

Survey Research Methods

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Overview and Goals of the Course

The objective is to introduce students to the various phases of conducting a sample survey through lectures, readings, and examples from actual projects. The first half of the week is focused on survey design and sampling. The second half focuses on questionnaire development and testing, data collection and coding. Data analysis and report writing remain beyond the scope of this class. The class will be run in the form of a workshop rather than a lecture driven format.

Upon successfully completing this course, students are able to:

- Identify primary sources of error in surveys, and discuss the consequences of each type of error for survey findings
- Critically evaluate the design, construction and implications of studies based on survey research
- Formulate strategies for surveys that minimize error
- Critically evaluate the design, construction, and implications of surveys

Readings

Most of the topics covered in class discussions can be found in the following books:

1. Bourque, L.B. and V.A. Clark. 1992. *Processing Data, The Survey Example*. Sage Publications.
2. Callegaro, M., Manfreda, K. L., & Vehovar, V. (2015). *Web survey methodology*. Sage.
3. Carmines E.C. and R. A. Zeller. 1979. *Reliability and Validity Assessment*. Sage Publications.
4. Converse, J.M. and S. Presser. 1986. *Survey Questions: Handcrafting the Standardized Questionnaire*. Sage Publications.
5. DeVellis, R.F. 1991. *Scale Development, Theory and Applications*. Sage Publications.
6. Foddy, W. 1993. *Constructing Questions for Interviews and Questionnaires, Theory and Practice in Social Research*, Cambridge University Press.
7. Fowler, F.J. Jr. and T.W. Mangione. 1990. *Standardized Survey Interviewing, Minimising Interviewer-Related Error*. Sage Publications.
8. Henry, G.T. 1990. *Practical Sampling*. Sage Publications.
9. Groves, R. M., et al. 2009. *Survey Methodology*, 2nd edition. Wiley-Interscience.
10. Rossi, P.H., J.D. Wright and A.B. Anderson. 1983. *Handbook of Survey Research*. Academic Press. Inc.
11. Sudman, S. and N.M. Bradburn. 1982. *Asking Questions*. Jossey-Bass Publishers.
12. Tourangeau, R., L.J. Rips and K. Rasinski. 2000. *The Psychology of Survey Response*, Cambridge University Press.

13. Tourangeau, R., Conrad, F. G., & Couper, M. P. (2013). *The science of web surveys*. Oxford University Press.
14. Weisberg, H. F., J. A. Krosnick and B. D. Bowen. 1996. *An Introduction to Survey Research Polling and Data Analysis*, Sage Publications.
15. Weisberg, H. F. 2005. *The Total Survey Error Approach, A guide to the New Science of Survey Research*, Chicago: The University of Chicago Press.

However, I will closely follow the presentation in the following textbooks for the class:

De Vaus, D., & de Vaus, D. (2014). *Surveys in social research*. Routledge.

Tentative Class Schedule and Readings

Lecture 1 Overview and Background: Logic of Science and Survey Research

- Chapters 1 to 4 from De Vaus (2002).

Choosing Your Own Survey Research Project

Describe a research question you would like to explore in this class and any initial thoughts you have about the survey that you would like to do or any special design challenges you already see ahead?

Recommended:

- Chapters 1 and 2 in Weisberg et al. (1996).
- Carmines and Zeller. (1979).
- Rossi, P.H., J.D. Wright and A.B. Anderson. 1983. "Sample Surveys: History, Current Practice, and Future Prospects" in Rossi, P.H., J.D. Wright and A.B. Anderson (eds.) *Handbook of Survey Research*. Academic Press. Inc.
- Bohrnstedt, G.W. 1983. "Measurement" in Rossi, P.H., J.D. Wright and A.B. Anderson (eds.) *Handbook of Survey Research*. Academic Press. Inc.

Lectures 2 to 4 Sampling and Research Design

- Chapter 6 from De Vaus (2002).

Selecting Target Population and Sampling Frame

What is (are) the unit(s) of analysis for your study? To what population would you like to generalize findings?

- Iannacchione, VG. (2011) "The Changing Role of Address-Based Sampling in Survey Research" *Public Opinion Quarterly*. 75 (3) 556-575.

Recommended:

- Chapter 3 in Weisberg et al. (1996).

- Henry (1990).
- Frankel, M. 1983. "Sampling Theory" in Rossi, P.H., J.D. Wright and A.B. Anderson (eds.) *Handbook of Survey Research*. Academic Press. Inc.
- Sudman, S. 1983. "Applied Sampling" in Rossi, P.H., J.D. Wright and A.B. Anderson (eds.) *Handbook of Survey Research*. Academic Press. Inc.

Examples of Sample Designs: (Read at least one of the below)

- Montaquila, JM, L. Mohadjuer et al. NYC Hanes: Design of the Community Health and Nutrition Examination Survey.
- Frerichs, RR, & Shaheen, MA. Small Community Based Surveys. *Annu. Rev. Public Health* 2001, 22:231-47.
- Luman ET, et al. Comparison of two survey methodologies to assess vaccination coverage. *International Journal of Epidemiology* 2007;36:633-641
- Puma, M., Bell, S.; Cook, R., and Heid, C. (2010) Head Start Impact Study: Final Report. Rockville, MD, US Department of Health and Human Services. 20850. pp. 2.01-2.11.

Hard-to-Reach Populations

Are there hard to reach populations that are of interest to you? How might you collect sufficient information from them?

- Heckathorn DD, Semaan S, Broadhead R, Hughes JJ. Extensions of Respondent Driven Sampling: A New Approach to the Study of Injection Drug Users Aged 18-25. *AIDS and Behavior*. 2002;6:55-67
- Robinson, WT, Risser JMH, McGoy S, Becker AB, Rehman H, Jefferson M, Griffin V, Wolverton M. and Tortu S. Recruiting Injection Drug Users: A Three Site Comparison of Results and Experiences with Respondent Driven and Targeted Sampling Procedures. *Journal of Urban Health*, 24 August 2006
- Meyer, I, Rossano L, Ellis JM and Bradford J. A Brief Telephone Interview to Identify Lesbian and Bisexual Women in Random Digit Dialing Sample. *Journal of Sex research*, 39 (2) May 2002 39-144.

Lectures 5 to 7 Questionnaire Design

- Chapter 7 from De Vaus (2002).

Instrument Construction: Events

What will your main outcome and independent variables be? How will your measures be influenced by your data collection strategy and the people you are studying?

Read at least one of the below:

- Gaskell GD, O'Muircheartaigh CA, et al. (1994). Survey questions about the frequency of vaguely defined events: The effects of response alternative. *Public Opinion Quarterly* 58(2): 241-254.
- Gaskell GD, Wright DB, et al. (2000). Telescoping of landmark events: implications for survey research. *Public Opinion Quarterly* 64(1): 77-89.

Instrument Construction: Opinions

What types of variables are your main outcome and independent variables? Attitudes, knowledge, behavior, events, demographic characteristics or what? What problems may respondent face trying to answer questions about these variables?

- Schaeffer NC, Presser S (2003). The Science of Asking Questions. *Annual Review of Sociology*. 65-88.

Read at least one of the below:

- Christian LM, Parsons NL, Dillman DA (2009). Designing Scalar Questions for Web Surveys. *Sociological Methods Research* 37:393-425
- Krosnick JA, Holbrook AL, et al. (2002). The impact of "No Opinion" response options on data quality: Non-attitude reduction or an invitation to satisfice? *Public Opinion Quarterly* 66(3): 371-403.
- Shoemaker P, Eichholz M, Skewes E. (2002). Item non-response: Distinguishing between don't know and refuse. *International Journal of Public Opinion Research* 14(2): 193-201.
- Streb MJ, et al. (2008). Social Desirability Effects and Support for a Female American President. *Public Opinion Quarterly*. 72(1): 76-89
- Schuldt JP, Konrath SH, Schwarz N (2011). "Global Warming" or "Climate Change": Whether the planet is warming depends on question wording. *Public Opinion Quarterly*. 75(1): 115-124.

Recommended:

- Chapter 4 in Weisberg et al. (1996).
- Converse and Presser (1986).
- DeVellis (1991).
- Oppenheim (1966).
- Sudman and Bradburn (1982).
- Sheatsley, P.B. 1983. "Questionnaire Construction and Item Writing" in Rossi, P.H., J.D. Wright and A.B. Anderson (eds.) *Handbook of Survey Research*. Academic Press. Inc.
- Anderson A.B., A. Basilevsky and D.P.J. Hum. 1983. "Measurement: Theory and techniques" in Rossi, P.H., J.D. Wright and A.B. Anderson (eds.) *Handbook of Survey Research*. Academic Press. Inc.
- Bradburn, N.M. 1983. "Response Effects" in Rossi, P.H., J.D. Wright and A.B. Anderson (eds.) *Handbook of Survey Research*. Academic Press. Inc.

Lectures 8 to 10 Issues in Data Collection

- Chapter 8 from De Vaus (2002).

Face-to-Face Interviewing

What if you chose to use face-to-face interviewing to collect data, what would be the advantages versus disadvantages?

- Groves, et al. Chapter 5

Telephone Interviews

What if you chose to use face to face or telephone interviewing to collect data, what would be the advantages versus disadvantages?

- Groves R. (1990) Theories and methods of telephone surveys *Annual Review of Sociology* 16:221-240.
- Lavrakas PJ, et al. The state of surveying cell phone numbers in the United States: 2007 and Beyond. *Public Opinion Quarterly* 71, 840-854
- Brown D. (2009) Cellphones' Growth Does a Number on Health Research. *Washington Post*. Monday, January 12, 2009; Page A04
- Tomlinson M, et al. (2009). The use of mobile phones as a data collection tool: A report from a household survey in South Africa. *BMC Medical Informatics and Decision Making*, 9:51

Read at least one of the below:

- Blumberg SJ, Luke JV (2007). Coverage Bias in traditional telephone surveys of low-income and young adults. *Public Opinion Quarterly*. 71 (5):734-749
- Houtkoop-Steenstra H, Van den Bergh H (2000). Effects of introductions in large-scale telephone survey interviews. *Sociological Methods and Research* 28 (3): 281-300.
- Brick JM, Dipko S, Presser S, Tucker C, Yuan Y (2006). Nonresponse Bias in a Dual Frame of Cell and Landline Numbers. *Public Opinion Quarterly*. 70 (5) 780-793.

Mail, Self-Administered, Web-based Questionnaires

What if you chose to use mail or web-based surveys to collect data, what would be the advantages versus disadvantages?

- Chang L, Krosnick JA (2009). National Surveys via RDD Telephone Interviewing versus the Internet: Comparing Sample Representativeness and Response Quality. *Public Opinion Quarterly* 73(4):641-678
- Dillman D (1991). The design and administration of mail surveys. *Annual Review of Sociology* 17:225-249
- Couper M, et al. (2001). Web Survey Design and Administration. *Public Opinion Quarterly* 65(2): 230-253.

Read at least one of the below:

- Fricker S, Galesic M., Tourangeau R, Yan T. An Experimental Comparison of Web and Telephone Surveys. *Public Opinion Quarterly* 69 (3), 370-392
- Battaglia MP, et al. An evaluation of respondent selection methods for household mail surveys. *Public Opinion Quarterly* 72 No. 3, Fall 2008, pp. 459-469

Computer Assisted Interviewing

What if you chose to use computer assisted interviewing to collect data, what would be the advantages versus disadvantages?

- Tourangeau R, Smith TW (1996). Asking sensitive questions: The impact of data collection mode, question format, and question context. *Public Opinion Quarterly* 60(2): 275-304.

Read at least one of the below:

- Couper MP, Singer E, et al (2003). Understanding the effects of Audio-CASI on self-reports of sensitive behavior. *Public Opinion Quarterly* 67(3): 385-395.
- Perlis T, Jarlais D, Friedman S, Arasteh K (2004). Audio-computerized self-interviewing versus face-to-face interviewing for research data collection at drug abuse treatment programs. *Addiction* 99(7), 885-96
- Villarroel MA, Turner CF, Eggleston E, Al-Tayib A, Rogers S, Roman AM, Cooley PC and Gordek, H. (2006) Same-Gender Sex in the United States: Impact of T-ACASI *Public Opinion Quarterly*. 70(2), 166-196.
- Harmon T, Turner CF, Rogers SM, et al. (2009). Impact of T-ACASI on Survey Measurements of Subjective Phenomena. *Public Opinion Quarterly* 73(2): 255-280.

Recommended:

- Chapters 5 and 6 in Weisberg et al. (1996).
- Fowler and Mangione (1990).
- Weinberg, E. 1983. "Data Collection: Planning and Management" in Rossi, P.H., J.D. Wright and A.B. Anderson (eds.) *Handbook of Survey Research*. Academic Press. Inc.
- Dillman, D.A. 1983. "Mail and Other Self-Administered Questionnaires" in Rossi, P.H., J.D. Wright and A.B. Anderson (eds.) *Handbook of Survey Research*. Academic Press. Inc.
- Bourque and Clark (1992).

Interview Error

What management and implementation strategies do you plan to use to ensure the quality of your data?

- Groves, et al. Chapter 9
- Davis DW (1997). Nonrandom measurement error and race of Interviewer effects among African Americans. *Public Opinion Quarterly* 61(1): 183-207.
- Schober MF, Conrad FG (1997). Does conversational interviewing reduce survey measurement error? *Public Opinion Quarterly* 61(4): 576-602.
- Fowler FJ (1991). Reducing interviewer-related error through interviewer training, supervision, and other means. In: *Measurement Errors in Surveys*. John Wiley and Sons.