

Questionnaire Design
Sociology 754 (Spring, 2007)
Mondays, 4:30 p.m. to 7:10 p.m.

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Office Hours: Mondays, 1:00 - 3:00 p.m. and by appointment

Overview

This course provides an introduction to the design of questions and questionnaires. The course will provide an overview of the theoretical and experimental literature related to question and questionnaire design. Particular attention is paid to recent work that draws on cognitive psychology to inform the design of standardized instruments. The course and assignments are structured around the stages of questionnaire development: initial development, question writing, question testing, pretesting, and questionnaire formatting. Discussion will focus on the measurement of subjective as well as objective phenomena. Issues related to telephone and computer-based data collection will be considered at several points, but the course focuses on face-to-face interviews conducted with paper instruments. The material covered in this course is relevant for standardized measurement in many social research contexts. As part of the course, students will learn how to design questionnaires, how to critique questionnaires, and how to interpret answers to survey questions.

Course Assignments and Requirements: Course grades are based on 5 assignments. The assignments provide an opportunity to work on a single problem through most stages of questionnaire design. For the final project you revise the assignments and prepare a final, complete, instrument. The reports required with the assignments must be written in a professional style and typed, and all instrument (questionnaire) drafts must be typed.

Assignments. You choose to work on a topic that I assign--or select one of your own--and the assignments lead you through the steps of developing a complete, though limited, instrument on that topic. Each assignment requires drafting a small portion of an instrument, testing it, revising it, and writing a brief report. In the last assignment you put the pieces of the questionnaire together into a complete instrument, pretest it, and write a final report. You must complete all five assignments.

Human Subjects. This course involves exercises in which you develop a standardized instrument. As part of those exercises, you try out your instrument in approximately 2 interviews in each of several assignments. You must realize several things:

- You may conduct these interviews as part of the course without obtaining a separate approval for your research project from the IRB, as long as you do not plan to

disseminate the results of that research. If you plan to do so, you must notify me and, under the direction of the faculty advisor for that research, obtain IRB approval **before** beginning the interviews.

- Regardless of whether you are conducting these interviews only as part of this course or to obtain knowledge that you will disseminate, you must complete the tutorial at: <http://www.uwm.edu/Dept/EHSRM/IRB/tutorial/index.html>
- You must send me an email confirming that you have completed this tutorial by 31st of January.
- You must obtain informed consent (see below) from everyone you interview and protect their identity. No information that would identify the person you interviewed should be attached to their answers.

Informed Consent. The following is an excerpt from the University's Human Subjects website:

All research approved by the IRB must obtain informed consent from subjects through a process that includes either the use of a written consent form or an alternative oral procedure. In all cases, the following eight elements of consent must be included in the written consent forms or as part of oral consent procedure:

1. A statement that the study involves research that includes an explanation of the purpose(s) of the research, the expected duration of the subject's participation, and a description of the research procedures (e.g. interview, observation, survey research).

2. A description of any reasonably foreseeable risks or discomforts for the subjects. Risks should be explained to subjects in language they can understand and be related to everyday life.

3. A description of any benefits to the subject and/or to others that may reasonably be expected from the research.

4. Disclosure of alternative procedures, as appropriate.

5. A statement describing the extent, if any, to which the confidentiality of records identifying the subject will be maintained.

6. For research involving more than minimal risk, a statement whether compensation is available if injury occurs and, if it is, what it consists of and from whom further information may be obtained.

7. An explanation of whom to contact for answers to pertinent questions about the research and research subject's rights. The IRB requires that the name and phone number of the responsible faculty member as well as an IRB office phone number be included for these purposes. In addition, if the project involves student research, the name and phone number of the student's advisor/mentor also be included.

8. *A statement that research participation is voluntary and the subject may withdraw from participation at any time without penalty or loss of benefits to which the subject is otherwise entitled. If the subject is a patient or client receiving medical, psychological, counseling or other treatment services, there should be a statement that withdrawal will not jeopardize or affect any treatment or services the subject is currently receiving or may receive in the future. If the subject is a prisoner, there should be a statement that participation or nonparticipation in the research will have no effect on the subject's current or future status in the prison. If a survey instrument or interview questions are used and some questions deal with sensitive issues (including but not limited to, illegal behavior, mental status, sexuality or sexual abuse, drug or alcohol use) the subjects should be told they may refuse to answer individual questions.*

Auditors. Students auditing or sitting in on the class must present discussion questions and complete a portion of assignment 1 (if doing own topic) and the instrument portion of assignments 2 through 5. Auditors need not write the reports or complete the final assignment. I will review these assignments, but not comment on them systematically or grade them.

Criteria for Evaluation. In evaluating class assignments I consider how well the work applies relevant concepts and findings presented in lectures and readings. The reports should explicitly refer to relevant results from the readings and show that you have read and understand the material; I consider how well you deploy the readings when I grade the reports. In grading the instruments, I also consider the practicality, comprehensiveness, and creativity of the solution to the problem presented in the assignments. Finally, I take into account how well you present your solution--whether the presentation is organized, clear, and professional.

Class Participation. For every class, beginning in the second week, I will assign several students to prepare discussion questions based on articles from the syllabus. This, as well as general participation in the class, will constitute the 15% of the grade. Although not formally graded (e.g., no written comments), the class participation grade will be taken in to account in determining the final grade.

No incompletes. All assignments must be completed on time.

Readings

The required texts for this course are:

Norman Bradburn, Seymour Sudman, and Brian Wansink (2004) *Asking Questions: The Definitive Guide to Questionnaire Design*. San Francisco: Jossey-Bass.

Roger Tourangeau, Lance Rips, and Ken Rasinski. (2000). *The Psychology of Survey Response*. Cambridge University Press.

Floyd J. Fowler (1995). *Improving Survey Questions*. Sage Publications

In addition to the required texts, additional required readings are included in a coursepack available for purchase from Clark Graphics.

Schedule of Assignments and Exams

Assignment	Topic	Date Assigned	Date Due
Assignment 1	Survey Concepts (10%)	January 22	February 5
Assignment 2	Demographic Questions (10%)	February 5	February 26
Assignment 3	Autobiographic Questions (20%)	March 5	March 26
Assignment 4	Subjective Evaluation Questions (20%)	April 2	April 23
Assignment 5	Final Questionnaire (25%)		May 7
Class Participation and Discussion Questions (15%)		Throughout Semester	

I. Introduction: Measurement, Theories, Structure, and Demographic Items

January 22 : Introduction, Measurement, Sources of Error in the Measurement Process

Bradburn, Sudman, and Wansink, Chapter 1

Fowler, Chapter 1

Hox, Joop J. 1997. "From Theoretical Concept to Survey Question." Pp. 47-70 in *Survey Measurement and Process Quality*, edited by L. Lyberg, P. Biemer, M. Collins, E. de Leeuw, C. Dippo, N. Schwarz, and D. Trewin. N.Y.: Wiley-Interscience.

January 29: Understanding the Response Process

Tourangeau, Rips, and Rasinski, Chapters, 1, 2, and 8

February 5: Question Wording and Structure; Demographic Items

Bradburn, Sudman, and Wansink, Chapter 5 and 9

Fowler, Chapter 4 and Appendixes B and C

Fowler, F. (1992) "How Unclear Terms Affect Survey Data." *Public Opinion Quarterly*, Vol 56: 218-231.

Graesser, A., Z. Cai, Z., Louwense, M., and Daniel, F. (2006) "Question Understanding Aid (QUAID): A Web Facility That Tests Question Comprehensibility." *Public Opinion Quarterly*, Vol. 70(1): 3-22.

Martin, E., DeMaio, T., and Campanelli, P. (1990) "Context Effects for Census Measures of Race and Hispanic Origin." *Public Opinion Quarterly*, 54:551-566.

II. Question Development and Testing

February 12: Developmental Interviewing

Morgan, David L. (1996) "Focus Groups." *Annual Review of Sociology* 22: 129-152.

Spradley, James. F. (1979) *The Ethnographic Interview*, Chapters 4 - 7 (out of print).

February 19: Question and Instrument Evaluation

Fowler, Chapters 5 and 6

Willis, G. B. (1999) "Cognitive Interviewing: A 'How-to' Guide" Research Triangle Institute.
<http://appliedresearch.cancer.gov/areas/cognitive/interview.pdf>

Campanelli, P., Martin, E., and Rothgeb, J. (1991) "The Use of Respondent and Interviewer Debriefing Studies as a Way to Study Response Error in Survey Data." *The Statistician*, Vol. 40: 253-264.

Oksenberg, L., Cannell, C. and Kalton, G. (1991) "New Strategies for Pretesting Survey Questions." *Journal of Official Statistics* Vol. 7, No. 3: 349-365.

Presser, S. and Blair, J. (1994) "Survey Pretesting: Do Different Methods Produce Different Results?" *Sociological Methodology*. San Francisco: Jossey-Bass.

III. Questions about Events and Behaviors

February 26 Cognition and Memory

Tourangeau, Rips, and Rasinski, Chapter 3, 4, 5, and 9

March 5: Errors in Reports of Events and Behaviors

Schaeffer, N. C. (2000) "Asking Questions about Threatening Topics: A Selective Overview" in Stone, et al (eds.) *The Science of Self Report: Implications for Research and Practice*. Mahwah, NJ: Lawrence Erlbaum

Mathiowetz, N. and Duncan, G. (1988) "Out or Work, Out of Mind: Response Errors in Retrospective Reports of Unemployment." *Journal of Business and Economic Statistics*, Vol. 6 (2): 221-229.

Belli, R. F. , M. W. Traugott, M. Young, and K. McGonagle (1999) "Reducing Vote Overreporting in Surveys: Social Desirability, Memory Failure, and Source Monitoring." *Public Opinion Quarterly* 63 (1): 90-108.

March 12: Writing Questions about Events and Behavior

Bradburn, Sudman, and Wansink, Chapters 2 and 3.

Fowler, Chapter 2

Belli, R. F. , W. L. Shay, and F. P. Stafford (2001) "Event History Calendars and Question List Surveys: A Direct Comparison of Interviewing Methods." *Public Opinion Quarterly* 65(1): 45-74.

March 19: Spring Break

IV. Questions about Subjective Phenomena

March 26: Cognitive Processes

Tourangeau, Rips, and Rasinski: Chapters 6 and 7

April 2: Response Options, Rating Scales, Acquiescence

Alwin, D. and Krosnick, J. (1985) "The Measurement of Values in Surveys: A Comparison of Ratings and Rankings. *Public Opinion Quarterly*. 49: 535-552.

Krosnick, J. and Fabrigar, L. (1997) "Designing Rating Scales for Effective Measurement in Surveys" in L. Lyberg, et al., (eds.) *Survey Measurement and Process Quality*. New York: John Wiley and Sons.

Krosnick, Holbrook, Berent, Carson, Hanneman, Kopp, Mitchess, Presser, Ruud, Smith, Moody, green and Conaway (2002) "The Impact of 'No Opinion' Response Options on Data Quality: Non-Attitude Reduction or an Invitation to Satisfice?" *Public Opinion Quarterly* 66: 371-403.

April 9: Writing Subjective Questions

Bradburn, Sudman and Wansink, Chapters 4, 5, and 7

Fowler, Chapter 3 and Appendix A

Shaeffer, E., Krosnick, J., Langer, G., and Merkle, D (2005) "Comparing the Quality of Data Obtained by Minimally Balanced and Fully Balanced Attitude Questions." *Public Opinion Quarterly* Vol 69(3):417-428..

V. Mode, Questionnaire Format, and Interviewing

April 16: Web-based Questionnaires; Modes of Data Collection

Tourangeau, Rips, and Rasinski: Chapter 10

Couper, M. (2000) "Web Surveys: A Review of Issues and Approaches." *Public Opinion Quarterly* Vol 64: 464-494

Couper, M., Traugott, M., and Lamias, M. (2001) "Web Survey Design and Administration." *Public Opinion Quarterly* Vol 65: 230-253.

Couper, M. and Tourangeau, R. (2004) "Picture This! Exploring Visual Effects in Web Surveys." *Public Opinion Quarterly* Vol 68(2):255-266.

Tourangeau, R. and Smith, T. (1996) "Asking Sensitive Questions: The Impact of Data Collection Mode, Question Format, and Question Context." *Public Opinion Quarterly*, Vol 60: 275-304.

April 23: Overall Questionnaire Design and Format of Questionnaires

Bradburn, Sudman, and Wansink, Chapters 10 and 12

Fowler, Chapters 6 and 7, Appendix C

Hess, J., Moore, J., Pascale, J. Rothgeb, J. and Keeley, C. (2001) "The Effects of Person-Level Versus Household-Level Questionnaire Design on Survey Estimates and Data Quality." *Public Opinion Quarterly* 65: 574-584.

Jenkins, C. and Dillman, D. (1997) "Towards a Theory of Self-Administered Questionnaire Design" in L. Lyberg, et al., (eds.) *Survey Measurement and Process Quality*. New York: John Wiley and Sons.

April 30: Interviewing; Ethics

Schaeffer, N.C. (1991) "Conversation with a Purpose of Conversation? Interaction in the Standardized Interview" in Biemer, et al (eds.) *Measurement Errors in Surveys.* New York: John Wiley and Sons.

Schober, M., and Conrad, F. (1997) "Does Conversational Interviewing Reduce Survey Measurement Error?" *Public Opinion Quarterly*, Vol 61: 576-602.

Presser, Stanley. 1994. "Presidential Address: Informed Consent and Confidentiality in Survey Research." *Public Opinion Quarterly* 58:446-459.

Singer, E., and Levine, F. (2003) "Protection of Human Subjects of Research: Recent Development and Future Prospects for the Social Sciences." *Public Opinion Quarterly* Vol 67: 148-164.

The Code of Ethics of the American Sociological Association. (excerpt),
<www.asanet.org/members/ecoderev.html>

The Code of Ethics of the American Association for Public Opinion Research,
<www.aapor.org/default.asp?page=survey_methods/standards_and_best_practices/code_for_professional_ethics_and_practices>

May 7th :Final Project Due

The following texts may prove useful as references.

- Anderson, R., Kasper, J., Frankel, M. and Associates (1979). *Total Survey Error*. San Francisco: Jossey-Bass Publishers.
- Biemer, Groves, Lyberg, Mathiowetz, and Sudman (1991) *Measurement Errors in Surveys*. New York: John Wiley and Sons.
- Bradburn, Norman, Sudman, Seymour, and Associates. (1979) *Improving Interview Method and Questionnaire Design*. San Francisco: Jossey-Bass.
- Dillman, D. (1977) *Mail and Telephone Data Collection Methods*. New York: John Wiley and Sons.
- Groves, R.M. and Kahn, R.L. (1979). *Surveys by Telephone: A National Comparison with Personal Interviews*. New York: Academic Press.
- Groves, R.M. (1989) *Survey Errors and Survey Costs*. New York: John Wiley and Sons.
- Groves, R.M., Biermer, P.P. Lyberg, L.E. Massey, J.T., Nichols, W.L., and Waksberg, J. (eds.) (1988). *Telephone Survey Methodology*. New York: John Wiley and Sons.
- Hippler, H.J., Schwarz, N., and Sudman, S.(eds.) (1987). *Social Information Processing and Survey Methodology*. New York: Springer-Verlag.
- Lyberg, L., et al. (1997) *Survey Measurement and Process Quality*. New York: John Wiley and Sons.
- Mishler, E.G. (1986). *Research Interviewing: Context and Narrative*. Cambridge: Harvard University Press.
- Payne, S. (1951) *The Art of Asking Questions*. Princeton,N.J.: Princeton University Press.
- Rossi, P., Wright, J. and Anderson, A. (eds.) (1983) *Handbook of Survey Research*. New York: Academic Press.
- Schwarz, N. and Sudman, S. (1996) *Answering Questions*. San Francisco: Jossey-Bass.
- Schwarz, N., and Sudman, S. (eds.) (1994) *Autobiographical Memory and the Validity of Retrospective Reports*. New York: Springer-Verlag.
- Schwarz, N., and Sudman, S. (eds.) (1992) *Context Effects in Social and Psychological Research*. New York: Springer-Verlag.
- Sudman, S. and Bradburn, N. (1974) *Response Effects in Surveys*. Chicago: Aldine.
- Sudman, S., Bradburn, N. and Schwarz, N. (1996). *Thinking about Answers: The Application of Cognitive Processes to Survey Methodology* San Francisco: Jossey-Bass
- Tanur, J. (ed.) (1991) *Questions about Questions: Inquiries into the Cognitive Bases of Surveys*. New York: Russell Sage Foundation.
- Turner, C.F. and Martin, E. (eds.) (1984) *Surveying Subjective Phenomena, Volumes I and II*. New York: Russell Sage.