS34) Orchid CD (CS35) Hibiscus A	Concurrent Sessions (CS34) Invited Session XII (CS35) Mobile Phones II
10:00 a.m.–10:30 a.m.	Refreshment Break	
10:30 a.m.–12:00 p.m.	(CS36) Orchid CD (CS37) Hibiscus A	Concurrent Sessions (CS36) Invited Session XIII (CS37) Special Populations
12:00 p.m.	Riverwalk, Outdoor Terrace Level	Conference Concludes/Box Lunch Available

Hyatt Regency Miami



Wednesday, January 11, 2006

- 7:00 a.m.–5:00 p.m. **Registration**
- 8:30 a.m.–5:00 p.m. **Short Courses**
- SC1, **Introduction to Survey Quality**, *Tuttle North*
Instructors: Paul S. Biemer, RTI International, and
Lars Lyberg, Statistics Sweden
- SC2, **Telephone Sampling**, *Tuttle South*
Instructor: Colm O'Muircheartaigh, University of
Chicago, NORC
- SC3, **Introduction to Writing Questions for
Standardized Interviews**, *Brickell North*
Instructor: Nora Cate Schaeffer, University of
Wisconsin, Madison
- SC4, **Multilevel Analysis for Grouped and
Longitudinal Data**, *Brickell South*
Instructor: Joop Hox, Utrecht University
- 6:00 p.m.–7:00 p.m. **Welcome Reception**
Riverwalk, Outdoor Terrace Level
Hosts: Clyde Tucker, Bureau of Labor Statistics, and
James Lepkowski, University of Michigan

Thursday, January 12, 2006

- 7:00 a.m.–5:00 p.m. **Registration**, *Lower Promenade*
- 7:00 a.m.–8:30 a.m. **Continental Breakfast**, *Jasmine*
- 8:30 a.m.–10:00 a.m. **Plenary**, *Jasmine*

P1 Telephone Survey Methods: Adapting to Change
Clyde Tucker, Bureau of Labor Statistics, and
James Lepkowski, University of Michigan

- 10:00 a.m.–10:30 a.m. **Refreshment Break**
- 10:30 a.m.–12:00 p.m. **Concurrent Sessions**

CS01, **Invited Session I**, *Brickell*
Chair: James Lepkowski, University of Michigan

10:35 a.m. **Sampling and Weighting in Telephone Surveys**
William D. Kalsbeek and Robert P. Agans, The University of
North Carolina at Chapel Hill

11:05 a.m. Discussant: Warren Mitofsky, Mitofsky International

11:20 a.m. Discussant: Paul Biemer, RTI International

CS02 –Cognitive Processes, Tuttle North

Chair: Polly Phipps, Bureau of Labor Statistics

- 10:35 a.m. **The Visualizers: Affective Imagery and Survey Respondents' Task Dedication.** Patricia Gwartney, University of Oregon, Eugene
- 10:55 a.m. **Preventing Inadequate Answers in Telephone Surveys.** Yfke Ongena, University of Nebraska; Wil Dijkstra, Vrije Universiteit Amsterdam
- 11:15 a.m. **Using Decomposition as a Questioning Strategy To Improve the Accuracy of Reporting Events and Behaviors.** Jennifer Dykema and Nora Cate Schaeffer, University of Wisconsin, Madison
- 11:35 a.m. **Interaction in Telephone Interviews: Some Things That Interviewers and Respondents Do.** Nora Cate Schaeffer and Douglas W. Maynard, University of Wisconsin, Madison

CS03–Nonresponse Bias, Tuttle South

Chair: Michael P. Battaglia, Abt Associates

- 10:35 a.m. **Is It Worth the Effort? The Costs of RDD Telephone Surveys and Advance Survey Notification.** Leslyn Hall, Kirsten Ivie, and Randal ZuWallack, ORC Macro
- 10:55 a.m. **Are Lower Response Rates Hazardous for Your Health?** Michael Davern, Kathleen Call, Donna McAlpine, and Jeanette Ziegenfuss, University of Minnesota; Timothy Beebe, Mayo Clinic
- 11:15 a.m. **Unit Nonresponse and Error in a National Public Opinion Survey: A Census-matching Approach.** Allyson Holbrook, Young Ik Cho, and Timothy Johnson, University of Illinois at Chicago
- 11:35 a.m. **Nonresponse Analysis for Longitudinal and Cross-sectional Telephone Surveys.** Ronaldo Iachan and Randall ZuWallack, ORC Macro

12:00 p.m.–1:30 p.m. **Keynote Luncheon** *Jasmine*
Kenneth Prewitt, Carnegie Professor of Public Affairs, Columbia University

1:30 p.m.–3:00 p.m. **Concurrent Sessions**

CS04 – Invited Session II, Brickell

Chair: Lilli Japac, Statistics Sweden

- 1:35 p.m. **The Effects of Mode and Format on Answers to Scalar Questions in Telephone and Web Surveys.** Leah Christian, Don Dillman, and Jolene Smyth, Washington State University
- 2:05 p.m. **Item Series and Forms: Establishment Survey Experiments.** Brad Edwards, Sid Schneider, and Pat Dean Brick, Westat
- 2:35 p.m. Discussant: Michael Schober, New School for Social Research

CS05 – Sampling and Coverage, Tuttle North

Chair: Jill M. Montaquila, Westat

- 1:35 p.m. **Using Dual-frame Sample Designs To Increase the Efficiency of Reaching General Populations and Subgroups in Telephone Surveys.** Douglas Currivan and David Roe, RTI International
- 1:55 p.m. **An Experiment To Screen for a Rare Population in a Telephone Survey Using a Dual-frame Design.** Meena Khare, NCHS, U.S. Centers for Disease Control and Prevention; Michael P. Battaglia and K. P. Srinath, Abt Associates
- 2:15 p.m. **Identifying Recent Cell Phone-only Households in RDD Surveys.** E. Deborah Jay and Mark Dicamillo, Field Research Corporation
- 2:35 p.m. Discussant: John Hall, Mathematica Policy Research

CS06 – Response Rates I, Tuttle South

Chair: Nick Moon, NOP World

- 1:35 p.m. **Preparing for Response Rates in Upcoming Years.** Rut Jónsdóttir, Statistics Iceland
- 1:55 p.m. **Changes in Response Rate Standards and Reports of Response Rate over the Past 5 years.** Lisa Carley-Baxter, Craig Hill, David Roe, Susan Twiddy, and Rodney Baxter, RTI International
- 2:15 p.m. **Estimating the Status of Cases with Unknown Eligibility in Telephone Surveys.** Tom W. Smith, NORC, University of Chicago
- 2:35 p.m. Discussant: Ed Cohen, Arbitron Inc.
- 3:00 p.m.–3:30 p.m. **Refreshment Break**
- 3:30 p.m.–5:00 p.m. **Concurrent Sessions**

CS07 – Invited Session III, Brickell

Chair: Paul Lavrakas, Nielsen Media Research

- 3:35 p.m. **Establishing a New CATI Center.** Jenny Kelly, Judi Petty, and Kate Hobson, NORC
- 4:05 p.m. **CATI Sample Management Systems.** Sue Ellen Hansen, University of Michigan, and Jacqueline Mayda, Statistics Canada
- 4:35 p.m. Discussant: Brian Meekins, U.S. Bureau of Labor Statistics

CS08 – Interviewer Performance, Tuttle North

Chair: Pat Dean Brick, Westat

- 3:35 p.m. **The Net Contribution Index: A New Measure of the Performance of Telephone Survey Interviewers.** Claire Durand, Université de Montréal
- 3:55 p.m. **Using Standardized Interviewing Principles To Improve a Telephone Interviewer Monitoring Protocol.** Douglas Currivan, Elizabeth Dean, and Lisa Thalji, RTI International

4:15 p.m. **Hiring 'The Right Stuff': Development of an Assessment System for Hiring Effective Interviewers.** Pamela Y. Skyrme, Erik Camayd-Freixas, Clara Haskins, Verb-a-Team.com; Donna Wilkinson, Kyle Vallar, and Paul Lavrakas, Nielsen Media Research

4:35 p.m. Discussant: Nora Cate Schaeffer, University of Wisconsin, Madison

CS09 – Multimode Data Collection I, Tuttle South
Chair: Jeffrey Stec, CRA International

3:35 p.m. **Does 'Yes or No' on the Telephone Mean the Same as 'Check All That Apply' on the Web?** Jolene Smyth, Leah Christian, and Don Dillman, Washington State University

3:55 p.m. **Evaluating the Transition of an Ongoing RDD Survey to a Dual Mode-Dual Frame RDD/Internet Survey.** David Dutwin and Melissa Hermann, International Communications Research; Dale Kulp, Marketing Systems Group; Steve Lavine, Common Knowledge, Inc.

4:15 p.m. **Telephone and Web: The Mixed-mode Challenge** Howard Speizer, Reg Baker, and Wyndy Wiitala, Market Strategies, Inc.; Jessica Greene, University of Oregon

4:35 p.m. Discussant: Roeland Beerten, UK Office for National Statistics

Friday, January 13, 2006

7:00 a.m.–5:00 p.m. **Registration, Lower Promenade**

7:00 a.m.–8:30 a.m. **Continental Breakfast, Jasmine**

8:30 a.m.–10:00 a.m. **Concurrent Sessions**

CS10 – Invited Session IV, Brickell

Chair: Roberta L. Sangster, U.S. Bureau of Labor Statistics

8:35 a.m. **Privacy, Confidentiality, and Respondent Burden as Factors in Telephone Survey Nonresponse.** Eleanor Singer, University of Michigan, and Stanley Presser, University of Maryland, JPSM

9:05 a.m. **The Use of Monetary Incentives To Reduce Nonresponse in Random Digit Telephone Surveys.** David Cantor, Westat; Barbara C. O'Hare, Arbitron, Inc.; Kathleen S. O'Connor, NCHS, U.S. Centers for Disease Control and Prevention

9:35 a.m. Discussant: Brian Harris-Kojetin, U.S. Office of Management and Budget

CS11 – Estimation, Tuttle North

Chair: Donsig Jang, Mathematica Policy Research

8:35 a.m. **Weighting Adjustments for Multiple Telephone Households: Is It Always Necessary?** Heather Morrison and Jennifer Beck, NORC

8:55 a.m. **Interrupted Telephone Service Adjustment (ITSA) in RDD Telephone Surveys.** Mansour Fahimi, Paul Levy, and Lily Trofimovich, RTI International; Lina Balluz, William Garvin, Machel Town and Ali Mokdad, U.S. Centers for Disease Control and Prevention

9:15 a.m. **Scale-up Estimators in CATI Surveys for Estimating the Number of Choking Injuries in Children.** Dario Gregori, Roberto Corradetti, and Silvia Snidero, University of Torino; Federica Zobec, S & A, SRL

9:35 a.m. Discussant: Michael Cohen, U.S. Bureau of Transportation Statistics

CS12 – Mobile Phones I, Tuttle South

Chair: Jennifer Rothgeb, U.S. Bureau of the Census

8:35 a.m. **Mobile vs. Fixed-line Surveys in Hong Kong.** John Bacon-Shone, University of Hong Kong; Liam Lau, Hong Kong Polytechnic University

8:55 a.m. **Coverage Optimization of Telephone Survey Thanks to the Inclusion of Cellular Phone-only Stratum.** Aurélie VanHeuverzwyn and Lorie Dudoignon, Médiamétrie

9:15 a.m. **Conducting a Branding Survey of Cell Phone Users and Nonusers: The Vox Populi Experience in Brazil.** Lourenço Roldão, Vox Populi, and Mario Callegaro, University of Nebraska, Lincoln

9:35 a.m. **Nonresponse and Measurement Error in Mobile Phone Surveys.** Marek Fuchs, University of Kassel

10:00 a.m.–10:30 a.m. **Refreshment Break**

10:30 a.m.–12:00 p.m. **Concurrent Sessions**

CS13 – Invited Session V, Brickell

Chair: J. Michael Brick, Westat

10:35 a.m. **Mobile Phones' Influence on Telephone Surveys.** Vesa Kuusela, Statistics Finland; Vasja Vehovar, University of Ljubljana; Mario Callegaro, University of Nebraska, Lincoln

11:05 a.m. **Multiplicity-based Sampling for Mobile Telephone Population: Coverage, Nonresponse, and Measurement Issues.** Robert Tortora, The Gallup Organization; Robert M. Groves, University of Michigan, JPSM; Emilia Peytcheva, University of Michigan

11:35 a.m. Discussant: Scott Keeter, Pew Research Center

CS14 – **New Approaches to Survey Management**, *Tuttle North*
Chair: Bob Oldendick, University of South Carolina

10:35 a.m. **Using Life Cycle Stages, Outcome and Disposition Codes, and Automated Scheduling for Improvements in Efficiency and Flexibility of RDD Surveys.** Jenny Kelly, Manas Chattopadhyay, and Kate Hobson, NORC

10:55 a.m. **Do Additional Call Attempts Really Increase Response Rates? A Comparison of Approaches.** Cindy Howes and Angela DeBello, NORC

11:15 a.m. **Effect of Call Rule on Data Quality and Survey Costs.** Richard Griffin, U.S. Census Bureau

11:35 a.m. **Balancing Quality and Cost: Conducting an ATS with Multiple Stakeholder Interests.** Jennifer Hicks, Barbara Fernandez, Kisha Bailly, Anne Gorrigan, Kristie Hannah, and Randal ZuWallack, ORC Macro

CS15 – **Establishment Surveys**, *Tuttle South*
Chair: Karen Goldenberg, Bureau of Labor Statistics

10:35 a.m. **The Choice Is Yours? Availability, Take-up, and Perceptions of Telephone Business Surveys.** Jacqui Jones, UK Office for National Statistics; Emma Farrell, Australian Bureau of Statistics; Gustav Haroldsén, Statistics Norway

10:55 a.m. **Statistics Canada's Experience Conducting Cost-recovery Business Surveys.** Terry Evers, Statistics Canada

11:15 a.m. **Going beyond Disposition Codes and Response Outcomes: Measuring Other Aspects of Survey Performance.** Paula Weir, Energy Information Administration; Benita O'Colmain and Tracy Churchill, ORC Macro

11:35 a.m. **Design and Testing of CATI Instruments for Business Surveys.** Emma Farrell, Australian Bureau of Statistics

12:00 p.m.–1:30 p.m. **Conference Luncheon**, *Jasmine*

1:30 p.m.–3:00 p.m. **Concurrent Sessions**

CS16 – **Invited Session VI**, *Brickell*
Chair: Michael W. Link, U.S. Centers for Disease Control and Prevention

1:35 p.m. **The Development of a Comprehensive, Behavioral-based System To Monitor Telephone Interviewer Performance.** Kenneth W. Steve, Anh Thu Burks, Paul J. Lavrakas, and J. Brooke Hoover, Nielsen Media Research

2:05 p.m. **Measuring Telephone Interviewer Performance and Productivity.** John Tarnai and Danna L. Moore, Washington State University

2:35 p.m. Discussant: Lisa Carley-Baxter, RTI International

CS17 – **Coverage**, *Tuttle North*
Chair: Stephen Blumberg, NCHS, U.S. Centers for Disease Control and Prevention

1:35 p.m. **Telephone Surveys: The End of an Era?** Barry Schouten, Jelke Bethlehem, and Fannie Cobben, Statistics Netherlands

1:55 p.m. **Consumer Expenditure Reports on Telephone Service: 1994–2005.** Brian Meekins, U.S. Bureau of Labor Statistics

2:15 p.m. **Ownership and Usage Patterns of Cell Phones: 2000–2005.** Peter Tuckel, Hunter College; Harry O'Neill, Roper Public Affairs, NOP World

2:35 p.m. Discussant: Linda Piekarski, Survey Sampling International

CS18 – **Response Rates II**, *Tuttle South*
Chair: James Griffith, U.S. Department of Education

1:35 p.m. **The Impact of Declining Response Rates on the Effect of Monetary Incentives in Random Digit Dialed National Surveys.** Richard Curtin, and Eleanor Singer, University of Michigan; Stanley Presser, University of Maryland

1:55 p.m. **Efficacy of Incentives in Increasing Response Rates.** Mansour Fahimi, Roy Whitmore, James Chromy, and Margaret Calahan, RTI International; Linda Zimble, National Center for Education Statistics

2:15 p.m. **The Influence of Advance Letters on Response in Telephone Surveys: A Metaanalysis.** Edith De Leeuw, Methodika; Joop Hox, Elly Korendijk, and Gerty Lensvelt-Mulders, Utrecht University; Mario Callegaro, University of Nebraska, Lincoln

2:35 p.m. **Maximizing Response Rate through Operational Innovation: A Case Study.** Darin Miglorie and Amelia Deller, ORC Macro

3:00 p.m.–3:30 p.m. **Refreshment Break**

3:30 p.m.–5:00 p.m. **Concurrent Sessions**

CS19 – **Invited Session VII**, *Brickell*
Chair: Nancy Bates, U.S. Bureau of the Census

3:35 p.m. **Aspects of Nonresponse Bias in RDD Telephone Surveys.** Jill M. Montaquila, J. Michael Brick, and Mary C. Hagedorn, Westat; Courtney Kennedy and Scott Keeter, The Pew Center

4:05 p.m. **Evaluating and Modeling Early Cooperator Bias in RDD Surveys.** Paul P. Biemer, RTI International; Michael W. Link, U.S. Centers for Disease Control and Prevention

4:35 p.m. Discussant: Robert M. Groves, University of Michigan, JPSM

CS20 – **Using Technology To Improve RDD Surveys**, *Tuttle North*. Chair: Chet Bowie, Market Strategies

- 3:35 p.m. **Prescreening Telephone Numbers To Identify Nonresidential Lines**. Heidi Upchurch, NORC; Marcie Cynamon and Larry Wilkinson, NCHS, U.S. Centers for Disease Control and Prevention
- 3:55 p.m. **New Methods for Identifying Nonresidential and Embedded Cellular Numbers in RDD Surveys**. Dale Kulp, Marketing Systems Group; J. Michael Brick, Westat; Michael W. Link, U.S. Centers for Disease Control and Prevention
- 4:15 p.m. **A Comparison of Interviewer-entered and System-applied Dispositions on a Large RDD Study**. Angela DeBello and Cindy Howes, NORC
- 4:35 p.m. Discussant: Tim Gable, RTI International

CS21 – **Call Scheduling**, *Tuttle South*
Chair: Jon Wivagg, NuStats

- 3:35 p.m. **Gaining Efficiencies in Scheduling Callbacks in Large RDD National Surveys**. Jeffery Stec, CRA International; Gail Daily, Paul Lavrakas, Charles Shuttles, and Tracie Yancey, Nielsen Media Research
- 3:55 p.m. **Calling Patterns for a Large National Random Digit Dial Health Survey**. Martin Barron, NORC; Meena Khare, NCHS, U.S. Centers for Disease Control and Prevention
- 4:15 p.m. **Call Scheduling: Theory and Practice**. Lisa Carley-Baxter, Brian Evans, R. Suresh, Rita Thissen, and Suzanne Triplett, RTI International
- 4:35 p.m. **A Survey of Call Rates Expected in Today's Household Telephone Survey**. Charles Mason, Bureau of Labor Statistics

CANCELLED

Saturday, January 14, 2006

- 7:00 a.m.–5:00 p.m. **Registration**, *Lower Promenade*
- 7:00 a.m.–8:30 a.m. **Continental Breakfast**, *Jasmine*
- 8:30 a.m.–10:00 a.m. **Concurrent Sessions**

CS22 – **Invited Session VIII**, *Brickell*
Chair: Edith De Leeuw, Methodika

- 8:35 a.m. **Mode Effects in Canadian Community Health Survey: A Comparison of CAPI and CATI**. Yves Béland and Martin St. Pierre, Statistics Canada
- 9:05 a.m. **Accommodating New Technologies: The Rejuvenation of Telephone Surveys**. Charlotte Steeh, Consultant, and Linda Piekarski, Survey Sampling International
- 9:35a.m. Discussant: John Kennedy, Indiana University

CS23 – **Sampling**, *Tuttle North*
Chair: Sarah Nusser, Iowa State University

- 8:35 a.m. **Address Frames and Mail Surveys as Complements (or Alternatives) to RDD Surveys**. Michael W. Link and Ali Mokdad, U.S. Centers for Disease Control and Prevention; Michael P. Battaglia and Larry Osborn, Abt Associates; Martin Frankel, Baruch College, CUNY/ Abt Associates
- 8:55 a.m. **Efficacy of a Clustered Design in Producing Small-area Estimates in a Health Insurance Survey**. Thomas Duffy and Ronaldo Iachan, ORC Macro
- 9:15 a.m. **An Experimental Comparison of Within-household Selection Techniques in a Survey of Substance Abuse**. Timothy Beebe, Mayo Clinic; Michael Davern and Donna McAlpine, University of Minnesota
- 9:35 a.m. Discussant: Mary Mulry, U.S. Bureau of the Census

CS24 – **Response Rates III**, *Tuttle South*
Chair: Claire Durand, University of Montréal

- 8:35 a.m. **RDD Surveys: The Statistical and Survey Interface**. Brenda Cox, Diane Burkom, and Jeanine Christian, Battelle
- 8:55 a.m. **Response Rates to Telephone Surveys over Time: A Comparison of Cost and Efforts in Repeated RDD and List Sample Surveys**. Patricia Gallagher, Anthony Roman, and Kirk Larsen, Center for Survey Research, University of Massachusetts, Boston
- 9:15 a.m. **Combining Contact Data from Administrative Records Improves Response Rates to Telephone Surveys**. Anne B. Ciemnecki, Mathematica Policy Research
- 9:35 a.m. Discussant: Marcie Cynamon, NCHS, U.S. Centers for Disease Control and Prevention

- 10:00 a.m.–10:30 a.m. **Refreshment Break**
- 10:30 a.m.–12:00 p.m. **Concurrent Sessions**

CS25 – **Invited Session IX**, *Brickell*
Chair: Dan Merkle, ABC News

- 10:35 a.m. **Response Rates in Surveys by the News Media and Government Contractor Survey Research Firms**. Allyson L. Holbrook, University of Illinois at Chicago; Jon A. Krosnick, Stanford University; Alison Pfent, The Ohio State University
- 11:05 a.m. **Response Rates: How Have They Changed and Where Are They Headed?** Michael P. Battaglia and Mary Cay Murray, Abt Associates; Meena Khare, NCHS, U.S. Centers for Disease Control and Prevention; Martin Frankel, Baruch College, CUNY/ Abt Associates; Paul Buckley; Sarah Peritz
- 11:35 a.m. Discussant: Murray Edelman, Rutgers University

CS26 – **Interviewing and Technology**, *Tuttle North*
Chair: Fred Conrad, University of Michigan

10:35 a.m. **Implementing New Technology: Interviewer Adaptation and Instrument Effects.** Polly Phipps, Brian Meekins, and Roberta Sangster, U.S. Bureau of Labor Statistics; Claudia West and Deborah Kinnaman, U.S. Bureau of the Census

10:55 a.m. **IVR and Survey Errors.** Darby Steiger, The Gallup Organization

11:15 a.m. **How To Estimate the Effectiveness of Online Codify with Search Engines: The Italian Experience of ISTAT Labour Force Survey.** F. Camillo, Università degli Studi Bologna; Maria Gabriella Grassia, Federica Pintaldi, Luciana Quattrocioni, and Vincenzo Triolo, ISTAT

11:35 a.m. **Study Documentation in Telephone Surveys.** Peter Mohler, ZUMA; Beth-Ellen Pennell, University of Michigan

CS27 – **Multimode Data Collection II**, *Tuttle South*
Chair: Mario Callegaro, University of Nebraska, Lincoln

10:35 a.m. **Interview Mode Effects in the UK Local Labour Force Survey.** Dave Elliot, Laura Rainford and Jack Eldridge, UK Office for National Statistics

10:55 a.m. **Telephone First Contact in the Canadian Labour Force Survey.** Danielle Lebrasseur and Jack Gambino, Statistics Canada

11:15 a.m. **What Are We Missing? The Effects on the Estimations of No-phone Households in Italy** Maria Muratore and Monica Perez, Italian National Statistical Institute; Giovanna Brancato, Isabella Corazziari, Barbara Dattilo, Paola Di Filippo, and Giorgia Simeoni, ISTAT

11:35 a.m. **Telephone Coverage in Italy: The Statement of the Problem and the Solutions Adopted for the CAPI/CATI Labour Force Survey.** Maria Gabriella Grassia and Rita Ranaldi, ISTAT

12:00 p.m.–1:30 p.m. **Conference Luncheon**, *Jasmine*

1:30 p.m.–3:00 p.m. **Concurrent Sessions**

CS28 – **Invited Session X**, *Brickell*
Chair: Don Dillman, Washington State University

1:35 p.m. **Recent Trends in Household Telephone Coverage in the United States.** Stephen J. Blumberg, Marcie Cynamon, and Julian Luke, NCHS, U.S. Centers for Disease Control and Prevention; Martin Frankel, Baruch College, CUNY/Abt Associates

2:05 p.m. **Post-survey Weighting Methods Using Propensity Scores: A Review.** Sunghye Lee, Center for Health Policy Research, UCLA; Richard Valliant, University of Michigan, JPSM

2:35 p.m. Discussant: Colm O'Muircheartaigh, University of Chicago, NORC

CS29 – **Election Surveys**, *Tuttle North*
Chair: Cliff Zukin, Rutgers University

1:35 p.m. **Composting Absentee and Exit Polls.** Warren Mitofsky, Mitofsky International

2:05 p.m. **The Impact of Cell Phone Noncoverage Bias on Polling in the 2004 Presidential Election.** Scott Keeter, Pew Research Center

2:35 p.m. Discussant: Paul Lavrakas, Nielsen Media Research

CS30 – **Call Center Management**, *Tuttle South*
Chair: Sue Ellen Hansen, University of Michigan

1:35 p.m. **Telephone Research Calling Centers: Technological, Managerial, and Organizational Choices.** Bruce Allen and Pat Dean Brick, Westat

1:55 p.m. **The Survey Help Desk: Telephone Interviewers' New Role.** Polly Armsby, Coda Research, Inc.

2:15 p.m. **Using Time Decomposition To Improve Survey Productivity and Lower Costs.** Jenny Kelly and Kate Hobson, NORC

2:35 p.m. Discussant: Barbara C. O'Hare, Arbitron Inc.

3:00 p.m.–3:30 p.m. **Refreshment Break**

3:30 p.m.–5:00 p.m. **Concurrent Sessions**

CS31 – **Invited Session XI**, *Brickell*
Chair: Leslyn Hall, ORC Macro

3:35 p.m. **Cues of Communication Difficulty in Telephone Interviews.** Fred Conrad, University of Michigan; Michael Schober, New School for Social Research; Wil Dijkstra, Vrije Universiteit of Amsterdam

4:05 p.m. **Telephone Interviewer Voice Characteristics and the Survey Participation Decision.** Robert M. Groves, University of Michigan, JPSM; Barbara C. O'Hare, Dottie Gould-Smith, and Andy McCann, Arbitron Inc.; Sue Ellen Hansen, José Béné, and Patty Maher, University of Michigan, JPSM

4:35 p.m. Discussant: Jaki McCarthy, USDA National Agricultural Statistics Service

CS32 – Multimode Data Collection III, Tuttle North

Chair: Charlotte Steeh, Consultant

- 3:35 p.m. **Telephone Collection as Part of a Multimode Survey.** Mark Pierzchala and Debra Wright, Mathematica Policy Research; Paul Guerino, Education Statistics Services Institute; Claire Wilson, Insight Policy Research
- 3:55 p.m. **Challenges of Designing and Implementing Multimode Instruments.** Jennifer Wine, M. Cominole, R. Heuer, and J. Riccobono, RTI International
- 4:15 p.m. Discussant: Todd Rockwood, University of Minnesota

CS33 – Getting a Foot in the Door, Tuttle South

Chair: Eleanor Singer, University of Michigan

- 3:35 p.m. **Who's Calling? The Impact of Caller-ID Displays on Telephone Survey Response.** Mario Callegaro and Allan L. McCutcheon, University of Nebraska, Lincoln; Jack Ludwig, The Gallup Institute
- 3:55 p.m. **Using Autodialer Technology in Telephone Follow-up.** Ron Fecso, National Science Foundation; Neil Feiraiuolo and John Finamore, U.S. Bureau of the Census
- 4:15 p.m. **'You're Calling for Who? About What?' Introductory Statements in RDD Surveys.** Teresa Parsley Edwards, University of North Carolina; W. Douglas Evans, RTI International
- 4:35 p.m. Discussant: Darby Miller Steiger, The Gallup Organization

Sunday, January 15, 2006

- 7:00 a.m.–12:00 p.m. **Registration, Lower Promenade**
- 7:00 a.m.–8:30 a.m. **Continental Breakfast, Jasmine**
- 8:30 a.m.–10:00 a.m. **Concurrent Sessions**

CS34 – Invited Session XII, Orchid CD

Chair: Allyson Holbrook, University of Illinois, Chicago

- 8:35 a.m. **Oral Translation in Telephone Surveys.** Janet Harkness, University of Nebraska, Lincoln/ZUMA; Nicole Schoebi and Dominique Joye, SIDOS; Timo Faass, ZUMA
- 9:05 a.m. Discussant: John Tarnai, Washington State University
- 9:20 a.m. Discussant: Danna Moore, Washington State University

CS35 – Mobile Phones II, Hibiscus A

Chair: Douglas Currivan, RTI International

- 8:35 a.m. **Magnitude and Effects of Number Portability in a National RDD Survey.** Stephanie Eckman, NORC; Elizabeth Luman, and Philip Smith, U.S. Centers for Disease Control and Prevention
- 8:55 a.m. **Merging Cellular and Landline RDD Sample Frames: A Series of Three Cell Phone Studies.** Anna Fleeman, Arbitron Inc.
- 9:15 a.m. **Can Opinion Polls Be Conducted Using Cell Phones?** Nick Moon, NOP World
- 9:35 a.m. Discussant: Dale Kulp, Marketing Systems Group

3:00 p.m.–3:30 p.m. **Refreshment Break**

10:30 a.m.–12:00 p.m. **Concurrent Sessions**

CS36 – Invited Session XIII, Orchid CD

Chair: Richard Valliant, University of Michigan, JPSM

- 10:35 a.m. **Methods for Sampling Rare Populations in Telephone Surveys.** Ismael Flores-Cervantes and Graham Kalton, Westat
- 11:05 a.m. **The Role of Telephones in Multiple Frame, Multimode Surveys.** J. Michael Brick, Westat; James Lepkowski, University of Michigan
- 11:35 a.m. Discussant: Lars Lyberg, Statistics Sweden

CS37 – Special Populations, Hibiscus A

Chair: Brad Edwards, Westat

- 10:35 a.m. **Interviewing Teenagers in Telephone Surveys: Gaining Parental Consent.** Anthony Roman, Center for Survey Research; Lois Biener, Patricia Gallagher, and Catherine Garrett, University of Massachusetts, Boston; Elizabeth Eggleston and Charles Turner, RTI International
- 10:55 a.m. **Removing the Barriers: Modifying Telephone Survey Methodology To Increase Self-response among People with Disabilities.** Karen A. Cybulski, Anne B. Ciemnecki, and Jason Markesich, Mathematica Policy Research
- 11:15 a.m. **Reaching Direct Care Workers through Their Employers: The National Nursing Assistant Survey (NNAS).** Robin Remsburg, Abigale Moss, Al Sirrocco, and Genevieve Strahan, NCHS, U.S. Centers for Disease Control and Prevention; Laura Branden, Brad Edwards, and Tom Harper, Westat; Andreas Fran, Emily Rosenoff, and William Marton, U.S. Department of Health and Human Services
- 11:35 a.m. Discussant: Mark Schulman, Schulman, Ronca & Bucuvalas, Inc.
- 12:00 p.m. **Conference Concludes/Box Lunches Available**
- Riverwalk, Outdoor Terrace Level*

Short Course Descriptions

Wednesday, January 11, 2006

8:30 a.m.–5:00 p.m.

SC1-Introduction to Survey Quality

Instructors: Paul S. Biemer and Lars Lyberg

This course will span a range of topics dealing with the quality of data collected through the survey process. The course will begin with a discussion of total survey error and its relationship to survey costs. It will provide a number of measures of quality that will be used throughout the course. Then, the major sources of survey error will be discussed in detail. In particular, we will examine the origins of each error source (i.e., its root causes), the most successful methods proposed for reducing the error emanating from those sources, and methods most often used in practice for evaluating the effects of the source on total survey error. The course is not designed to provide an in-depth study of any topic, but as an introduction to the field of survey data quality.

SC2-Telephone Sampling

Instructor: Colm O'Muircheartaigh, University of Chicago, NORC

This course will present a mixture of topics on telephone surveys, sampling methods, estimation procedures, and operations. It is designed to provide a comprehensive introduction to telephone household and person sampling, covering topics such as the extent to which telephone households represent all households and persons in the United States, alternative telephone sampling frames (including the cellular telephone frame), methods of telephone sample selection, estimates for selected telephone sampling methods, and features in the implementation of telephone sampling methods. The course will cover the history of telephone sampling in the United States and focus on the basic methods of list-assisted random digit dialing (RDD). It also will deal with more advanced topics, such as dual-frame telephone sample designs, geographic and demographic over-sampling, and the use of interruption and propensity weighting methods to adjust for potential bias due to non-telephone households. Participants will be given a brief overview of operational issues, such as call scheduling and the use of sample replicates and the computation of various response rates.

SC3-Introduction to Writing Questions for Standardized Interviews

Instructor: Nora Cate Schaeffer

This course will include an analysis of the structure of two common types of survey questions: questions about events and behaviors and questions about subjective items. The course will then present an overview of the decisions one must make in writing these types of questions. For questions about events and behaviors, decisions include naming the event, selecting a response dimension (e.g., occurrence or frequency), and structuring response categories. For questions about subjective items, decisions include naming the attitude object and evaluative dimension and labeling response categories. These decisions are used as a framework for bringing research about survey questions to bear. The course will summarize relevant research and apply that research to solving common problems in designing questions for standardized interviews. For questions about events and behaviors, topics will include how to use the structure and wording of questions to clarify concepts and support retrieval. For questions about subjective items, topics will include how to structure response scales. The course will provide conceptual tools and practical examples to use in writing survey questions.

SC4-Multilevel Analysis for Grouped and Longitudinal Data

Instructor: Joop Hox

In multilevel modeling, the data have a hierarchical structure, with units nested within groups. Classical examples are organizational studies, with individuals nested within organizational groups. Examples relevant to the survey field are data from multistage cluster samples, interviewer research with respondents nested within interviewers (who may be nested within organizations), and longitudinal research with measurement occasions nested within respondents. This course is a basic and non-technical introduction to multilevel analysis. It will start with a description of some examples and show why multilevel models are necessary. It will then cover the basic theory of two- and three-level models, drawing on an example of respondents nested within interviewers. Next it will explain how multilevel models can be applied to analyzing longitudinal data, and why and when this may be an attractive analysis approach. It will end with a brief introduction to software that has been written specifically for fitting multilevel models: HLM and MLwiN. The course assumes reasonable familiarity with analysis of variance and multiple regression analysis, but prior knowledge of multilevel modeling is not assumed.

ABSTRACTS

Plenary

Telephone Survey Methods: Adapting to Change

Clyde Tucker, Bureau of Labor Statistics; James Lepkowski, University of Michigan

This chapter provides a brief introduction to the field, where it is today, and where it might be going. Besides discussing the rapid changes in telecommunications and the social and political environment over the last decade, the paper considers the ways telephone survey methodologists have adapted to all of these changes and what further adaptations may be needed in the future. The final section provides a brief overview of the contents of the monograph, which contains papers devoted to meeting the challenges for telephone survey methodologists now and in the future.

CS01—Invited Session I

Sampling and Weighting in Telephone Surveys

William D. Kalsbeek and Robert P. Agans, University of North Carolina at Chapel Hill

The telephone survey is a method of inquiry in which data are collected from a sample of telephone numbers for the purpose of learning about a population that has been targeted for study in the survey. Most frequently, surveys of this kind gather data from persons through the household where they live. The purpose of this chapter is to provide an overview of the methods and implication of sampling used in household surveys conducted by telephone, and to thus motivate specific topics addressed by other speakers at the conference. After briefly reviewing the concept and settings of survey sampling within telephone systems in the United States and other parts of the world, we present a summary of sampling approaches used in telephone surveys before discussing important analysis activities and issues in this type of research. We conclude by suggesting future issues for telephone sampling.

CS02—Cognitive Processes

The Visualizers: Affective Imagery and Survey Respondents' Task Dedication

Patricia Gwartney, University of Oregon, Eugene

Affective imagery refers to the meanings respondents give to certain stimuli. Affective images are evoked with open-ended word association questions. We have experimented with these questions in several telephone surveys by asking

Overall Conference Agenda

Wednesday, January 11, 2006

8:30 a.m.–5:00 p.m.

Short Course 1 Introduction to Survey Quality,
Instructors: Paul S. Biemer and Lars Lyberg

Short Course 2 Telephone Sampling,
Instructor: Colm O'Muircheartaigh

Short Course 3 Introduction to Writing Questions
for Standardized Interviews, Instructor: Nora Cate
Schaeffer

Short Course 4 Multilevel Analysis for Grouped
and Longitudinal Data, Instructor: Joop Hox

6:00–7:00 p.m. Welcome Reception

Thursday, January 12, 2006

7:00–8:30 a.m. —Continental Breakfast

8:30–10:00 a.m.—Opening Plenary
Clyde Tucker and James Lepkowski

10:00–10:30 a.m.—Refreshment Break

10:30 a.m.–12:00 p.m.—Concurrent Sessions (01-03)

12:00–1:30 p.m.—Luncheon Keynote Speaker

1:30–3:00 p.m.—Concurrent Sessions (04-06)

3:00–3:30 p.m.—Refreshment Break

3:30–5:00 p.m.—Concurrent Sessions (07-09)

Friday, January 13, 2006

7:00–8:30 a.m.—Continental Breakfast

8:30–10:00 a.m.—Concurrent Sessions (10-12)

10:00–10:30 a.m.—Refreshment Break

10:30 a.m.–12:00 p.m.—Concurrent Sessions (13-15)

12:00–1:30 p.m.—Lunch

1:30–3:00 p.m.—Concurrent Sessions (16-18)

3:00–3:30 p.m.—Refreshment Break

3:30–5:00 p.m.—Concurrent Sessions (19-21)

Saturday, January 14, 2006

7:00–8:30 a.m.—Continental Breakfast

8:30–10:00 a.m.—Concurrent Sessions (22-24)

10:00–10:30 a.m.—Refreshment Break

10:30 a.m.–12:00 p.m.—Concurrent Sessions (25-27)

12:00–1:30 p.m.—Lunch

1:30–3:00 p.m.—Concurrent Sessions (28-30)

3:00–3:30 p.m.—Refreshment Break

3:30–5:00 p.m.—Concurrent Sessions (31-33)

Sunday, January 15, 2006

7:00–8:30 a.m.—Continental Breakfast

8:30–10:00 a.m.—Concurrent Sessions (34-35)

10:00–10:30 a.m.—Refreshment Break

10:30 a.m.–12:00 p.m.—Concurrent Sessions (36-37)

12:00 p.m.—Conference Concludes; Box Lunch Pick-up

Continental breakfast, lunch, and refreshment breaks are included in registration.

questions such as “What is the first thought or image that comes to mind when you hear the word _____?” As stimuli, we have used words and terms consistent with each survey’s topic. In our analyses of respondents’ images about surveys, the U.S. Census, and political polls, we found about 40% could not supply a visual image, even when probed, and that percentage did not vary across the three stimuli. More importantly, we discovered respondents who could provide visual images behaved significantly differently as survey respondents than those who could not. No matter what the specific answer, on average the “visualizers” produced less item nonresponse, more words per open-ended question, and fewer minutes per completed interview. In addition, visualizers ascribed higher levels of importance to survey research in general. In multivariate analyses, the ability to visualize was highly significant, controlling for other standard predictors, and had twice the net effect of educational attainment in explaining item nonresponse. These results suggest affective imagery could yield robust indicators of cognitive sophistication.

Preventing Inadequate Answers in Telephone Surveys

Yfke Ongena, University of Nebraska; Wil Dijkstra, Vrije Universiteit Amsterdam

Analysis of interviewer-respondent interactions in telephone surveys shows inadequate answers—especially so-called mismatch answers (i.e., answers that do not match the required answering format)—are the most frequently occurring problematic respondent behavior. Mismatch answers also are the most important cause of inadequate interviewer behavior. From an experiment, in which formal and conversational wording of questions and response alternatives were varied systematically, it appeared conversational alternatives (i.e., with words and phrases common in ordinary conversations) yielded the least mismatch answers, whereas questions with formal response alternatives (i.e., noncommon words) yielded the most mismatch answers. The difference in the percentage of mismatch answers was largest for assertions, yielding mismatch answers in only 4% of the QA sequences in case of conversational alternatives but in 19% of the QA sequences in case of formal alternatives.

Using Decomposition as a Questioning Strategy To Improve the Accuracy of Reporting Events and Behaviors

Jennifer Dykema and Nora Cate Schaeffer, University of Wisconsin, Madison

Behavioral frequency questions require respondents to summarize their experiences over time with a single estimate. These questions place substantial demands on cognitive processing, and these demands may be greater in a telephone interview that offers few interactional supports, no visual aids, and a fast-pace. Decomposition or division of a single, global frequency question into two or more less cognitively taxing questions is a promising technique for improving reporting quality. We examine accuracy in reports about child support from three telephone surveys. Analyses indicate decomposing questions about payments based on their frequency, regularity, and similarity yield the most accurate

reports. We develop a model that predicts respondents will be less accurate when events are complex, indistinct from like events, and emotionally neutral and examine the degree to which these predict errors net of other factors (e.g., memory decay, demographics, social desirability, and motivation). Results indicate response effects are reduced using decomposition.

Interaction in Telephone Interviews: Some Things That Interviewers and Respondents Do

Nora Cate Schaeffer and Douglas W. Maynard, University of Wisconsin, Madison

Although survey methodologists have studied the interaction between the interviewer and respondent for many years, most researchers have focused on whether the behavior of interviewers is standardized, whether respondents provide adequate answers, and related behaviors such as probing. Although researchers have noted how the participants have imported into the survey interview the conversational practices they have learned in other contexts, this observation has not yet led to a new look at what the participants do. In this paper, we describe the results of such a reexamination of the behavior of interviewers and respondents that draws on the methods of conversation analysis. These observations were the first stage of developing a new set of interaction codes for a study of international aspects of cognitive processing. This paper describes some of the phenomena we observed.

CS03—Nonresponse Bias

Is It Worth the Effort? The Costs of RDD Telephone Surveys and Advance Survey Notification

Leslyn Hall, ORC Macro; Kirsten Iwie, ORC Macro; Randal ZuWallack, ORC Macro

It is generally accepted that advance notification for any survey has positive effects on response rates. What is less clear is whether the letter affects survey estimates or the costs (i.e., labor, materials, and bias) associated with the letter are worth the subsequent boost to the response and cooperation rates. Using the Behavioral Risk Factor Surveillance System RDD Telephone Surveys for a number of states and the U.S. Department of Housing and Urban Development’s Fair Market Rent (FMR) Regional RDD Telephone Surveys, ORC Macro mailed advance letters to randomly selected households of the RDD telephone sample. A previous paper analyzing these same data established that the receipt of advance notification to these samples introduced bias to variables of interest by increasing the potential representation of the list portion of the RDD telephone-sampling frame. This paper seeks to further that analysis by conducting cost-benefit analyses for sending out the advance notification.

Are Lower Response Rates Hazardous for Your Health?

Michael Davern, Kathleen Call, Donna McAlpine, and Jeanette Ziegenfuss, University of Minnesota; Timothy Beebe, Mayo Clinic

Does obtaining higher response rates in a RDD telephone survey on health lead to better estimates? The key health indicators we focus on are health insurance, health care access,

and substance abuse estimates from three recent state surveys conducted by the University of Minnesota in Oklahoma and two surveys conducted in Minnesota. We found specific demographic characteristics varied significantly between those who became a complete within five or fewer days versus those who took longer across all three surveys. We also found significant differences between those households with and those without an initial refusal with respect to demographic characteristics. However, when using the length of field period and considering whether there was an initial refusal in a multivariate model along with demographic controls, we found these variables to be nonsignificant predictors of health insurance coverage, access, and substance abuse.

Unit Nonresponse and Error in a National Public Opinion Survey: A Census-matching Approach

*Allyson Holbrook, Young Ik Cho, and Timothy P. Johnson,
The University of Illinois at Chicago*

Response rates to social and behavioral surveys have been declining for several decades, increasing the likelihood that differences between respondents and nonrespondents may be sufficient to bias survey estimates of means, proportions, and other population parameters. However, recent studies suggest response rates may not be strongly related to survey error or representativeness. We propose to contribute a paper that makes a unique contribution to this literature by reviewing, contrasting, and critiquing five methodologies and then using a unique application of record match methodology to estimate potential nonresponse bias in the RDD telephone survey conducted as part of the 2000 National Election Studies Survey.

Nonresponse Analysis for Longitudinal and Cross-sectional Telephone Surveys

Ronaldo Iachan and Randall ZuWallack, ORC Macro

The measurement effects of survey nonresponse are especially difficult to address when little is known about nonrespondents. Nonresponse often is evaluated via comparisons to known demographic, socioeconomic, and geographic distributions or through costly reinterviews with nonrespondents. Surveys with longitudinal components offer the opportunity to evaluate nonresponse at the individual level without the need for recontacts. We examine two large-scale telephone surveys different in design and intent conducted for the Department of Housing and Urban Development (HUD) Fair Market Rent program. While the Regions surveys focus on yearly rent change, and include overlapping samples, the cross-sectional Areas surveys focus on rent levels. The analyses are driven by the different sample designs and challenges. The analyses also may suggest design refinements for repeated and cross-sectional surveys.

CS04 – Invited Session II

The Effects of Mode and Format on Answers to Scalar Questions in Telephone and Web Surveys

*Leah Christian, Don Dillman, and Jolene Smyth,
Washington State University*

The proliferation of mixed-mode surveys, where data is collected from respondents using different survey modes, raises concerns about whether respondent characteristics are

being measured equivalently across modes, as the data often are combined for analysis. Mode differences often encourage survey designers to construct questions differently, depending on the mode being used to survey respondents. In this paper, we compare scalar formats using both telephone and web modes to identify ways of asking scalar questions that present the same stimulus to respondents across telephone and web modes so scalar questions can be constructed optimally for mixed-mode surveys. We include several experimental manipulations designed to compare the same scales across telephone and web modes as well as different scales within these modes. Our results indicate that mode and format independently influence responses to scalar questions; however, the interaction of mode and scalar format is not significant in any of the models. Overall, we find telephone respondents provide more positive ratings than web respondents and are more likely to select the most positive extreme endpoint category. We also find differences across scales within telephone and web modes.

Item Series and Forms: Establishment Survey Experiments

Brad Edwards, Sid Schneider, and Pat Dean Brick, Westat

A series of related questions poses choices for survey designers that can be especially important for establishment surveys. Many surveys of organizations administer sets of similar items to each establishment. A flexible format allows the interviewer to control the flow of information and choose the most expedient order for entering data. Computer-assisted interviewing (CAI) creates a dialog between the user (i.e., the interviewer) and the computer, but to a large extent the computer controls the direction of the information flow. A typical screen contains a single question; the interviewer enters the response and the computer presents the next question on a new screen. This design approach emphasizes simplicity. The interviewer's attention is highly focused on the current question, but the interviewer may forget previous questions and fail to recognize the general structure of the series. This distortion of orientation in an interview is called the segmentation effect. We designed a group of experiments to measure this effect and assess alternative design features in an establishment survey. The results led us to propose some general design guidelines that can enhance data quality and improve efficiency in CAI surveys.

CS05 – Sampling and Coverage

Using Dual-frame Sample Designs To Increase the Efficiency of Reaching General Populations and Population Subgroups in Telephone Surveys

Douglas Curriwan and David Roe, RTI International

The difficulty in screening households to complete interviews in random-digit dialing surveys has increased through time. An alternative strategy to relying solely on RDD numbers is to supplement the sample with numbers selected from directory listings. List frames can increase the incidence rate of targeted subgroups by reducing out-of-scope numbers, add demographic information on households from secondary databases, and improve the effectiveness of advance mailings. To assess the impact of combining listed and RDD numbers on efficiency and survey results, we use data from a statewide

survey of adults and a national survey of youth 12-17 and young adults 18-24. Both studies focused on smoking behavior and attitudes and used a dual-frame sample with directory-listed and RDD numbers. For both studies, we compare the two sample frames and completed interviews from each frame to key indicators to see if and how the results differ. This research addresses the potential of dual-frame techniques to reduce effort and provide accurate survey data.

An Experiment To Screen for a Rare Population in a Telephone Survey Using a Dual-frame Design

Meena Khare, NCHS, U.S. Centers for Disease Control and Prevention; Michael P. Battaglia and K. P. Srinath, Abt Associates

In a random-digit-dialing (RDD) survey, the sample from a rare population is selected through screening a sample from the general population. Generally, a large screening sample size is required to identify an adequate sample from the rare population. The effort and cost of screening could be high if the required sample size from the rare population is large. Alternatively, if a partial list of members of the rare population is available, then a method of minimizing the screening cost is to use a dual sampling frame design with samples from both the RDD frame and the list frame. In this paper, we investigate the use of a dual frame sampling design for the National Immunization Survey (NIS) in which the population of interest is children aged 19 and 35 months. We describe an approach for making an allocation to the two frames and compare the eligibility rates from the two samples. We compare the cost and efficiency of the final estimates obtained using the regular RDD sample and the dual frame designs in the NIS.

Identifying Recent Cell Phone-only Households in RDD Surveys

E. Deborah Jay and Mark DiCamillo, Field Research Corporation

In 2004, Field Research Corporation conducted a large-scale telephone survey of California households for the state's Public Utilities Commission (CPUC). In it, current (landline) telephone households that reported going without telephone service for one month or longer within the past three years were identified. These households were asked about their reasons for going without telephone service, which was of interest to the CPUC. However, of greater interest to survey researchers was an explanation of the recent non-telephone households who reported having access to a household cell phone during the time of their service interruption. These households can be referred to as "recent cell phone-only households." Recent cell phone-only households share many of the same characteristics as cell phone-only households in the NHIS. This leads us to believe that recent cell phone-only households can be used as surrogates for cell-only households. Weights then can be applied to households identified as recent cell phone-only households to take into account the exclusion of cell phone-only households, thereby improving the representativeness of RDD surveys.

CS06—Response Rates I

Preparing for Response Rates in Upcoming Years

Rut Jónsdóttir, Statistics Iceland

Problem statement of the paper is "How is Statistics Iceland (STATICE) going to increase or at least maintain response rates in its surveys under the conditions of small populations (Population in Iceland is 293,000) in addition to all other problems related to people's willingness to participate in surveys. How can STATICE ensure that people will still have tolerance for surveys in upcoming years? The paper is supposed to search for a solution in form of a strategy. Key to success is all personnel working professionally and united. The strategy is based on an analysis of the survey department at STATICE and its environment. In order to keep the strategy alive the paper concludes with an implementation plan. A plan to help employees to be strategy focused.

Changes in Response Rate Standards and Reports of Response Rate over the Past Five Years

Lisa Carley-Baxter, Craig Hill, David Roe, Susan Twiddy, and Rodney Baxter, RTI International

Response rates are widely reported to have decreased for many types of surveys over the past decade, especially for random-digit-dial (RDD) surveys. There seems to be a perception that it is harder to get studies published if they fail to achieve acceptable response rate standards. This paper reports results from a survey of editors of social science, health, and statistics research journals to determine what standards exist concerning response rates. We also report results of a metaanalysis of RDD surveys that have been reported in the literature in the last five years. Our analysis will include the reported response rate, topic of study, the submission to publication ratio for the journal (if available), date of publication, length of survey, and whether any other nonresponse bias analyses or data quality indicators are discussed in the paper.

Estimating the Status of Cases with Unknown Eligibility in Telephone Surveys

Tom W. Smith, NORC, University of Chicago

A large and growing proportion of telephone numbers sampled in RDD surveys are of indeterminate eligibility. These consist of numbers that are always busy, no answer, or some similar outcome. To determine the response rate in a survey, the proportion of this number that represents the target population (e.g., residences in samples of households) must be estimated. This is known as e in the RR3 formula of the American Association for Public Opinion Research's Standard Definitions (2004).

CS07—Invited Session III

Establishing a New CATI Center

Jenny Kelly, Kate Hobson, and Judi Petty, NORC

Forty years ago, if an organization decided to get involved in telephone surveys, it was typically a simple matter of seating some interviewers at some desks with phones. While that remains an option today, at the other end of the spectrum

there can be a multimillion dollar investment involving purpose-built facilities, automated dialers, extensively customized software, a dedicated computer infrastructure, and highly specialized staff – sometimes offshore. This chapter overviews the major issues to be considered when establishing a new CATI center, or overhauling an existing one. It addresses the advantages and disadvantages of many choices that can be made in the areas of planning, facilities, technology, and staffing.

CATI Sample Management Systems

Sue Ellen Hansen, University of Michigan; Jacqueline Mayda, Statistics Canada

Computer-assisted telephone interviewing (CATI) sample management has the potential to improve the scheduling of interviews, monitoring of sample outcomes, supervision of interviewers, and data quality. However, the triple constraints of time, budget, and resources in relation to quality need to be considered in designing sample management strategies and systems for CATI surveys. Optimal strategies likely differ across specific survey populations, types of survey, sample designs, sizes of sample, data collection periods, sizes of call centers, and characteristics of interviewers and respondents. Thus, CATI sample management systems need to be flexible and have features that accommodate a range of sample management approaches. This chapter reviews the research literature on CATI sample management systems, in particular CATI sample design and survey lifecycle requirements, system features, optimizing call scheduling, monitoring and controlling interviewer sample management, and assessing system performance. Implications for the design of CATI sample management systems and future research are discussed.

CS08 – Interviewer Performance

The Net Contribution Index: A New Measure of the Performance of Telephone Survey Interviewers

Claire Durand, Université de Montréal

A substantial part of nonresponse in telephone survey interviews is due to refusals that may be avoided or converted by good, well-trained interviewers. However, not much attention is given to improving interviewer performance because interviewers are usually part-time, nonpermanent employees. This also is reflected in the lack of importance given to the specifics of performance measurement and monitoring. Most researchers use cooperation rate at first contact as a measure of performance, but this does not measure the whole performance of interviewers, particularly in “serious” surveys. Good fieldwork means taking appointments and monitoring them as well as converting refusals. When interviewers perform these tasks, the cooperation rate at first contact takes a missing value so the performance of the best interviewers is not assessed. This paper proposes a new measure of interviewer performance, an index of the net contribution of interviewers; presents an evaluation of its properties in terms of reliability and discriminant and predictive validity; shows its usefulness to monitor the evolution of interviewer performance; and concludes on its advantages over the cooperation rate at first contact.

Using Standardized Interviewing Principles To Improve a Telephone Interviewer Monitoring Protocol

Douglas Currivan, Elizabeth Dean, and Lisa Thalji, RTI International

A critical challenge in monitoring telephone interviewers is recording accurately objective indicators of the degree to which interviews follow prescribed behaviors. Without a complete and accurate record of the number and type of specific interviewer behaviors, monitors cannot provide precise feedback to interviewers on standardized interviewing techniques. Objective measurement also facilitates tracking of interviewing behaviors among interviewers, across studies, and over time. Survey researchers at RTI International recently developed a monitoring protocol designed to allow quick entry of nonstandardized interviewing behaviors. A complete record of behaviors allows monitors and supervisors to more accurately assess interviewer knowledge and skills and, therefore, provide more effective feedback. This paper describes the steps in the development of this monitoring protocol and presents monitoring data across time and studies to evaluate the effectiveness of the protocol in improving interviewer behavior.

Hiring ‘The Right Stuff’: Development of an Assessment System for Hiring Effective Interviewers

Pamela Y. Skyrme, Erik Camayd-Freixas, and Clara Haskins, Verb-a-Team.com; Donna Wilkinson, Kyle Vallar, and Paul Lavrakas, Nielsen Media Research

Many research organizations hire interviewers through a series of personal and/or telephone interviews and by having candidates read sample scripts. However, there is little published literature on the use of quantifiable testing of skills, attributes, and abilities for selecting quality interviewers. This paper will discuss the development of an assessment tool designed to improve the quality of selection of telephone research interviewers for a major research company. A number of skills and aptitudes were identified through a job analysis of the research interviewer position. Assessment tools were constructed and/or identified to be used in a three-phase evaluation of this hiring system. These studies examined the relationship of personality, cognitive, and language measures with actual training and objective job performance of incumbent and newly hired employees. These three studies provided strong support for the use of this assessment tool to improve the selection process for research interviewers.

CS09 – Multimode Data Collection I **Does ‘Yes or No’ on the Telephone Mean the Same as ‘Check All That Apply’ on the Web?**

Jolene Smyth, Leah Christian, and Don Dillman, Washington State University

Telephone researchers customarily convert check-all-that-apply questions to a series of forced-choice items to facilitate the telephone surveying process. However, the effects of this practice on respondent answers have not been systematically examined. We report the results of several experiments comparing the forced-choice and check-all question formats

across web and telephone modes to determine whether responses are influenced by question format and/or survey mode. The findings indicate the forced-choice format on the phone produces a higher mean number of options marked affirmatively than the check-all format on the web and that using the forced-choice format across modes results in less variation in the number of items endorsed. Additional analyses of question type suggest responses to opinion/attitude questions, when compared to behavioral/factual questions, are more prone to format and mode effects.

Evaluating the Transition of an Ongoing RDD Survey to a Dual Mode-Dual Frame RDD/Internet Survey

David Dutwin and Melissa Hermann, International Communications Research; Dale Kulp, Marketing Systems Group; Steve Lavine, Common Knowledge, Inc.

This paper will communicate design issues, implementation experience, and specific results relating to the RDD telephone/internet panel transition. A special focus will include a detailed exploration of mode variations and their impact on the estimation process. As this survey contains a battery of nearly 100 continuously tracked HH entertainment and communication-related variables, along with detailed geodemographics, this vehicle provides a rich source of comparative measures. The paper also will review weighting and estimation issues, while specifically focusing on the dual portion of the sample frame—households with in-home internet access. Finally, the authors will review findings relating to samples of cellular-only and out-of-frame respondents developed through the internet portion of the sample.

Telephone and Web: The Mixed-mode Challenge

Howard Speize, Reg Baker, and Wyndy Wiitala, Market Strategies, Inc.; Jessica Greene, University of Oregon
As telephone surveys have increased both in difficulty and cost, more research is migrating to the lower cost alternative of the Web. Yet the influence of mode, especially on health-related questions, remains unclear. This paper reports on an experimental comparison of web and telephone in a study of employee attitudes toward health plan alternatives. Respondents were randomly assigned to either telephone or Web as their primary mode. The mixed-mode study achieved an overall response rate of 84%. Telephone respondents exhibited social desirability effects for several health-related questions, including overall health status and reports of healthy behaviors. The use of multi-item indices seemed to mitigate this effect. The study also found higher item nonresponse on the web, but little evidence of modal differences in satisficing behaviors.

CS10—Invited Session IV

Privacy, Confidentiality, and Respondent Burden as Factors in Telephone Survey Nonresponse

Eleanor Singer, University of Michigan; Stanley Presser, University of Maryland, JPSM

This paper reviews the literature on the nonresponse effects associated with factors usually assumed to depress cooperation with surveys: privacy and confidentiality concerns and respondent burden. We attempt to relate our findings about

nonresponse rates to nonresponse bias, though evidence about bias is sparse. We draw on European research, but most of the work we review was done in the United States.

The Use of Monetary Incentives To Reduce Nonresponse in Random Digit Telephone Surveys

David Cantor, Westat; Barbara C. O'Hare, Arbitron, Inc.; Kathleen S. O'Connor, NCHS, U.S. Centers for Disease Control and Prevention

Random digit dial (RDD) telephone surveys have been used widely as a cost effective methodology for studying general populations; however, response rates have declined over time. A method that can be employed in an attempt to address this issue is the payment of a monetary incentive to a respondent in exchange for interview completion. The purpose of this chapter is to review and summarize the experimental evidence that has tested the effects of monetary incentives in RDD surveys. The bulk of the chapter is restricted to a review of empirical studies that utilized various experimental designs. The chapter commences with an examination of theories used to guide research regarding respondent participation in surveys. Additionally, the chapter discusses how these empirical findings apply to the Social Exchange (SE) and Leverage-Salience (LS) theories and the aforementioned predictions based on these theories. Five major conclusions are drawn, several of which are consistent with the current state of knowledge.

CS11—Estimation

Weighting Adjustments for Multiple Telephone Households: Is It Always Necessary?

Heather Morrison and Jennifer Beck, NORC

For surveys conducted by telephone, collecting information on the number of additional residential phone lines in a household is viewed as an essential standard for statistical weighting procedures. Because households with additional residential lines have a greater chance of being contacted, adjustments must be made to response rates to account for a given household's probability of selection. However, the additional survey questions required to gather this information often are viewed suspiciously by respondents and can lead to loss of cooperation and a corresponding drop in response rates. This paper explores the statistical impact of altogether eliminating questions regarding number and type of telephone lines from data collection. Using the REACH 2010 survey as an example, we demonstrate that when a relatively small proportion of eligible households have additional phone lines, completely eliminating the phone line adjustment may not have a significant impact on response rate estimates.

Interrupted Telephone Service Adjustment (ITSA) in RDD Telephone Surveys

Mansour Fahimi, Paul Levy, and Lily Trofimovich, RTI International; Lina Balluz, William Garvin, Machel Town and Ali Mokdad, U.S. Centers for Disease Control and Prevention

Exclusion of households without a telephone is a source of systematic bias in telephone surveys. While lack of telephone

service among households is about 5% nationally, this rate is differentially higher among households of lower socioeconomic status. Using the interruption in telephone service as a surrogate for lack of service, we used a weighting adjustment methodology to compensate for non-telephone coverage in the 2003 Behavioral Risk Factors Surveillance System (BRFSS). Here, we discuss the history and rationale for using such weighting adjustments, describe the procedure for developing Interrupted Telephone Service Adjustment (ITSA) weights for BRFSS, and evaluate its merits. Specifically, we examine the extent of variance inflation that results from applying this additional layer of adjustment and contrast that against the potential gains in bias reduction on a number of key BRFSS outcome measures.

Scale-up Estimators in CATI Surveys for Estimating the Number of Choking Injuries in Children

Dario Gregori, University of Torino; Roberto Corradetti, University of Torino; Silvia Snidero, University of Torino; Federica Zobec, S&A, SRL

The Scale-up estimator is a network-based estimator for the size of hidden or hard-to-count subpopulations. The basic idea is that the proportion of the mean number of people known by respondents in a subpopulation E is the same as the proportion the subpopulation E forms in general population T. The official data on injuries do not include self-resolved injuries, and indeed these cases are lost at observation. The aim of this study is to check the capability of a CATI survey using the scale-up methodology in detecting the number of injuries due to foreign bodies in children aged 0–14 years in Italy. For this purpose, 1,081 CATI interviews were conducted. The number of choking accidents was estimated as 15,829 in 2004. The scale-up estimator in association with CATI methodology shows a high potential in the field of injury prevention, being accurate and robust.

CS12—Mobile Phones I

Mobile vs. Fixed-line Surveys in Hong Kong

John Bacon-Shone, University of Hong Kong; Liam Lau, Hong Kong Polytechnic University

Hong Kong has some of the highest penetration rates in the world for both fixed-line and mobile phones; there are now more mobile phones registered than adults, and there are still almost as many domestic fixed-lines as there are households. This paper looks at the practicalities of mobile phone surveys in Hong Kong and the differences in sampling frame for mobile and fixed-lines and compares the results for the two frames for both objective and subjective questions. It also compares in detail the contact and success rates for the two frames and discusses the implications for fieldwork arrangements.

Coverage Optimization of Telephone Survey Thanks to the Inclusion of Cellular Phone-only Stratum

Aurélie VanHeuverzwyn and Lorie Dudoignon, Médiamétrie

The use of the telephone in sample surveys has increased constantly since the advent of opinion surveys and within diversified areas. But the use of a land-line phone as the administration method of sample surveys implies that

homes equipped with a land-line phone are representative of the global population of the surveyed units. Today, 18% of households are excluded from land-line phone surveys. In 94% of these households, there is at least one cellular phone. It is known that the social-demographic structure of individuals exclusively equipped with a cellular phone is different from those with a land-line phone, notably in the age and social-professional categories. Médiamétrie's 75000+ Radio Survey was carried out by land-line phone. The breakthrough of the cellular phone could have undermined the relevance of the results, which is why Médiamétrie launched a research program on cellular-phone surveys in 1998. The first part of this paper describes this program. The second part describes the operational aspects of the inclusion of a cellular-phone only stratum in Médiamétrie's telephone surveys. The last part reflects on the next challenge that telephone survey designers will have to take up because of the breakthrough of IP telephony.

Conducting a Branding Survey of Cell Phone Users and Nonusers: The Vox Populi Experience in Brazil

Lourenço Roldão, Vox Populi; Mario Callegaro, University of Nebraska, Lincoln

A major international mobile phone company contacted Vox Populi for a branding project that would involve all the mobile phone operators in most of Brazil. A triple frame procedure was used to produce the final sample. A stratified RDD was used to sample from landline phones, then, within the household, a screening procedure (next birthday day) was used to find a non-cell phone user. The cellular phone frame was built starting with all mobile phone numbers that called the client's mobile phones in the previous 12 months. The interviewers used mobile phones to call mobile phone numbers. This strategy allowed Vox Populi to save 25%. This paper analyzes and describes the methodological issues, problems, and solutions involved in calling mobile phones and landlines in a different environment containing unique billing characteristics and a specific numbering plan.

Nonresponse and Measurement Error in Mobile Phone Surveys

Marek Fuchs, University of Kassel

The penetration rate of cellular phones has topped 80% in some countries. Even though it is still considerably smaller in the United States and many European countries, mobile phone numbers are included frequently in the sampling frames for telephone surveys. In 1999 and 2002, two small-scale pilot studies were conducted in Germany to assess mobile communication devices for survey purposes. In both studies, a random sample of cell phone numbers was compared to a random home phone sample. Indicators for coverage error, nonresponse error, and measurement error were used to evaluate and compare the two samples. This paper summarizes results on field work, unit nonresponse, and measurement error in mobile phone surveys. Based on the two studies, data quality indicators for the mobile phone samples are compared to the home phone samples. Results indicate only a few data quality indicators differ greatly.

CS13—Invited Session V

Mobile Phones' Influence on Telephone Surveys

Vesa Kuusela, Statistics Finland; Vasja Vehovar, University of Ljubljana; Mario Callegaro, University of Nebraska, Lincoln

The first part of this paper is an account of the mobile phone coverage in developed countries and a detailed description of the percent of households by type of service in some European countries based on face-to-face-interviews of probability samples. In addition, the history of changes in telephone service in households in Finland from 1996 to 2005 are traced and factors associated with the transformation of household to a mobile-only household are identified. The second part of this paper deals with sampling and nonsampling effects that the increased number of mobile phones has on telephone surveys. The sampling effects, due to coverage problems, might be severe and the approaches to solving these problems may not be straightforward. The nonsampling effects are associated to survey costs and practices, nonresponse issues, and data quality.

Multiplicity-based Sampling for Mobile Telephone Population: Coverage, Nonresponse, and Measurement Issues

Robert Tortora, The Gallup Organization; Robert M. Groves, University of Michigan, JPSM; Emilia Peytcheva, University of Michigan,

Multiplicity sampling extends the coverage of a sampling frame to target population members not on the frame but who have well-defined links to frame elements. In some countries, there is no mobile telephone number frame, but there is a line telephone number frame. The line frame is traditionally used to cover the telephone household population, but the increase in persons with mobile-only telephones threatens its usefulness. One logical design option is to draw a sample of line telephones and measure a family network connected to the respondent to identify mobile-only relatives. The mobile-only relatives can then be sampled for supplementation of the survey. This chapter presents the results of a field test that yields nonresponse and measurement insights into mobile telephone surveys using a multiplicity approach, compared to an RDD approach. It reviews the estimated prevalence of mobile-only network members, cooperation with a request to provide mobile numbers, and response rate characteristics of a survey with the mobile-only members and makes comparisons to an RDD mobile telephone survey.

CS14—New Approaches to Survey Management

Using Life Cycle Stages, Outcome and Disposition Codes, and Automated Scheduling for Improvements in Efficiency and Flexibility of RDD Surveys

Jenny Kelly, Manas Chattopadhyay, and Kate Hobson, NORC

Social research surveys differ significantly from other surveys in features such as the requirement for higher response rates, unique designs that do not fit easily within standardized structures, and complex sampling designs. NORC recently overhauled its survey software, and as part of that process, established a project to design a set of Outcome

and Disposition codes and associated scheduling rules to deliver social surveys faster and more efficiently. This paper describes the solution developed and its features, such as Life Cycle Stage concept, Windowsets concept, clear separation of Outcome code and Disposition, parameterization of key scheduling variables, and use of placeholder codes.

Do Additional Call Attempts Really Increase Response Rates? A Comparison of Approaches

Cindy Howes and Angela DeBello, NORC

Call strategies, including the number of callbacks to refusing respondents, are important for conducting successful telephone surveys. It is well established in survey research that increasing the number of calls to sample members produces a corresponding increase in the number of completed interviews. However, beyond a certain point, the law of diminishing returns applies and the value of the few additional completed interviews is outweighed by the associated costs. But little empirical research exists comparing the productivity of varying numbers of refusal conversion callbacks within the same sample. We examine the impact of modifying call strategies for refusals by evaluating telephone call history data from the evaluation of Racial and Ethnic Approaches to Community Health 2010 (REACH). We also evaluate variations in response rates by household size and composition at both sample stages. Finally, we explore solutions to increase respondent cooperation.

Effect of Call Rule on Data Quality and Survey Costs

Richard Griffin, U.S. Bureau of the Census

Telephone surveys typically use a call rule to help ensure a representative sample. A default call rule used at a market research firm in 1995 was original plus 3 (O + 3), meaning up to four attempts were made on each sample telephone number before discarding it. Multiple attempts are necessary to ensure a representative sample of completed interviews. Over many surveys, it was noticed that the completion rate from the 4th attempt was small. If the call rule could be changed to O + 2 without compromising data quality, surveys could be completed with a given number of interviews at lower cost. Two market research random digit dialing sample surveys were split into two parts, using the O + 3 call rule and the O + 2 call rule. This paper presents results from the study that evaluate the effect of a potential change in call rule on data quality and operational results related to cost. Chi-Square tests of independence are used to test the null hypothesis of independence between the call rule used and the distribution of characteristics of interest and demographic groups.

Balancing Quality and Cost: Conducting an ATS with Multiple Stakeholder Interests

Jennifer Hicks, Barbara Fernandez, Kisha Bailly, Anne Gorrigan, Kristie Hannah, and Randal ZuWallack, ORC Macro

Conducting a state-based Adult Tobacco Survey (ATS) involves multiple stakeholders with a common goal

of collecting high-quality data, but often also involves competing interests. Balancing competing demands leads to design decisions that impact survey participation and results. We present an assessment of design effects caused by survey introduction and topic, measuring the propensity of individuals to respond to an ATS. We find these elements can lead to decreased participation for some population subgroups, particularly smokers. The effect of topic avoidance is measured by analyzing mid-survey termination rates. BRFSS data is used as a benchmark for smoking prevalence. This analysis demonstrates design impact on prevalence estimates and illuminates reasons for ATS and BRFSS estimate differences.

CS15 – Establishment Surveys

The Choice Is Yours? Availability, Take-up, and Perceptions of Telephone Business Surveys

Jacqui Jones, UK Office for National Statistics; Emma Farrell, Australian Bureau of Statistics; Gustav Haroldsén, Statistics Norway

The UK Office for National Statistics, Statistics Norway, and the Australian Bureau of Statistics are responsible for conducting business and social surveys. The outputs from these sources are used for a variety of purposes, ranging from government policy making to academic research. As in many other national statistics institutions (NSIs), these NSIs traditionally have used paper self-completion as the primary mode for business survey data collection. However, the past years have seen the introduction of additional modes of data collection into the design of business surveys. The objectives of this paper are to provide an overview of when, why, and how telephone data collection has been used for business surveys. The paper also will provide an insight into respondent perceptions of these changes.

Statistics Canada's Experience Conducting Cost Recovery Business Surveys

Terry Evers, Statistics Canada

The core business of the Small Business and Special Surveys Division is to fill data gaps that exist in the business sector within Statistics Canada mainstream statistical programs on a cost-recovery basis. SBSS releases results from five to seven new cost recovery national business surveys each year, most of which are CATI, and has unique challenges related to the conduct of its business surveys that manifest themselves around the data collection activity: all its surveys are voluntary, nearly all are activity-based, and it usually deals with hard-to-find populations and complex and hard-to-define concepts. As well, there is Statistics Canada's overriding concern about the level of response burden being imposed on the business community. This paper describes the steps to being proactive in addressing issues of response burden, survey cost, timeliness of results, response rates, and data quality and maintaining our reputation as a credible and professional statistical organization.

Going beyond Disposition Codes and Response Outcomes – Measuring Other Aspects of Survey Performance

Paula Weir, Energy Information Administration; Benita O'Colmain and Tracy Churchill, ORC Macro

Disposition codes and response outcomes are important for measuring performance in a Computer Assisted Telephone Interview (CATI) survey with respect to nonsampling error, but additional measures are necessary to monitor survey performance in terms of time, efficiency, accuracy, and cost. The government's official weekly gasoline prices are produced via a non-RDD CATI survey of a fixed set of respondents. The core requirement for this survey is the production of accurate and timely price estimates each week. In order to determine how well this requirement is met and to generally promote a high-quality set of statistics, performance indicators were designed to measure the timeliness of the data submission; the efficiency of the data collection process in terms of time and cost per interview; and the accuracy of the data in terms of response rates, sampling error, and data edit and recheck rates. These measures are reviewed on a weekly basis to monitor the quality of the data and work for performance-based contracting, as well as to guide performance improvement. This paper describes the performance indicators and their purpose and provides examples of how they are used to monitor and improve performance.

Design and Testing of CATI Instruments for Business Surveys

Emma Farrell, Australian Bureau of Statistics

CATI interfaces using Blaise are being developed in the Australian Bureau of Statistics for data collection as part of a wider, integrated respondent management framework. This presentation describes the early stages of introducing CATI to some surveys and survey-related procedures, taking a form design and testing perspective. The conversion of a self-administered paper form to a CATI will be covered, including evaluating the changes to question wording, screen design, and mode effects.

CS16 – Invited Session VI

The Development of a Comprehensive Behavioral-based System To Monitor Telephone Interviewer Performance

Kenneth W. Steve, Anh Thu Burks, Paul J. Lavrakas, and J. Brooke Hoover, Nielsen Media Research

A key purpose of this research paper is to provide an overview of the state of knowledge about the monitoring of telephone interviewers—including an original survey of interviewer monitoring practices across government, academic, and commercial telephone survey centers—and a synthesis of the literature in this area. Another key purpose is to describe the development and implementation of a new behavioral-based, computerized interviewing, quality monitoring system at Nielsen Media Research from 2001–2005.

Measuring Telephone Interviewer Performance and Productivity

John Tarnai and Danna L. Moore, Washington State University

This paper describes how telephone interviewer performance is measured in survey organizations and how the performance of interviewers can be improved through training. Several productivity measures are described, many from Computer Assisted Telephone Interview (CATI) systems. These productivity measures are useful for projecting staffing needs and assessing progress toward survey deadlines. We describe the results of a questionnaire administered to survey organizations that show the productivity measures collected and what the current standards are for interviewer productivity. The survey presents data on how productivity measures are used to communicate expectations to interviewers, reward or reassign interviewers, and train interviewers to improve their performance. The survey results also will describe the breadth of current practices organizations use to train telephone interviewers. The paper concludes with a discussion of the most useful ways to evaluate interviewer productivity and how to use productivity to improve interviewer training.

CS17 – Coverage

Telephone Surveys: The End of an Era?

Barry Schouten, Jelke Bethlehem, and Fannie Cobben, Statistics Netherlands

The percentage of Dutch households with a listed fixed-line telephone has decreased steadily throughout the years. Currently, approximately 30% of the Dutch population cannot be contacted in telephone surveys when cases are selected from telephone directories. Analysis shows the population of households with a listed fixed-line telephone is different when it comes to age, degree of urbanization, and ethnic background. This raises the question of whether telephone surveys are still an adequate tool to measure population statistics. In this paper, we discuss the implications for survey inference. In order to characterize households, we linked auxiliary information from registers to a number of CAPI surveys. For each household in the survey, we know whether a fixed-line telephone number is available in case the survey would have been CATI. We present a model for the probability of having a fixed phone. Furthermore, we answer the question of whether we can adjust estimates sufficiently for the selectivity of telephone surveys.

Consumer Expenditure Reports on Telephone Service: 1994–2005

Brian Meekins, U.S. Bureau of Labor Statistics

The last 10 years have seen significant changes in the use of mobile and cell phone service, but accurate estimates of trends are rare. Since 1994, the Consumer Expenditure Interview Survey (CEIS) has queried households on their expenditure for phone services in the preceding three months. While measured with some error, reports of cell/mobile phone expenditures and landline expenditures can be used to categorize households as having both a landline and cell phone, a landline only, a cell phone only, or no phone

service. Preliminary results going to 2003 show cell phone-only households as approximately 4.5% of the population. In addition to the normal set of demographics, the CEIS asks respondents about pre-paid phone cards, DSL and internet access, pay phones, how much of the phone budget is written off as business expense, and the amount of expenditure on a number of items, including mortgage and rent. These correlates, examined over time, can give us a description of the trends in phone service in a variety of sub-populations, illuminating probable sources of noncoverage bias in list-assisted RDD telephone frames.

Ownership and Usage Patterns of Cell Phones: 2000–2005

Peter Tuckel, Hunter College; Harry O'Neill, Roper Public Affairs, NOP World

The cell phone poses a potential challenge to the viability of the telephone survey as a data-gathering mechanism. This challenge stems from two factors: telephone numbers assigned to cell phones are generally not included in the sample frame of telephone surveys, and even if potential respondents retain their land-line phones but use their cell phones as their primary means of communication, they may be less accessible to telephone survey researchers. This paper constructs a detailed profile of cell phone owners and examines changes in the patterns of usage of the cell phone over time. The paper has three major objectives: (1) to measure the incidence of individuals who have jettisoned their land-line phones as well as those who are “heavy users” of cell phones, (2) to assess the possible biases that both “exclusive” and “heavy users” of cell phones might introduce into the conduct of regular telephone surveys, and (3) to discuss the implications of the findings with respect to carrying out surveys via the cell phone.

CS18 – Response Rates II

The Impact of Declining Response Rates on the Effect of Monetary Incentives in Random Digit Dialed National Surveys

Richard Curtin and Eleanor Singer, University of Michigan; Stanley Presser, University of Maryland

Singer et al. (2000) found that a \$5 prepaid incentive markedly increased response rates during 1996 to 1998 on Michigan's monthly RDD Survey of Consumer Attitudes (SCA). Although this led the study to adopt that incentive, SCA's response rate has declined sharply since then. We examine (a) whether the effect on response rates of the \$5 prepaid incentive has diminished; and (b) whether prepaid incentives of \$10 would, as predicted from earlier research, show a larger effect. In addition, we look at the effect of incentives on number of calls to obtain an interview, item nonresponse, response distributions, and sample composition, thus replicating analyses of the earlier paper. We also examine the cost-effectiveness of prepaid vs. refusal conversion payments and the effect of differences between cases for which addresses can and cannot be obtained, neglected topics in the earlier paper. Finally, we discuss implications of incentives for nonresponse bias.

Efficacy of Incentives in Increasing Response Rates

Mansour Fahimi, Roy Whitmore, James Chromy, Margaret Calahan, RTI International; Linda Zimpler, National Center for Education Statistics

Nonresponse is a major challenge to conducting high-quality survey research because the quality of survey estimates is contingent upon a high response rate. Now, more than ever before, securing a respectable rate of response is an objective that is hard to achieve in most surveys. This paper provides a summary of the results obtained from an experiment conducted to assess the effectiveness of incentives for increasing the response rate, particularly for hard-to-reach individuals. Data for this research come from the 2003 field test of the National Study of Postsecondary Faculty (NSOPF), conducted for the National Center for Education Statistics, U.S. Department of Education. This nationwide study involved collection of data from faculty at postsecondary institutions. The experiment consisted of a design where two levels of incentives for nonresponse follow-up were nested within three levels of incentives for early response. Results include statistical tests of significance as well as a cost-benefit analysis to assess the efficacy of incentives.

The Influence of Advance Letters on Response in Telephone Surveys: A Metaanalysis

Edith De Leeuw, Methodika; Joop Hox, Elly Korendijk, and Gerty Lensvelt-Mulders, Utrecht University; Mario Callegaro, University of Nebraska, Lincoln

Recently, the leading position of telephone surveys as the major mode of data collection has been challenged. Telephone surveys suffer from a growing nonresponse, partly due to the general nonresponse trend for all surveys, partly due to changes in society and technology influencing the contactability and willingness to answer. One way to counteract the increasing nonresponse is the use of an advance letter. In mail and face-to-face surveys, advance letters have been proven effective. Survey handbooks also advise the use of advance letters in telephone surveys. This study reviews the evidence for this advice and presents a quantitative summary of empirical studies on the effectiveness of advance letters in raising the response rate for telephone surveys. In addition, characteristics of successful letters are discussed.

Maximizing Response Rate through Operational Innovation: A Case Study

Darin Miglorie and Amelia Deller, ORC Macro

This paper examines how a telephone research call center made operational changes during the fielding of a study to produce a positive influence on response rate. The study demanded a final response rate of 20% using AAPOR 4. With nearly 50% of the fielding complete, performance estimates indicated the study would fall short of the goal. In response, management developed and implemented a strategy to improve response rate for that study. We detail the steps taken in formulating a successful set of new operational procedures. The new methodology produced measurable increases in respondent cooperation and response. A sample released before the operational changes performed at a 19.57%

response rate. A sample released after the operational changes performed at 26.46%. Overall, we met our 20% response rate goal and exceeded it by posting a 22.31% response rate.

CS19—Invited Session VII

Aspects of Nonresponse Bias in RDD Telephone Surveys

Jill M. Montaquila, J. Michael Brick, and Mary C. Hagedorn, Westat; Courtney Kennedy and Scott Keeter, The Pew Center

Achieving high response rates in sample surveys has become increasingly difficult in recent years and is particularly problematic for RDD telephone surveys. The relatively high level of nonresponse in RDD surveys and the lack of good auxiliary data to reduce the effects of nonresponse in estimation combine to make nonresponse bias a serious concern. Despite this, several studies of nonresponse bias have suggested that the estimates from RDD surveys typically do not have large nonresponse biases. In this paper, we review the literature on nonresponse bias in RDD surveys and discuss limitations associated with the previously applied methods. Using data from surveys with very different protocols, sponsors, and populations, we introduce analytic techniques to address some of these shortcomings. The research presented in this paper, as well as in other recent studies, demonstrates that the relationship between the response rate in a survey and the nonresponse bias of an estimate is tenuous. The paper concludes with a discussion of the implications for methods used in RDD surveys.

Evaluating and Modeling Early Cooperator Bias in RDD Surveys

Paul P. Biemer, RTI International; Michael W. Link, U.S. Centers for Disease Control and Prevention

Response rates to RDD telephone surveys continue to plummet, and methods for increasing them have been largely ineffective. Now survey methodologists are focusing on the difference between respondents and nonrespondents and developing approaches for minimizing these differences. Recent research suggests the early cooperator bias (ECB) may be small for RDD surveys. This would explain why a survey with a 40% response rate, representing mostly early cooperators, would show no greater nonresponse bias than the same survey pushed to a 70% response rate. To that end, this paper examines the ECB for a number of health characteristics using data from the Behavioral Risk Factor Surveillance Survey and a range of truncated callback rules. To limit the risk of a large ECB in some estimates, we based our approach on a model for the ECB that takes into account the number of call attempts required to reach a final disposition for a case. An evaluation of the performance of the ECB adjustment method for the BRFSS data also is presented.

CS20—Using Technology To Improve RDD Surveys

Prescreening Telephone Numbers To Identify Nonresidential Lines

Heidi Upchurch, NORC; Marcie Cynamon and Larry Wilkinson, NCHS, U.S. Centers for Disease Control and Prevention

The National Immunization Survey (NIS) is a large random digit dial telephone survey sponsored by the U.S. Centers for Disease Control and Prevention. Annually, upwards of 2 million telephone numbers are dialed in attempts to interview households with children between 19 and 35 months of age. After the sample has been selected, a commercial vendor flags out-of-scope business, nonworking, or modem lines. An additional 1.8 million telephone numbers are flagged annually as out-of-scope at this stage. The remaining sample is then reverse matched for addresses through another vendor and an advance letter describing the purpose of the NIS is mailed to matched addresses. Each of these vendors provides information as to whether a phone number is a business or residence. We will compare the benefits of using one vendor versus another to identify nonresidential numbers before they are called by interviewers.

New Methods for Identifying Nonresidential and Embedded Cellular Numbers in RDD Surveys

Dale Kulp, Marketing Systems Group; J. Michael Brick, Westat; Michael W. Link, U.S. Centers for Disease Control and Prevention

A problem confronted in all random digit dial (RDD) telephone surveys in the United States is that the sampling frame contains ineligible telephone numbers. This research describes two investigations under way that may alleviate this problem. First is the evaluation of a procedure that uses the SS7 network to query particular telephone numbers, returning the “name” of the ultimate subscriber. The second involves a priori identification of “phantom interconnects” within the sample frame itself. The paper will report on the evaluation of the procedures and methods for operationalizing these methods. Samples of telephone numbers with an indeterminate residential status and with known status will be processed and compared to the survey results. Evaluation samples also will include cellular numbers embedded in residential 100-banks that cannot be identified by other methods. This research may represent a significant step in preidentifying and reliably eliminating the majority of nonresidential and indeterminant telephone numbers in RDD samples.

A Comparison of Interviewer-entered and System-applied Dispositions on a Large RDD Study

Angela DeBello and Cindy Howes, NORC

As part of any CATI survey, the time taken for identifying and assigning dispositions to nonconnect call attempts is a driver for productivity and overall project costs. This is particularly true of large-scale Random Digit Dial CATI surveys. Automatic dispositioning—a software feature that automatically identifies and assigns dispositions to common noncontact types, such as busy signals, “ring no answers,” and disconnected telephone numbers with little or no interviewer intervention—can offer substantial cost savings. The expected benefits of automatic dispositioning include increases in speed and accuracy. We will examine the differences between dispositions of nonconnected cases applied by interviewers and those of an automated system on the evaluation of Racial and Ethnic Approaches

to Community Health 2010 (REACH). Specifically, we will compare the dialing speed when using an automated dispositioning system with the same dialing activity using a manual disposition system. Further, we will analyze the rates for the most common noncontact dispositions to assess the accuracy or error introduced by each method.

CS21 – Call Scheduling Gaining Efficiencies in Scheduling Callbacks in Large RDD National Surveys

Jeffery Stec, CRA International; Gail Daily, Paul Lavrakas, Charles Shuttles, and Tracie Yancey, Nielsen Media Research

In the past 20 years, the effort needed to properly and fully dial and dispose of the telephone numbers in an RDD sampling pool has grown extensively. As such, telephone survey researchers are constantly seeking cost-beneficial ways to schedule their calls efficiently so as to minimize costs without adding to nonresponse (and possible nonresponse bias). Four times each year, Nielsen Media Research uses a list-assisted RDD frame to sample respondent households for its national dual-stage, mixed-mode diary surveys of television viewing in the United States. This paper will present analyses using NMR’s 2003–2005 calling data from its diary surveys to investigate where efficiencies are likely to be gained by changing the fixed calling rules now used. In addition, this paper will present analyses examining whether exploiting these efficiencies would lead to statistically different sample estimates.

Calling Patterns for a Large National Random Digit Dial Health Survey

Martin Barron, NORC; Meena Khare, NCHS, U.S. Centers for Disease Control and Prevention

The National Immunization Survey (NIS), a nationwide, list-assisted random digit dial survey, was conducted in 2005 by the NORC for the U.S. Centers for Disease Control and Prevention. The NIS monitors vaccination rates of children between the ages of 19 and 35 months. Each quarter, the NIS dials more than 500,000 telephone numbers, screens more than 250,000, and completes more than 8,000 interviews in 83 Immunization Action Plan areas. Taken together, the magnitude and scope of the NIS create a rich, and perhaps unique, database to study telephone survey calling patterns. The purpose of this paper is to present a variety of statistics designed to illustrate typical calling patterns for the RDD survey and to propose a series of optimal or “best practice” scheduling rules for RDD surveys.

Call Scheduling: Theory and Practice

Lisa Carley-Baxter, Brian Evans, R. Suresh, Rita Thissen, and Suzanne Triplett, RTI International

Utilizing optimal call scheduling is one way to minimize nonresponse. In order to optimize call scheduling, it is important to have both a flexible call scheduler that can utilize multiple parameters for prioritizing and delivering cases and sufficient data to illustrate when sample members are at home and can be contacted. This paper builds on prior discussions

of call schedulers by detailing key features of call schedulers and linking them to call outcomes. In addition, this paper expands prior discussions of optimal call scheduling, which typically have limited their review to one study by presenting an analysis of both successful call attempts and refusal conversion for different types of studies (list versus RDD), waves of data collection (baseline versus follow-up), and populations (e.g., adults over 18, health care workers, youth).

A Survey of Call Rules Employed in Today's Household Telephone Survey

Charles Mason, Bureau of Labor Statistics

At the first Telephone Survey Method conference in 1987, there was much discussion about the best practices for establishing optimal times to contact household respondents and for developing optimal calling patterns. Many of us returned with recommendations that populated automated call schedulers for years. However, the landscape has changed due to cell phones and call "screening," reducing the efficiencies of these early rules. Most survey organizations have continued to research optimal calling times and patterns. The impetus behind this continued research is to achieve the highest levels of response rates and efficiently manage resources. This paper surveys the surveys and reports on the current best practices, differences, and similarities found in calling patterns.

CS22 – Invited Session VIII

Mode Effects in Canadian Community Health Survey: A Comparison of CAPI and CATI

Yves Béland and Martin St. Pierre, Statistics Canada

The Canadian Community Health Survey (CCHS) was developed as part of the Health Information Roadmap initiative, a five-year plan to modernize and standardize health information across the country. The CCHS program includes two surveys: a health region-level survey and a provincial-level survey every two years with a total sample of 20 to 30,000 respondents. The health region-level component of the CCHS makes use of multiple sample frames and multiple data collection modes (CAPI and CATI). Between the CCHS 2003 and the CCHS 2001, the mix of sample frames and collection modes changed considerably for various reasons, but namely to reduce the survey cost at the collection stage. It was anticipated that such a change could impede the comparability of the estimates over the two surveys if differences in the response behavior are observed between the two modes of collection. Therefore, a study on the effect of the two collection methods on the responses was carried out within the CCHS 2003. This paper will present the results of the various analyses performed as part of the mode study where several types of comparison between the modes of collection were carried out.

Accommodating New Technologies: The Rejuvenation of Telephone Surveys?

Charlotte Steeh, Consultant; Linda Piekarski, Survey Sampling International

Technology has transformed voice communication over the last 15 years with major implications for telephone surveys. The first innovations, such as answering machines, limited the access to households that survey interviewers previously

enjoyed. Consequently, the average number of call attempts increased as response rates declined. The advent of wireless telephones now threatens to exclude growing percentages of adults from the standard sample frame of telephone numbers, and Voice-over-Internet-Protocol (VoIP), which uses the web rather than standard telephone lines to transmit calls, has spread from business to individual use. In this paper, we describe the nature of these latest challenges to the telephone mode of administration and compare the results from three recent surveys based on a cellular number frame in order to locate overarching principles that can be used in the future design of telephone surveys.

CS23 – Sampling

Address Frames and Mail Surveys as Complements (or Alternatives) to RDD Surveys

Michael W. Link and Ali Mokdad, U.S. Centers for Disease Control and Prevention; Michael P. Battaglia and Larry Osborn, Abt Associates; Martin Frankel, Baruch College, CUNY/Abt Associates

In order to expand coverage for and participation in the Behavioral Risk Factor Surveillance System (BRFSS), a six-state pilot was conducted to determine if mail surveys using a random sample of adults selected from an address-only sampling frame (based on the U.S. Post Office's Delivery Sequence File) could rival the quality of data collected using more traditional RDD methods. Moving from a telephone-only approach to one that utilizes complementary sampling frames and survey modes may improve response rates and increase the validity and reliability of estimates. We provide an overview of the issues related to development of a valid and reliable address-based sampling frame, estimates of coverage and response rates for the address-based and RDD-based surveys, and comparison of mail and telephone estimates obtained for key health and risk indicators. The findings help to assess the viability of address-based frames as potential complements to current RDD frames and to evaluate the feasibility of using these approaches in tandem in dual frame/mixed mode studies of the general public.

Efficacy of a Clustered Design in Producing Small-area Estimates in a Health Insurance Survey

Thomas Duffy and Ronaldo Iachan, ORC Macro

The Ohio Family Health Survey (FHS) is a telephone survey of the health and health insurance status of adults and children in Ohio. The FHS prescribed confidence intervals for estimates of insurance status for several population subgroups: rural regions, ethnic minorities, families in poverty, families with children, etc. These constraints required a complex sample design that oversampled on many levels. One major consideration in the allocation of the sample across the 88 counties was obtaining reliable estimates of the health insurance status of children under the age of 18; precision constraints called for reliable estimates either for individual counties (in the case of the largest counties) or for clusters of similar counties. Sampling clusters were created using a k-means iterative process, using variables shown to correlate with insurance status in other research (e.g., household income, employment status, race). Geographic contiguity was one of several variables. The objective was to obtain reliable estimates for clusters of similar, small counties

without having to be completely dependent on other small-area estimation techniques. As a result, clustering was used to produce design strata that would most effectively meet this analytic objective. This paper will assess how well the clustered design did in approximating county-level estimates of health insurance coverage.

An Experimental Comparison of Within-household Selection Techniques in a Survey of Substance Abuse

Timothy Beebe, Mayo Clinic; Michael Davern and Donna McAlpine, University of Minnesota

The Rizzo-Brick-Park (RBP) within-household selection approach is an enhanced version of the Last Birthday (LB) method, where there is a determination of whether the contacted household informant is to be sampled. If there are more than two adults in the household and the informant is not selected, then the LB (informant excluded) can be used to identify the selected respondent. This paper presents the results of an experiment comparing the RBP method against the standard LB approach of selecting respondents within households. The experiment was embedded in a larger RDD telephone survey designed to estimate the need for treatment for those who abuse or are dependent on alcohol or other drugs. Approximately 3,250 cases were randomly assigned to either one of the two conditions. Key research questions to be addressed include the following: Which method results in the highest cooperation and refusal rates? How do completion times vary by method? How do estimates of drug and alcohol use vary by the two methods?

CS24 – Response Rates III

RDD Surveys: The Statistical and Survey Interface

Brenda Cox, Diane Burkom, and Jeanine Christian, Battelle

Random digit dialed (RDD) telephone surveys pose unique challenges to sampling statisticians and survey managers who must work together to ensure acceptable response rates are achieved while preserving the attributes needed for effective estimation. Our premise is that acceptable response rates are the culmination of many decisions made during survey planning and execution. Screeners must be designed to encourage response, identify eligible households, and select subjects for interview. Response rates must be monitored and compared to expected sample yields for each stage of data collection. Detailed disposition codes must be developed that capture progress made for each sampled number and the data needed for weighting and nonresponse adjustment. Calling protocols must be developed that focus on increasing contact rates while capturing information to identify ineligible cases. Sampling plans are needed that ensure sample size targets are met without releasing so much sample that response rates are depressed. This paper illustrates the RDD planning process with examples from RDD surveys fielded in 2005.

Response Rates to Telephone Surveys over Time: A Comparison of Cost and Efforts in Repeated RDD and List Sample Surveys

Patricia Gallagher, Anthony Roman, and Kirk Larsen, Center for Survey Research, University of Massachusetts, Boston

Declining response rates to telephone surveys is an ongoing concern, both from the standpoint of data quality and data

collection costs. We compare the cost and effort associated with achieving acceptable response rates in RDD and list-sample surveys conducted in the last seven years at our academic survey research center. With increased effort, CSR has been able to maintain response rates of 60% or better (AAPOR RR1) across parallel RDD surveys designed to make statewide estimates of health insurance status in both Massachusetts (four studies between '98 and '04) and Arkansas (studies in '01 and '04). Since 1998, we have conducted five parallel statewide list-sample CAHPS® surveys of the Medicaid population in Massachusetts. While overall response rates to these dual-mode surveys (Mean: 55%; Range: 52–57%) have been maintained throughout time, there has been a trend of increasing responses by telephone. Our analyses allow us to describe current trends in nonresponse in these rigorously conducted RDD and list-sample telephone surveys.

Combining Contact Data from Administrative Records Improves Response Rates to Telephone Surveys

Anne B. Ciemnecki, Mathematica Policy Research

Government agencies conduct telephone surveys to collect perceptual information about public programs. Survey respondents often are selected from administrative records of program participants. The quality of contact information on the administrative records is highly variable. Program records may or may not contain telephone numbers of program participants selected to participate in the survey. To locate survey sample members, MPR has turned to a second source of administrative records, usually from government programs other than the one under study, to supplement contact information. This paper will use two surveys as case studies to demonstrate that using secondary sources of administrative data early in the field period to improve contact data improves telephone survey quality and reduces potential bias and cost. It will present overall response rates; response rates for key subgroups; and the time and cost to complete telephone interviews by the presence or absence of a telephone number at the beginning of the field period, the source of the telephone number, and the quality of the telephone number. It also will suggest that improving contact information on administrative files has wide-reaching benefits for policymakers and program participants because programs can best serve people if they can keep in touch with them.

CS25 – Invited Session IX

Response Rates in Surveys by the News Media and Government Contractor Survey Research Firms

Allyson L. Holbrook, University of Illinois at Chicago; Jon A. Krosnick, Stanford University; Alison Pfent, The Ohio State University

Response rates for some RDD telephone surveys in the United States have been declining, inspiring the worry that sample representativeness, and therefore survey accuracy, may be declining as well. Low response rates are threats to representativeness only if potential respondents who do not participate in a survey differ systematically from those who do. This chapter explores whether unit nonresponse in surveys does in fact result in sample composition bias.

The chapter reports analysis of data from more than 100 of the best and most visible RDD telephone surveys done of nationally representative samples between 1996 and 2005 (with response rates ranging from less than 10% to more than 70%). The chapter provides a summary of response rates in recent surveys, describes changes in response rates and survey administration procedures in recent years, and tests how response rates are related to sample representativeness and to the procedures used to conduct surveys (e.g., field period length, number of call attempts, use of incentives and refusal conversions).

Response Rates: How Have They Changed and Where Are They Headed?

Michael P. Battaglia and Mary Cay Murray, Abt Associates; Meena Khare, NCHS, U.S. Centers for Disease Control and Prevention; Martin Frankel, Baruch College, CUNY/Abt Associates; Paul Buckley; Sarah Peritz

A steady decline in telephone survey response rates has been well-documented throughout the past decade. What is less clear, however, is the exact nature of this decline, its components, and the rate of change. Our contribution will make use of a large-scale, government-sponsored RDD survey that has maintained a constant core methodology throughout the last decade to examine the various components and drivers of this decline. We will trace various measures of response and cooperation rates throughout the 10-year period (1995 to 2004), including the various components of the basic AAPOR and CASRO response rates (telephone number resolution, eligibility screening, and interviewing) and other important response and production rate measures. Alternative response rate measures also will be discussed. Correlates of nonresponse will be examined and the relationship between response rates and nonresponse bias will be assessed.

CS26 – Interviewing and Technology Implementing New Technology: Interviewer Adaptation and Instrument Effects

Polly Phipps, Brian Meekins, and Roberta Sangster, U.S. Bureau of Labor Statistics; Claudia West and Deborah Kinnaman, U.S. Bureau of the Census

The Telephone Point-of-Purchase Survey (TPOPS) is a panel survey of households that collects the name and address of the businesses where consumers purchase various types of goods and services. In 2003-04, TPOPS survey operations implemented a web-based case management system in tandem with a transition to a BLAISE instrument for the computer-assisted telephone interview survey. As part of the implementation, interviewer training and field testing were conducted. While it is common to implement new technology in a production survey, the process is not without difficulties. Response rates declined with the introduction of the web-based survey system, then rose over the next several quarters. In this paper, we focus on understanding the introduction of new technology into a production survey and investigate possible interviewer and instrument effects.

IVR and Survey Errors

Darby Steiger, The Gallup Organization

Electronic self-administered surveys, such as web-based data collection and telephone computer automated data collection (also known as IVR or Interactive Voice Response), are becoming increasingly popular ways to study populations that have easy access to the technology and who have a high level of willingness to interact with computers directly. These new methods of data collection offer the power and complexity of computerization combined with the privacy of self-administration. This paper reviews the foundations of IVR research in order to understand what IVR is and how it fits into the family of data collection methodologies; the various survey errors associated with IVR as compared to other modes of data collection; when IVR is and is not an appropriate choice of methodologies; and recommendations for IVR research design.

How To Estimate the Effectiveness of Online Codify with Search Engines: The Italian Experience of ISTAT Labour Force Survey

F. Camillo, Università degli Studi Bologna; Maria Gabriella Grassia, Federica Pintaldi, Luciana Quattrociochi, and Vincenzo Triolo, ISTAT

In order to comply with Eurostat regulations, ISTAT implemented a new Survey on Labour Force (RCFL). The new Survey was carried out simultaneously with the quarterly survey during 2003 and in the first quarter of 2004. It replaced the quarterly survey in 2004. The overlapping period had the double aim of testing the new survey system and limiting the historical data discrepancies between the old and new investigations. Accuracy, reliability, and timeliness in data production are essential elements of continuous investigation. The ISTAT has used the opportunity offered by the substitution of quarterly investigation with continuous investigation to update and improve the data quality and to comply with the methodologies and contents defined at community level. This paper describes the new survey.

Study Documentation in Telephone Surveys

Peter Mohler, ZUMA; Beth-Ellen Pennell, University of Michigan

Since the first conference on Telephone Survey Methodology, there have been many changes and developments in both the technologies and the methods used. Many see the evolution of the mode continuing at an ever increasing rate. For us to fully understand the impact of these changes, documentation of study results must take a more central and critical role in survey research. Focusing on telephone studies, while highlighting computer-assisted data collections, this paper discusses the needs of various audiences for documentation: sponsors, the media, students, methodologists, etc. It overviews current barriers to producing documentation and presents recent technical developments that both facilitate documentation for users and enable documentation protocols to be used to enhance design procedures and quality control. We provide a generic framework for study documentation, including metadata, paradata, the more traditional study documentation of the survey data, and valuable related information, such as contextual data. Exemplary studies

will be drawn from both national and cross-cultural, cross-national projects. Finally, the paper will address future trends in documentation and archiving.

CS27 – Multimode Data Collection II

Interview Mode Effects in the UK Local

Labour Force Survey

Dave Elliot, Laura Rainford and Jack Eldridge, UK Office for National Statistics

The UK Labour Force Survey is a five-wave panel survey. First-wave interviews are face-to-face, but 80% of later interviews are by telephone. In 2000–03, ONS launched the Local LFS. This adds data from 141 local booster surveys, some conducted by phone, to give direct, small-area estimates. The boost data should improve the precision of the national estimates. However, studies found significant differences in key estimates between the sources and evidence of wave differences within the national sample. Possible reasons include differential nonresponse (attrition) biases and interview mode effects. Separate studies established that attrition bias is a contributory factor but explains only part of the observed differences. Two special studies tested for mode differences comparing results from a face-to-face interview with those from a telephone interview. ONS also ran a separate observational study of face-to-face and telephone interviewers and focus group discussions with interviewers and their supervisors. The aim was to identify differences in interviewing practice to help explain mode differences. We will describe the conduct and results of these studies.

Telephone First Contact in the Canadian Labour Force Survey

Danielle Lebrasseur and Jack Gambino, Statistics Canada

The Canadian Labour Force Survey usually has conducted interviews of households entering the sample (i.e., “births”) in person, with subsequent interviews done by telephone. In the context of a broad strategic streamlining initiative, the feasibility of conducting birth interviews by telephone was studied using a test. The goal of the test was to evaluate a strategy for using the LFS’s Computer Assisted Telephone Interviewing (CATI) environment and associated tools, procedures, and constraints to conduct as many birth interviews as possible by telephone. In the test, a random systematic subsample of 1,400 birth dwellings was selected from the sample of birth dwellings each month. An attempt was then made to find the phone number for each of these 1,400 dwellings. For dwellings where this succeeded, the cases were sent for CATI interviewing. The remaining cases were handled using the standard Computer Assisted Personal Interviewing (CAPI) process used by the LFS. In the evaluation, a number of comparisons were made. These included response rates, major LFS estimates, demographic characteristics, and processing-related measures. This paper gives an overview of the methodology and results of the test.

What Are We Missing? The Effects on the Estimations of No-phone Households in Italy

Maria Muratore and Monica Perez, Italian National Statistical Institute; Giovanna Brancato, Isabella Corazziari,

Barbara Dattilo, Paola Di Filippo, and Giorgia Simeoni, ISTAT

Usually, household telephone surveys in Italy refer to landline connections as the only available sampling lists. As a consequence, leaving out certain relevant groups seems to increase due to the trend of people choosing mobile phones over a home-line connection. Also, reserving home-line phone numbers is increasing, most likely as a consequence of a greater sensitivity to privacy and family or personal safety. The present paper analyzes the Italian evolution of data that emerged from the Italian PAPI Multipurpose Household Survey, carried out annually by the Italian Statistical Institute. Increasing diffusion of mobile phones as a counterpart of increasing households with no landline connection could be one of the important explanations for the rising problems of coverage for sampling frame occurring in Italian telephone surveys.

Telephone Coverage in Italy: The Statement of the Problem and the Solutions Adopted for the CAPI/CATI Labour Force Survey

Maria Gabriella Grassia and Rita Ranaldi, ISTAT

In the last few years, telephone coverage in Italy has changed drastically. The growing diffusion of the mobile phone in daily life has brought considerable change, both in the number and structure of phone ownership. Another problem is reserved numbers, which influence the noncoverage rate. This context has influenced the design of the new Labour Force Survey (LFS). Since 2000, ISTAT has undertaken a project aimed at redesigning the LFS in order to fulfill the European Union (EU) regulation. The requests in the EU regulation, the peculiarity of the survey, and the particular Italian situation have led ISTAT to adopt a “mixed mode” survey. The LFS sample is interviewed for four waves: the first interview is generally carried out by CAPI technique, whereas the last three interviews are carried out by CATI or CAPI. The main results concerning the use of different survey techniques and types of telephone are reported in this paper.

CS28 – Invited Session X

Recent Trends in Household Telephone Coverage in the United States

Stephen J. Blumberg, Marcie Cynamon, and Julian Luke, NCHS, U.S. Centers for Disease Control and Prevention; Martin Frankel, Baruch College, CUNY/Abt Associates

The telephone environment today looks different than it did in 1987 when Thornberry and Massey wrote about trends in telephone coverage for the first Telephone Survey Methodology book. Today, an increasing proportion of adults with telephones have chosen wireless. In the latter half of 2004, 5.5% of adults lived in households with at least one wireless telephone and no landline telephone, and the size of this population is growing. Using several years of data from the National Health Interview Survey, this chapter begins with a discussion of trends in telephone coverage and the major sociodemographic correlates of telephone coverage. The chapter then considers the potential for coverage bias when telephone surveys exclude wireless-only households. The chapter concludes with a look at adjustments to sampling weights that might be useful for reducing this potential coverage bias and improving the validity of survey estimates.

Post-survey Weighting Methods Using Propensity Scores: A Review

*Sunghee Lee, Center for Health Policy Research, UCLA;
Richard Valliant, University of Michigan, JPSM*

This study will attempt to provide a review of propensity score weighting. It will start with an examination of the theoretical origin of propensity score adjustment and the link between propensity score adjustment and propensity score weighting. Most of the discussion will focus on different methods to employ propensity scores in the estimation and the effectiveness of propensity score weighting investigated in exiting literature. Another propensity score weighting method will be proposed for noncoverage of the cellular-phone-only population in landline telephone surveys. The remarks and limitations for propensity score adjustment will be discussed in this conclusion.

CS29 – Election Surveys

Composting Absentee and Exit Polls

Warren Mitofsky, Mitofsky International

For news coverage of elections, the media sponsors projections of the election outcome and analysis of the vote. To do this, Edison/Mitofsky conduct exit polls on Election Day with voters leaving the polling place after they cast their votes. However, these voters represent only about four-fifths of the total vote nationwide and only between 0% and 75% of the vote in 13 states. These 13 states represent more than three-fourths of all absentee vote. Other states cast absentee votes, but in smaller numbers. In order to represent absentee voters in these 13 states and nationally, absentee voters are interviewed by telephone in the days immediately before the election. Composite estimates are made throughout the election system. The Edison/Mitofsky election system includes composites estimates from absentee telephone surveys and exit polls, exit polls/absentee polls and pre-election polls, exit polls/absentee polls and quick counts, and more.

The Impact of Cell Phone Noncoverage Bias on Polling in the 2004 Presidential Election

Scott Keeter, Pew Research Center

Despite concerns that the accuracy of pre-election telephone polls would be harmed by the omission of voters who could be reached by cell phone only, most national polls performed well in predicting President George W. Bush's reelection, and state polls were generally accurate as well. The national exit poll conducted by the National Election Pool found that 7% of Election Day voters had cell phone service but no land line; younger voters were far more likely to be cell-only: 19% among those 18–24 and 20% among those 25–29. Within these two youngest age cohorts, cell-only voters were significantly more likely to be single and childless. While cell-only voters were more supportive of John Kerry than voters overall, they were similar to voters within their own age cohort. Because of this, pre-election telephone surveys that weighted their data appropriately by age were not significantly biased by the absence of the cell-only voters.

CS30 – Call Center Management

Telephone Research Calling Centers – Technological, Managerial, and Organizational Choices

Bruce Allen and Pat Dean Brick, Westat

All telephone survey research has one fundamental requirement in common: a crew of telephone interviewers trained to conduct telephone research. How these interviewers are placed and organized, however, can be as varied as the number of organizations engaged in such research. Most telephone research firms rely on some form of a call center to organize and deploy their telephone interviewers. This paper examines the possible technological, managerial, and organizational configurations employed by call centers; benefits, drawbacks, and trade-offs inherent in the various configurations; quality assurance practices and technologies; and the potential of the various configurations to meet the challenges of call center work in the not so distant future.

The Survey Help Desk – Telephone Interviewers' New Role

Polly Armsby, Coda Research, Inc.

As the use of internet-based and mixed-mode data collection increases, survey research organizations have expanded their efforts to facilitate survey completion through the addition of survey help desks. Telephone production staffs play dual roles as help desk agents and traditional CATI interviewers. In addition, data collection management is faced with designing, implementing, and monitoring these activities with an increased emphasis on customer service while maintaining standardization. Although help desks are as varied as the survey projects they support, they share many commonalities. This paper summarizes the general types of help desk activities and their roles in survey participant recruitment and retention. Furthermore, we explore some of the key issues facing survey operations managers who employ help desks: designing and monitoring call flows, staffing and forecasting call volume, utilizing staff across skill groups to meet caller needs, problem classification and resolution systems (i.e., ticketing), and qualitative and quantitative performance metrics for survey help desk agents.

Using Time Decomposition To Improve Survey Productivity and Lower Costs

Jenny Kelly and Kate Hobson, NORC

Considerable literature is devoted already to the influence of survey design factors (such as questionnaire length and topic, sample frame, sample design) and technology choices (CATI software, scheduling, autodialers, and predictive dialers) on survey costs and productivity. Less attention has been given to the operational factors that can influence costs once a survey is in progress and how these relate to and interact with design factors. Because interviewer time is one of the main cost components of surveys, we have found that a detailed decomposition of time used – at both the interviewer level and the case level – has been essential in order to accurately identify how time is used and lost in a survey. This paper describes the system of tracking and analyzing time that we have developed and the main applications or findings of this system.

CS31 – Invited Session XI

Cues of Communication Difficulty in Telephone Interviews

Frederick Conrad, University of Michigan; Michael Schober, New School for Social Research; Wil Dijkstra, Vrije Universiteit of Amsterdam

When people don't understand each other, they can articulate this directly with words or indirectly by producing "ums and uhs," facial expressions of confusion, and other implicit cues of uncertainty about what was intended. Speakers generally are able to recognize this kind of cue and react accordingly. Survey respondents also exhibit these cues but it is not clear to what extent interviewers are able or allowed to act on them. We first distinguish between the cues available in different media, in order to predict differences in how misunderstanding is communicated across survey modes. We then discuss a program of research that examines the relation between respondents' cues of communication difficulty and the accuracy of their answers in different telephone interviews. We present four laboratory studies that allow us to compare the kinds of cues displayed in telephone and face-to-face interviews, to explore speech-dialogue interfaces that can react to cues of respondent uncertainty, and to examine how the ability to obtain clarification (from interviewers or interviewing systems) affects the cues respondents display.

Telephone Interviewer Voice Characteristics and the Survey Participation Decision

Robert M. Groves, University of Michigan, JPSM; Barbara C. O'Hare, Dottie Gould-Smith, and Andy McCann, Arbitron Inc.; Sue Ellen Hansen, José Bénkí, and Patty Maher, University of Michigan, JPSM

This paper reports on a study of the linkage between interviewer voice properties, ratings of other interviewer attributes, and cooperation propensities. The design includes samples of interviewers from two interviewing environments, one commercial and one academic; electronic analysis of interviewer introductory speech; ratings of interviewer introductory speech by experienced staff; interviewer experience indicators; historical response rate indicators; and measures of outcome of sample case with recorded speech. Approximately 15 introductory deliveries will be measured on each of approximately 60 interviewers from the two organizations. Multilevel models will be fit on the dependent variable of the outcome of the measured case, using as predictors the measured attributes of the voice, interviewers, and the case. In addition, some models will be fit at the interviewer level predicting historical response rates using summary measures of the recorded introductions.

CS32 – Multimode Data Collection III

Telephone Collection as Part of a Multimode Survey

Mark Pierzchala, Mathematica Policy Research; Paul Guerino, Education Statistics Services Institute; Claire Wilson, Insight Policy Research.

We discuss the role of telephone data collection as part of a multimode survey effort. In such a survey, telephone may be a starting mode, an anchor (or main) mode, or a follow-

up mode to other modes. In this overview, we review the complimentary attributes of telephone collection vis-à-vis other modes and discuss administrative issues involved in fielding a multimode telephone survey, including instrumentation, survey operations and management, data quality and comparability, survey costs, and survey design. The authors draw on experience from three MPR multimode surveys, with the following mode combinations: paper/web/CATI, web/CATI, and CATI/CAPI.

Challenges of Designing and Implementing Multimode Instruments

Jennifer Wine, M. Cominole, R. Heuer, and J. Riccobono, and RTI International

Over the last several years, telephone response rates among postsecondary populations, particularly students and former students, have been declining. As a result, achieving desired response rates has necessitated introduction of alternative modes of instrumentation. Offering a web, self-administered interview is quickly becoming the most practical and cost-effective alternative method for reaching postsecondary populations. We will discuss the design of several web-based, multimode surveys in use for cross-sectional and longitudinal studies in postsecondary education. We will focus specifically on how features of the telephone interview can be successfully blended with those of the self-administered interview to maximize response rates and data quality while minimizing nonresponse.

CS33 – Getting a Foot in the Door

Who's Calling? The Impact of Caller-ID Displays on Telephone Survey Response

Mario Callegaro and Allan L. McCutcheon, University of Nebraska, Lincoln; Jack Ludwig, The Gallup Institute

In the spring of 2003, The Gallup Organization conducted a caller-ID randomized, pre- and post-experimental design to test the effectiveness of different caller-ID displays (names) and their impact on response, contact, and cooperation rates for telephone surveys. This research focuses on the impact of Caller ID listing on the frequency of final dialing dispositions. The data include sampling designs employing both RDD and (client-supplied) list samples. The analysis examines the AAPOR standard response definitions (run separately for "pre" and "post" periods) as the basis for investigating the impact of the implementation of Caller ID listing on relevant dispositions and rates. We find evidence for the hypothesis that the caller-ID transmission works as a sort of "compact invitation letter," similar to that found for advance letters that underscore the legitimacy of a survey, take away suspicion, and communicate the value of the survey, thereby positively influencing response rates.

Using Autodialer Technology in Telephone Follow-up

Ron Fecso, National Science Foundation; Neil Feiraiuolo and John Finamore, U.S. Bureau of the Census

The U.S. Bureau of the Census fields the National Survey of College Graduates for the National Science Foundation. After each census, the new census data forms the frame for

a redesign of the survey with a much larger sample size. The redesign aims to correct for sample attrition and other nonsampling error problems that tend to increase through the decade. While mail-out instruments are essential to control the cost of the large survey, a significant amount of telephone follow-up of mail nonrespondents is critical for the quality of the data. In the 2003 fielding of the redesign, an unexpected large decline in mail-back rates and the desire to use an open window of time before CAPI interviewing could begin gave rise to several experiments using an automated dialer. The initial interest in the technology was to more effectively use the small interviewer staff that was available. Of key interest was the testing of versions of the message, with the simplest message found to be most effective. The effort also produced considerable information about effectiveness of the methodology when phones were answered by a person versus an answering machine, the patterns of next contact given the previous contact, and how to model the flow of calls to match staffing levels. The methodology was found to be a cost-effective approach to follow-up while producing no notable increase in adverse reactions from the respondents.

'You're Calling for Who? About What?' Introductory Statements in RDD Surveys

Teresa Parsley Edwards, University of North Carolina; W. Douglas Evans, RTI International

This paper explores two elements of the survey introduction and their effects on cooperation rates in a national RDD survey. The first is the stated sponsorship of the survey – RTI or the University of North Carolina. The data are from a CATI survey in which half of the sampled telephone numbers were randomly assigned to receive the RTI treatment and the other half received the UNC treatment. Listed households received advance letters from the organization to which they were assigned. Interviewers introduced the survey as being sponsored by the designated organization. All other aspects of data collection were identical. The cooperation rate among the UNC group was significantly higher than the RTI group. We believe this is due to higher name recognition for the University of North Carolina. In addition, we compare cooperation rates from the RTI treatment group to one conducted nine months earlier with an identical design but for one element of the introduction.

CS34 – Invited Session XII Oral Translation in Telephone Surveys

*Janet Harkness, University of Nebraska Lincoln and ZUMA;
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Timo Faass, ZUMA*

Telephone surveys have fostered the use of oral translation in survey research. In orally translated interviews, bilingual interviewers translate as they interview. Oral translations are used frequently in some telephone surveys to interview respondents unable to be interviewed in the language(s) in which a written questionnaire is available. Interviewers also may call translation service vendors to match language needs of respondents. In this way, within and across countries, interviewers or translators can be matched to locations called

and/or sample unit reached. However, oral translations change the data collection process in ways that put data quality and comparability at risk. The research suggests that the use of oral translations in telephone survey research needs to be reviewed and procedures reconsidered.

CS35 – Mobile Phones II Magnitude and Effects of Number Portability in a National RDD Survey

Stephanie Eckman, NORC; Elizabeth Luman and Philip Smith, U. S. Centers for Disease Control and Prevention

Recent changes in the telecommunications industry have made it possible to port telephone numbers from a wired phone to a cell phone, from cell phone to wired phone, wired to wired, and cell to cell. When these ports are from one carrier to another, ghost numbers are created. These ghost numbers are assigned out of the new carrier's bank of numbers and are almost always unknown to the phone customer. The National Immunization Survey samples one million cases every quarter and thus provides a unique opportunity to explore the relatively rare phenomena of number portability and ghost numbers. We will provide tables and charts showing the magnitude and trends in number portability nationally and by region.

Merging Cellular and Landline RDD Sample Frames: A Series of Three Cell Phone Studies

Anna Fleeman, Arbitron Inc.

Responding to the growing number of cell-phone-only households, Arbitron began a series of studies exploring ways to successfully complement a landline frame with cellular sample. In these studies, we called nearly 75,000 cell numbers, screened respondents for cell usage, requested participation in the Radio Ratings, and analyzed the listening diaries from cell-only households. The percentage of cell-only households was higher than expected, and we found cell-only respondents were more likely to be under age 34. Sample usability, success, voicemail-only, and diary return rates will be presented with the comparison of radio listening between cell-only respondents and those reached on landlines. These studies provide substantial insight into cellular sample performance and the operational feasibility of merging cellular and landline frames in survey research.

Can Opinion Polls Be Conducted Using Cell Phones?

Nick Moon, NOP World

The rise in the number of cell phone-only households has led to concern about coverage bias in telephone surveys, which for various reasons have historically not included cell phones in RDD samples. There has been concern in several countries about the possible bias in election surveys, perhaps most noticeably in the run-up to the 2004 U.S. presidential election. To test the acceptability of interviewing via cell phones, GfK NOP Social Research conducted an experiment in the May 2005 UK General Election, running a cell phone survey alongside a traditional telephone survey in the last week of the campaign. The paper begins by examining some of the

differences—both demographic and attitudinal—between mobile-only households and those accessible via landlines. It then discusses the results of the experiment, in terms of the relative accuracy of the two surveys, and the differences in costs and response rates. The paper concludes with a discussion of the implication for future surveys.

CS36—Invited Session XIII

Methods for Sampling Rare Populations in Telephone Surveys

Ismael Flores-Cervantes and Graham Kalton, Westat

For cost reasons, surveys of small domains or subgroups of the population—rare populations—often are conducted by telephone. This chapter evaluates the application of the general strategies for sampling rare populations to random digit dialing (RDD) telephone surveys. The sampling strategies reviewed include screening, two-phase sampling, disproportionate stratified sampling, use of multiple frames, multiplicity or network sampling, a variant of the Mitofsky-Waksberg sampling method for rare populations, and the use of a multipurpose survey. Illustrations and assessments of the effectiveness of the methods for sampling or for oversampling different types of rare population are provided. The issues of noncoverage and nonresponse in telephone surveys of rare populations also are discussed.

The Role of Telephones in Multiple Frame, Multimode Surveys

J. Michael Brick, Westat; James Lepkowski, University of Michigan

The telephone is an essential component in survey research, serving both as a frame for drawing samples of households and as a mode for contacting and collecting data from households and household members. As new coverage and efficiency issues emerge, the use of the telephone in a dual or multiple frame survey is becoming more attractive. Similarly, the mode of contacting and collecting data from households has associated costs and error properties that must be balanced in the design of the survey. This chapter provides a framework for considering alternative sample design and mode decisions in surveys using the telephone as a mode or telephone number frames. Issues in dual frame sample designs with telephone numbers and multimode surveys with the telephone mode are examined in conducted surveys.

CS37—Special Populations

Interviewing Teenagers in Telephone Surveys: Gaining Parental Consent

Anthony Roman, Center for Survey Research; Lois Biener, Patricia Gallagher, and Catherine Garrett, University of Massachusetts, Boston; Elizabeth Eggleston and Charles Turner, RTI International

This paper will examine two large surveys and a pilot survey that attempted to gain parental consent to interview teenagers aged 12–17 over the telephone. The topics of these efforts ranged from tobacco use and health care to sexually transmitted infections. Two surveys used RDD samples while

the third was a list sample. Sample sizes ranged from 50 households in the pilot survey to nearly 27,000 households in an RDD survey. Issues related to potential survey bias such as age, gender, race and Hispanic origin of teenager and parent, and education level and smoking status of parent will be investigated as they relate to the ability to gain parental consent. In addition, the manner in which parental consent was sought will be addressed. Finally, a discussion of interviewer effort and its cost implications will be examined. The goal of the paper is to have a better understanding of the factors surrounding parental consent in telephone surveys for this increasingly important age group.

Removing the Barriers: Modifying Telephone Survey Methodology To Increase Self-response among People with Disabilities

Karen A. CyBulski, Anne B. Ciemnecki, and Jason Markesich, Mathematica Policy Research

This paper will cover research based on Mathematica Policy Research, Inc.'s (MPR's) first telephone-only interviews with individuals with disabilities. The study was conducted for the Centers for Medicare and Medicaid Services (CMS) as part of their evaluation of the Section 1115 Medicaid Reform Demonstrations. MPR conducted computer-assisted telephone interview (CATI) surveys to assess how SSI recipients are faring on Medicaid. The surveys—conducted in Kentucky, New York, and Tennessee—addressed access to care, quality of care, and use of health services. Data were collected from more than 4,200 adults with disabilities solely by telephone. The groups interviewed included adults with physical or sensory disabilities, mental retardation, and severe and persistent mental illness.

Reaching Direct Care Workers through Their Employers: The National Nursing Assistant Survey (NNAS)

Robin Remsburg, Abigale Moss, Al Sirrocco, and Genevieve Strahan, NCHS, U.S. Centers for Disease Control and Prevention; Laura Branden, Brad Edwards, and Tom Harper, Westat; Andreas Fran, Emily Rosenoff, and William Marton, U.S. Department of Health and Human Services

The NNAS, the first ever national telephone survey of nursing assistants (NAs) in nursing homes, provides information about demographic characteristics of NAs, basic education and training, reasons for becoming NAs, job history, working conditions, benefits and wages, job satisfaction, family situation, and on-the-job injuries. These entry-level workers, employed in physically demanding jobs, can burnout quickly, have high rates of turnover, and are reluctant to participate in research. This presentation describes the development of the NNAS and approaches used for achieving adequate response rates for this population.