# Using Surveys for Research and Evaluation

Thomas J. Leeper
Department of Political Science and Government
Aarhus University

September 1, 2014

Almost every organization — public or private — conducts surveys to understand their customers, clients, constituents, research subjects, and the public at-large. Surveys are therefore a critically important methodological tool for conducting empirical political science research and for evaluating policy, performance, and impact. Nearly every political science student will, in the course of their future career, have to conduct, analyze, or interpret survey-based research.

How do we conduct surveys well so that they provide meaningful insights? How do we write survey questions so that respondents understand them and that those responses generate useful data about relevant constructs? How do we decide whom to interview and how do we interview them effectively? How do we prepare for and manage the implementation of a large survey? How do we analyze the obtained results? This course will provide answers to these questions while training students how to implement a survey data collection and analyze the results thereof. The exam will entail the design, preparation, and pilot testing of a survey on the topic of student's choice.

# 1 Objectives

The learning objectives for the course are as follows. By the end of the course, students should be able to:

- 1. Identify and analyze the usefulness of survey methods for conducting research and evaluating programs, policies, and outcomes
- 2. Identify sources of error and bias in surveys
- 3. Explain how sampling procedures enable estimation of population parameters and evaluate the implications of differences in sampling techniques
- 4. Demonstrate how to successfully manage large survey data collection efforts
- 5. Evaluate the quality of surveys in terms of sampling, interviewing procedures, and questionnaire content
- 6. Apply methodological and substantive knowledge from the course to the design and implementation of an original survey

# 2 Exam and Weekly Assignments

The exam for the course involves a home assignment, totaling 6000 words. The exam will take the form of an essay that describes a research question, hypotheses, sampling design, operationalization of constructs, implementation plan, and pilot testing of a proposed survey. A

complete questionnaire for that survey, including exact question wordings of all core constructs, must be created and included as a supplemental appendix to the exam paper. Students are welcome to meet with the instructor near the end of the semester to discuss their survey and and exam paper. Final presentations during the last two weeks of the course allow for additional peer feedback.

While officially due at the end of the course, each requisite portion of the exam can be completed during the semester in the form of weekly written assignments that progressively evaluate student learning. As such, the exam is a "portfolio" of these earlier assignments, which will need to be made into a single, coherent, finished product reflecting peer and instructor feedback from earlier. The exam paper should also include a concluding section (up to one page) reflecting on the evolution of the survey plan from its initial origins at the beginning of the course to its final state, with emphasis on how what you learned in the course influenced the final survey design.

Details on the weekly assignments are listed in the course schedule. Assignments are due on the day they are described in the schedule.

Finally, students will sign up each week to provide a short, five-minute presentation of one of the (non-textbook) readings and lead a short discussion about its contents and the implications thereof for survey design. Students are expected to give at least two such presentations during the semester.

## 3 Course Website

All information about the course will be posted on http://www.thomasleeper.com/surveycourse. Any changes to the syllabus or additional notes will be made available there.

# 4 Reading Material

The assigned material for the course includes a textbook and empirical research articles, all of which are available online or in the printed course packet. All readings should be completed for the day they are described. There is reading assigned on the first day. The textbook for the course is:

– Robert M. Groves, Floyd J. Fowler, Mick P. Couper, James M. Lepkowski, Eleanor Singer, and Roger Tourangeau. *Survey Methodology*. Wiley-Interscience, 2nd edition, 2009.

# 5 Schedule

The general schedule for the course is as follows. Details on the readings for each week are provided on the following pages.

- 5.1 No class (Week 36)
- 5.2 What can surveys tell us? (Week 37)
- 5.3 Populations and Sampling Frames (Week 38)
- 5.4 Sampling Techniques (Week 39)
- 5.5 Questionnaire Design I (Week 40)
- 5.6 Questionnaire Design II (Week 41)
- 5.7 No class (Week 42)
- 5.8 Survey Mode (Week 43)
- 5.9 Questionnaire Design III (Week 44)
- 5.10 Survey Evaluation and Pilot Testing (Week 45)
- 5.11 Interactions with Interviewers or Instruments (Week 46)
- 5.12 Recruitment and Fielding (Week 47)
- 5.13 Data Management I (Week 48)
- 5.14 Data Management II (Week 49)
- 5.15 Final Presentations (Weeks 50-51)

# 5.1 No class (Week 36)

There is no class in Week 36. However, please start reading the textbook and a short article by Brady providing an overview of survey research in political science. This also gives you additional time to prepare readings and the first short assignment for the first class meeting in Week 37.

# Assignment Due

None. See short assignment for next week.

- Ch.1 from Groves et al.
- Henry E. Brady. Contributions of survey research to political science. PS: Political Science & Politics, 33(1):47—-57, 2000.

## 5.2 What can surveys tell us? (Week 37)

What are surveys for? How do they help us to make inferences about things we care about? What different kinds of research designs can leverage surveys?

## Assignment Due

Think about a survey you have participated in, either as a respondent or as an interviewer. What was the survey about? How were you recruited to participate in the survey? In one half page, discuss your experience and reflections on the survey experience. Be prepared to share in class.

#### In-Class Activities

- Introductions and sharing of initial assignments
- Mostly lecture and discussion
- Generate and discuss ideas for possible final exam projects

## Readings

- Ch. 2 from Groves et al.
- Ch. 4–5 (103–161) from William R. Shadish, Thomas D. Cook, and Donald T. Campbell. Experimental and Quasi-Experimental Designs for Generalized Causal Inference. Houghton-Mifflin, Boston, MA, 2001.
- Richard Johnston and Henry E. Brady. The rolling cross-section design. *Electoral Studies*, 21(2):283–295, June 2002.
- Peter Lynn, Nicholas Buck, Jonathan Burton, Annette Jackle, and Heather Laurie. A review of methodological research pertinent to longitudinal survey design and data collection. ISER Working Paper 29, Institute for Social and Economic Research, University of Essex, 2005.

- David Sanders. The effects of deliberative polling in an eu-wide experiment: Five mechanisms in search of an explanation. *British Journal of Political Science*, 36(2006):1–24, February 2012.
- Brian J. Gaines, James H. Kuklinski, and Paul J. Quirk. The logic of the survey experiment reexamined. *Political Analysis*, 15(1):1–20, October 2007.

## 5.3 Populations and Sampling Frames (Week 38)

In order for a survey to provide meaningful statistical inferences, it needs to be conducted on a representative sample of a population of interest. How do we define populations? And how do we sample from them in a valid way?

## Assignment Due

What do you want to know? What is your research question? In one page, describe a topic of interest to political science that you can address with a survey. It can be a question about the prevalence of something (e.g., a condition or behavior), the level of something (e.g., opinions or income), the effect of an intervention on an outcome (e.g., an outcome expected to respond to a randomized treatment or a real-world policy), or similar. Describe your topic and your research question. Then, describe what construct or constructs you need to measure in your survey in order answer your question. Speculate briefly about how you might measure those constructs in a survey.

### In-Class Activities

- Identifying possible sampling frames for various populations
- Simple Random Sampling (SRS) from within a frame

## Readings

- Ch. 3 from Groves et al.
- Douglas D. Heckathorn. Respondent-driven sampling: A new approach to the study of hidden populations. *Social Problems*, 44(2):174–199, May 1997.
- Erin C. Cassese, Leonie Huddy, Todd K. Hartman, Lilliana Mason, and Christopher R. Weber. Socially mediated internet surveys: Recruiting participants for online experiments. *PS: Political Science & Politics*, 46(4):1–10, 2013.
- David Scott Yeager, Jon A. Krosnick, Linchiat Chang, Harold S. Javitz, Matthew S. Levendusky, Alberto Simpser, and Rui Wang. Comparing the accuracy of RDD telephone surveys and internet surveys conducted with probability and non-probability samples. *Public Opinion Quarterly*, 75(4):709–747, October 2011.

- Sharon Lohr. Sampling: Design and Analysis. Advanced (Cengage Learning). Cengage Learning, 2009.
- LinChiat Chang and Jon A. Krosnick. National surveys via RDD telephone interviewing versus the internet: Comparing sample representativeness and response quality. *Public Opinion Quarterly*, 73(4):641–678, December 2009.

## 5.4 Sampling Techniques (Week 39)

How do we sample from a sampling frame? What are our options for how to gather respondents, and what consequences do those options have for error, costs, and other resources we have available for a survey project? What can we learn from convenience sampling?

## Assignment Due

Find a survey online. This can be any survey (a national election study, a political poll, a survey of childhood health, a survey of political interest organizations, a survey of businesses, etc.). What is the population of units being studied? Was the survey conducted on a representative sample or a convenience sample? Write one half page describing the survey project's research objective, the population, and details how about the sampling frame and sampling process (e.g., were there any issues of coverage, what sampling method was used, etc.).

#### In-Class Activities

- Mean and proportion estimates, and their variances
- Practice stratified and cluster sampling from a frame
- Design effects
- Discuss trade-offs between representative and convenience sampling

## Readings

- Ch. 4 from Groves et al.
- Ch. 3 (73–100), 4 (165–199), and 14 (511–526) from Sharon Lohr. Sampling: Design and Analysis. Advanced (Cengage Learning). Cengage Learning, 2009.
- Reg Baker, Stephen J. Blumberg, J. Michael Brick, Mick P. Couper, Melanie Courtright, J. Michael Dennis, Don A. Dillman, Martin R. Frankel, Philip Garland, Robert M. Groves, Courtney Kennedy, Jon A. Krosnick, Paul J. Lavrakas, Sunghee Lee, Michael Link, Linda Piekarski, Kumar Rao, Randall K. Thomas, and Dan Zahs. Research synthesis: AAPOR report on online panels. *Public Opinion Quarterly*, 74(4):711–781, October 2010.
- Gilbert Burnham, Riyadh Lafta, Shannon Doocy, and Les Roberts. Mortality after the 2003 invasion of iraq: A cross-sectional cluster sample survey. *The Lancet*, 6736(06):69491–69499, 2006.
- June Machover Reinisch, Stephanie A. Sanders, Erik Lykke Mortensen, and Donald B. Rubin. In utero exposure to phenobarbital and intelligence deficits in adult men. *Journal of the American Medical Association*, 274(19):1518–1525, November 1995.
- Richard M. Walker and Gareth Enticott. Using multiple informants in public administration: Revisiting the managerial values and actions debate. *Journal of Public Administration Research and Theory*, 14(3):417–434, 2004.

- Adam J. Berinsky, Eleanor Neff Powell, Eric Schickler, and Ian Brett Yohai. Revisiting public opinion in the 1930s and 1940s. PS: Political Science & Politics, 44(03):515-520, June 2011.
- Adam J. Berinsky, Gregory A. Huber, and Gabriel S. Lenz. Evaluating online labor markets for experimental research: Amazon.com's mechanical turk. *Political Analysis*, 20(3):351–368, March 2012.

## 5.5 Questionnaire Design I (Week 40)

How do we write surveys so that the answers we receive from respondents inform us about concepts we care about? What considerations come into play when designing questionnaires and how do we choose between alternative ways of asking about the concepts we care about?

## Assignment Due

What is your population of cases that you intend to survey? Do you plan to do a census or only interview a sample of the population? If a sample, what is the sampling frame and how did you construct it? How are individuals sampled from your sampling frame? How large of a sample do you plan to collect to obtain sufficiently precise estimates of constructs? In one written page, provide answers to these questions and be prepared to discuss your plans in class.

#### In-Class Activities

- Concept definition
- Measuring Political (Left-Right) Ideology
- Measuring factual political knowledge
- Measuring opinions

- Nora Cate Schaeffer and Stanley Presser. The science of asking questions. Annual Review of Sociology, 29:65–88, 2003.
- Stephen Ansolabehere, Jonathan Rodden, and James M. Jr. Snyder. The strength of issues: Using multiple measures to gauge preference stability, ideological constraint, and issue voting. *American Political Science Review*, 102(02):215–232, June 2008.
- John Zaller and Stanley Feldman. A simple theory of the survey response: Answering questions versus revealing preferences. American Journal of Political Science, 36(3):579–616, 1992.
- Clyde Wilcox, Lee Sigelman, and Elizabeth Cook. Some like it hot: Individual differences in responses to group feeling thermometers. *Public Opinion Quarterly*, 53(2):246–257, 1989.
- Jon A. Krosnick, Charles M. Judd, and Bernd Wittenbrink. The measurement of attitudes. In Dolores Albarracín, Blair T. Johnson, and Mark P. Zanna, editors, *Handbook of Attitudes and Attitude Change*, chapter 2, pages 21–76. Erlbaum, Mahway, NJ, 2005.
- Jon A. Krosnick, Allyson L. Holbrook, Matthew K. Berent, Richard T. Carson, W. Michael Hanemann, Raymond J. Kopp, Robert Cameron Mitchell, Stanley Presser, Paul A. Ruud, V. Kerry Smith, Wendy R. Moody, Melanie C. Green, and Michael Conaway. The impact of 'no opinion' response options on data quality. *Public Opinion Quarterly*, 66:371–403, 2002.
- Richard Nadeau and Richard G. Niemi. Educated guesses: The process of answering factual knowledge questions in surveys. *Public Opinion Quarterly*, 59(3):323, 1995.
- Markus Prior. Visual political knowledge: A different road to competence? *Journal of Politics*, 76(1):41–57, January 2014.
- James L. Perry. Measuring public service motivation: An assessment of construct reliability and validity. *Journal of Public Administration Research and Theory*, 6(1):5–22, 1996.
- Jon A. Krosnick and Leandre R. Fabrigar. Designing rating scales for effective measurement in surveys. In *Survey Measurement and Process Quality*, chapter 6, pages 141–164. John Wiley & Sons, 1997.

- Melanie A. Revilla, Willem E. Saris, and Jon A. Krosnick. Choosing the number of categories in agree-disagree scales. *Sociological Methods & Research*, 43(1):73–97, 2013.
- Melissa K. Miller and Shannon K. Orr. Experimenting with a 'third way' in political knowledge estimation. *Public Opinion Quarterly*, 72(4):768–780, 2008.
- Robert C. Luskin and John G. Bullock. 'don't know' means 'don't know': Dk responses and the public's level of political knowledge. *The Journal of Politics*, 73(2):547–557, 2005.
- Josine Junger-Tas and Ineke Haen Marshall. The self-report methodology in crime research. *Crime and Justice*, 25:291–367, 1999.

## 5.6 Questionnaire Design II (Week 41)

How do we know if respondents' answers to our questions our "correct" or valid? How can we ask respondents about challenging or sensitive topics in a way that reveals truthful answers? What can experiments in questionnaire design do the inform these decisions?

## Assignment Due

Given your research question, what are the important constructs that you need to measure? How do you envision operationalizing them as survey questions and response options? Have these constructs been measured in surveys before? If so, how were the questions worded? If there are several options, how will you choose between alternative wordings and response options? In one page provide your answers to these questions.

#### In-Class Activities

- Design a simple experiment to compare alternative question wordings
- Brainstorm methods of measuring various sensitive questions
- Design a list experiment for a sensitive question

## Readings

- Ch. 7 from Groves et al.
- Roger Tourangeau and Tom W. Smith. Asking sensitive questions: The impact of data collection mode, question format, and question context. *Public Opinion Quarterly*, 60:275–304, 1996.
- Allyson L. Holbrook and Jon A. Krosnick. Social desirability bias in voter turnout reports: Tests using the item count technique. *Public Opinion Quarterly*, 74(1):37–67, 2010.
- Adam N. Glynn. What can we learn with statistical truth serum?: Design and analysis of the list experiment. *Public Opinion Quarterly*, 77(S1):159–172, February 2013.
- Michael W. Traugott and John P. Katosh. Response validity in surveys of voting behavior. *Public Opinion Quarterly*, 43(3):359–377, 1979.
- Scot Burton and Edward Blair. Task conditions, response formulation processes, and response accuracy for behavioral frequency questions in surveys. *Public Opinion Quarterly*, 55(1):50–79, 2011.
- Vincent Price. The impact of varying reference periods in survey questions about media. Journalism & Mass Communication Quarterly, 70(3):615–627, 1993.
- Natacha Borgers, Edith de Leeuw, and Joop Hox. Children as respondents in survey research: Cognitive development and response quality 1. *Bulletin de Methodologie Sociologique*, 66:60–75, April 2000.

- Allyson L. Holbrook and Jon A. Krosnick. A new question sequence to measure voter turnout in telephone surveys: Results of an experiment in the 2006 anes pilot study. *Public Opinion Quarterly*, 77:106–123, February 2013.
- Eunkyu Lee, Michael Y. Hu, and Rex S. Toh. Are consumer survey results distorted? systematic impact of behavioral frequency and duration on survey response errors. *Journal of Marketing Research*, 37:125–135, February 2000.

5.7 No class (Week 42)

## 5.8 Survey Mode (Week 43)

In what mode, or format, do respondents provide answers to questions? Survey interviewing was originally entirely face-to-face, with interviewers reading questions aloud and recording answers on paper. With advances in both technology and scientific understanding of survey responding, there are now numerous modes and formats in which respondents can provide answers. What impact does mode have on responding? How does it affect quality, validity, and cost of surveys? And how does mode influence the kinds of questions that can be asked and the way that respondents engage with the survey interview?

## Assignment Due

Be prepared to share and briefly present a complete outline of your questionnaire. This does not need to be finalized, as you may want to add or delete questions, or change question wordings, response categories, or orderings particularly in-light of discussions about survey mode. At this point you simply need to have draft question wordings for your key constructs.

### In-Class Activities

- Try out different interview modes in pairs
- Estimate the budget for different modes

## Readings

- Ch. 5 from Groves et al.
- Frauke Kreuter, Stanley Presser, and Roger Tourangeau. Social desirability bias in CATI, IVR, and web surveys: The effects of mode and question sensitivity. *Public Opinion Quarterly*, 72(5):847–865, January 2009.
- Rebecca L. Medway and Jenna Fulton. When more gets you less: A meta-analysis of the effect of concurrent web options on mail survey response rates. *Public Opinion Quarterly*, 76(4):733–746, October 2012.
- Ana Villar, Mario Callegaro, and Yongwei Yang. Where am i? a meta-analysis of experiments on the effects of progress indicators for web surveys. Social Science Computer Review, 31(6):744-762, August 2013.
- Mick P. Couper, Roger Tourangeau, Frederick G. Conrad, and Chan Zhang. The design of grids in web surveys. *Social Science Computer Review*, 31(3):322–345, June 2013.
- Howard Schuman and Stanley Presser. The open and closed question. American Sociological Review, 44(5):692-712, 1979.

- Jolene D. Smyth, Don A. Dillman, Leah Melani Christian, and Michael J. Stern. Comparing check-all and fored-choice question formats in web surveys. *Public Opinion Quarterly*, 70(1):66–77, Spring 2006.
- Paul R. Brewer and Kimberly Gross. Values, framing, and citizens' thoughts about policy issues: Effects on content and quantity. *Political Psychology*, 26(6):929–948, December 2005.

## 5.9 Questionnaire Design III (Week 44)

Now that you've written a full questionnaire and thought about how you'll gather answers to its questions from respondents, how should you organize questions into a coherent survey interview? Can supplemental data (other than that personally supplied by respondents) benefit your design (e.g., data from public registries, interviewer observations, etc.)?

## Assignment Due

In what mode (or modes) do you intend to conduct your survey interviewing? Will respondents have options for how to complete the survey? What do you estimate the time per interview and cost per interview to be for each mode option? What are the benefits and consequences of choosing your proposed survey mode in terms of data quality? In one page, provide answers to these questions and any other considerations relevant to survey mode.

#### In-Class Activities

• Practice collecting interviewer observations during an interview

#### Readings

- Roger Tourangeau and Kenneth A. Rasinski. Cognitive processes underlying context effects in attitude measurement. *Psychological Bulletin*, 103(3):299–314, 1988.
- George F. Bishop, R.W. Oldendick, and Alfred Tuchfarber. Interest in political campaigns: The influence of question order and electoral context. *Political Behavior*, 6(2):159–169, 1984.
- Ch. 2 from Howard Schuman and Stan Presser. Questions and Answers in Attitude Surveys: Experiments on Question Form, Wording, and Context. SAGE Publications, Thousand Oaks, CA, 1981.
- Mirta Galesic and Michael Bosnjak. Effects of questionnaire length on participation and indicators of response quality in a web survey. *Public Opinion Quarterly*, 73(2):349–360, Summer 2009.
- Mai Heide Ottosen. Research on the danish longitudinal survey of children (dalsc) at the danish national centre for social research. *Scandinavian Journal of Public Health*, 39(7):121–125, 2011.

- Kim Mannemar Sønderskov and Peter T. Dinesen. Spørgeskemaer og registerdata: Nabolagets betydning for social tillid. In M. Frederiksen, P. Gundelach, and R.S. Nielsen, editors, *Mixed Methods*. Hans Reitzel, Copenhagen, 2014.
- Michael Davidsen, Mette Kjø ller, and Karin Helweg-Larsen. The danish national cohort study (DANCOS). Scandinavian Journal of Public Health, 39(7):131–135, 2011.

## 5.10 Survey Evaluation and Pilot Testing (Week 45)

Before we launch a survey on our full sample, how do we check to make sure that it "works"? What techniques can we use to validate our questionnaire before putting it in the field?

#### Assignment Due

Given what you've learned about questionnaire design and survey mode, be prepared to share and briefly present a nearly final and complete version of your questionnaire. You can, of course, still add or delete questions, or change question wordings, response categories, or orderings, but all of the essential questions should be there and you should have a strong idea of the order in which questions will be asked.

## In-Class Activities

- Try cognitive interviewing in class
- Develop pre-testing plan for surveys

- Ch. 8 from Groves et al.
- Stanley Presser, Mick P. Couper, Judith T. Lessler, Elizabeth Martin, Jean Martin, Jennifer M. Rothgeb, and Eleanor Singer. Methods for testing and evaluating survey questions. *Public Opinion Quarterly*, 68(1):109, 2004.
- Stanley Presser and Johnny Blair. Survey pretesting: Do different methods produce different results? *Sociological Methodology*, 24(1994):73–104, 1994.
- Paul C. Beatty and Gordon B. Willis. Research synthesis: The practice of cognitive interviewing. *Public Opinion Quarterly*, 71:287–311, 2007.
- Peter V. Miller and Robert M. Groves. Matching survey responses to official records: An exploration of validity in victimization reporting. *Public Opinion Quarterly*, 49(3):366, 1985.

## 5.11 Interactions with Interviewers or Instruments (Week 46)

If a survey is conducted as an interaction between persons (i.e., between a respondent and an interviewer), how does that human interaction affect responding? How do people behave when they are being interviewed? And how do interviewers influence the way that questions are asked and answers are recorded? What can we expect of survey interviewers?

## Assignment Due

In one page, describe a plan for pilot testing your survey. What techniques will you use to assess your questions, your planned survey mode, and the overall quality of your instrument? How many people do you need to pilot the survey on? Be prepared to discuss these plans in detail and revise them in response to feedback during class.

#### In-Class Activities

• Take a survey and record your thoughts and feelings about the instrument

- Ch. 9, 11 from Groves et al.
- Jon A. Krosnick. Response strategies for coping with the cognitive demands of attitude measures in surveys. *Applied Cognitive Psychology*, 5(3):213–236, 1991.
- Lynne M. Reder and Frank E. Ritter. What determines initial feeling of knowing? familiarity with question terms, not with the answer. *Journal of Experimental Psychology: Learning, Memory, and Cognition*, 18(3):435–451, 1992.
- George F. Bishop, Alfred Tuchfarber, and R.W. Oldendick. Opinions on fictitious issues: The pressure to answer survey questions. *Public Opinion Quarterly*, 50(2):240, 1986.
- Darren W. Davis. The direction of race of interviewer effects among African-Americans: Donning the black mask. *American Journal of Political Science*, 41(1):309–322, 1997.
- Markus Prior. The immensely inflated news audience: Assessing bias in self-reported news exposure. *Public Opinion Quarterly*, 73(1):130–143, March 2009.
- Carsten Jensen and Jens Peter Frø lund Thomsen. Self-reported cheating in web surveys on political knowledge. Quality & Quantity, December 2013.

## 5.12 Recruitment and Fielding (Week 47)

How do we convince designated respondents to participate in a survey? How do we respond to refusals to participate? How should we monitor the progress of a survey in the field and address challenges faced in the process?

## Assignment Due

Considering the feedback on the previous assignment and the new details you've learned about respondent behavior and the interactions between respondents and interviewers, begin implementing the pilot testing of your survey instrument. In one to two written pages, report your initial findings from pilot testing, reflect on what those findings mean for your planned survey, and describe changes you will make to your survey plan based on the pilot testing.

#### In-Class Activities

- Practice writing out recruitment materials
- Discuss survey fielding scenarios
- Generate disposition codes for sampled units

## Readings

- The National Commission for the Protection of Human Subjects of Biomedical and Behavioral Research. The belmont report: Ethical principles and guidelines for the protection of human subjects of research. Technical report, The National Commission for the Protection of Human Subjects of Biomedical and Behavioral Research, 1978.
- Jennifer Dykema, John Stevenson, Lisa Klein, Yujin Kim, and Brendan Day. Effects of e-mailed versus mailed invitations and incentives on response rates, data quality, and costs in a web survey of university faculty. *Social Science Computer Review*, 31(3):359–370, June 2013.
- Michael D. Kaplowitz, Frank Lupi, Mick P. Couper, and Laurie Thorp. The effect of invitation design on web survey response rates. *Social Science Computer Review*, In press, October 2011.
- Frederick G. Conrad and Michael F. Schober. Clarifying question meaning in a household telephone survey. *Public Opinion Quarterly*, 64(1):1–28, January 2000.
- Ruth W. Grant and Jeremy Sugarman. Ethics in human subjects research: Do incentives matter? *The Journal of Medicine and Philosophy*, 29(6):717–38, December 2004.
- Jesse Driscoll and Nicholai Lidow. Representative surveys in insecure environments: A case study of mogadishu, somalia. *Journal fo Survey Statistics and Methodology*, 2:78–95, 2014.
- Robert M. Groves. Nonresponse rates and nonresponse bias in household surveys. *Public Opinion Quarterly*, 70(5):646, 2006.

- Michael F. Schober and Frederick G. Conrad. Does conversation interviewing reduce survey measurement error? *Public Opinion Quarterly*, 61:576–602, 1997.
- Jason Lyall, Graeme Blair, and Kosuke Imai. Explaining support for combatants during wartime: A survey experiment in afghanistan. *American Political Science Review*, 107(4):679–705, November 2013.
- Michael W. Link, Polly P. Armsby, Robert C. Hubal, and Curry I. Guinn. Accessibility and acceptance of responsive virtual human technology as a survey interviewer training tool. *Computers in Human Behavior*, 22(3):412–426, 2006.

- Celeste Stone, Leslie Scott, Danielle Battle, and Patricia Maher. Locating longitudinal respondents after a 50-year hiatus. *Journal of Official Statistics*, 30(2):311–334, 2014.
- Elizabeth Martin, Denise Abreu, and Franklin Winters. Money and motive: Effects of incentives on panel attrition in teh survey of income and program participation. *Journal of Official Statistics*, 17(2):267-284, 2001.
- Cecilie Gaziano. Comparative analysis of within-household respondent selection techniques. Public Opinion Quarterly, 69(1):124-157, Spring 2005.

## 5.13 Data Management I (Week 48)

We conduct surveys to make inferences about populations of interest, within a given margin of error. But realities sometimes differ from expectations. What do we do with the data we have? And how do we honestly report our findings?

#### **In-Class Activities**

- Calculate response rates from disposition codes
- Generate survey weights

## Readings

- Ch. 6, 10.5 from Groves et al.
- The American Association for Public Opinion Research. Standard definitions: Final dispositions of case codes and outcome rates for surveys. Technical Report 7th, AAPOR, 2011.
- Scott Keeter, Courtney Kennedy, Michael Dimock, Jonathan Best, and Peyton Craighill. Gauging the impact of growing nonresponse on estimates from a national RDD telephone survey. *Public Opinion Quarterly*, 70(5):759–779, January 2006.
- Adam J. Berinsky. Silent voices: Social welfare policy opinions and political equality in America. American Journal of Political Science, 46(2):276–287, 2002.
- Andreas Behr, Egon Bellgardt, and Ulrich Rendtel. Extent and determinants of panel attrition in the European Community Household Panel. European Sociological Review, 21(5):489–512, December 2005.
- Sections 8.4–8.9 (pp. 338–356) from Sharon Lohr. *Sampling: Design and Analysis*. Advanced (Cengage Learning). Cengage Learning, 2009.

- Richard Curtin, Stanley Presser, and Eleanor Singer. Changes in telephone survey nonresponse over the past quarter century. *Public Opinion Quarterly*, 69(1):87, 2005.
- Robert M. Groves. Nonresponse rates and nonresponse bias in household surveys. *Public Opinion Quarterly*, 70(5):646, 2006.
- Joshua D. Clinton. Panel bias from attrition and conditioning: A case study of the knowledge networks panel. Unpublished paper, 2001.
- Yehuda Baruch and Brooks C. Holtom. Survey response rate levels and trends in organizational research. *Human Relations*, 61(8):1139–1160, 2008.

## 5.14 Data Management II (Week 49)

Once we have survey data, what do we do with it? How do we record our questions, answers, and details of sampling and (non)responses? How do we maximize the utility of our data for ourselves, for stakeholders, and for future data end-users?

## Assignment Due

Using your questionnaire (or a subset of 10-20 questions thereof), conduct a pilot interview. Find a friend, family member, or classmate to serve as an interviewer. Explain to them the point of the study, and have them read the questionnaire and ask any clarifying questions. Then, find another friend, family member, or classmate to serve as a respondent. Observe (either inperson or via an audio recording) the survey interview. Discuss with the interviewer and the respondent their reactions to the survey interview (e.g., any points of confusion, whether it was interesting/enjoyable or uninteresting/annoying). In one-page, document what occurred during the interview, note any challenges the interviewer and respondent faced (e.g., did the interviewer change the way the question or response options were worded? did they attempt to clarify meaning?), and reflect on how the pilot testing might lead to any changes in your planned survey.

#### In-Class Activities

- Cleaning, coding, and data imputation
- Evaluate a published codebook
- Create a codebook from a questionnaire
- Anonymizing data

- Ch. 10 from Groves et al.
- Spiros Simitis. From the market to the polis: The eu directive on the protection of personal data. *Iowa Law Review*, 80(445):445–469, 1994–95.
- Matthew DeBell. Harder than it looks: Coding political knowledge on the ANES. *Political Analysis*, 21(4):393-406, July 2013.

# 5.15 Final Presentations (Weeks 50–51)

## Assignment Due

Each student will distribute a copy of their survey two days prior to class and then provide a 10 minute presentation of their final exam paper. In the presentation, you should present your research question, sampling plan, and details of the survey mode and questionnaire. Based on details from last week, be prepared to discuss issues of refusals, nonresponse, and dropoff/attrition. When not presenting, students are expected to provide feedback to classmates on their presentations and planned surveys.

## Readings

None assigned, though students may distribute surveys or any other materials related to their presentations no later than 24 hours prior to their presentation.