

**SURVEY CONSTRUCTION AND VALIDATION**  
**Spring 2008**

**Dr. Sheila Murphy**  
**Associate Professor**  
**Annenberg School for Communication Suite 321**  
**213-740-0945**

**Office hours: 11-1 on Wednesdays or by appointment**

**Email: [smurphy@usc.edu](mailto:smurphy@usc.edu)**

**Learning objective of this course:**

This course is designed to familiarize students with the fundamental principles of survey construction and validation. With respect to survey construction topics covered will include format (online, phone, face-to-face, mail) related issues, sampling, question wording, tailoring for international audiences, response option format, order, and avoiding acquiescence bias and breakoffs. In addition students will learn how to pilot and statistically validate survey items using the Annenberg National Health Communication Survey data as a case study.

**Required Texts:**

Groves, R. M., Fowler, F. J. Couper, M. P., Lepkowski, Singer, E., and Tourangeau, R. (2004). Survey Methodology. Hoboken, New Jersey, John Wiley & Sons.

Schuman, H. & Presser, S. (1996). Questions and Answers in Attitude Surveys: Experiments on question form, wording and context. Thousand Oaks, CA, Sage Publications.

DeVellis, R. F. (2003). Scale Development. Theory and Applications. (2<sup>nd</sup> Edition). Applied Social Research Methods Series (Volume 26). Sage.

Sudman, S., Bradburn, N. M., & Schwarz, N. (1996). Thinking about answers: The application of cognitive processes to survey methodology. San Francisco: Jossey-Bass.

**Recommended but not required:**

Converse, J. M. & Presser, S. (1986). Survey Questions: Handcrafting the Standardized Questionnaire. Thousand Oaks, CA, Sage Publications.

**Academic Integrity Policy:**

The Annenberg School for Communication is committed to upholding the University's Academic Integrity code as detailed in the SCampus Guide. It is the policy of the School for Communication to report all violations of the code. Any serious violation or pattern of violations of the Academic Integrity Code will result in the student's expulsion from the Communication major or minor, or from the graduate program.

**ADA Compliance Statement**

Any student requesting academic accommodations based on a disability is required to register with Disability Services and Programs (DSP) each semester. A letter of verification for approved

accommodations can be obtained from DSP. Please be sure the letter is delivered to me as early in the semester as possible. DSP is located in STU 301 and is open 8:30 a.m. – 5:00 p.m., Monday through Friday. The phone number for DSP is (213) 740-0776.

### **Course Requirements:**

**1. Attendance** --- As we only meet once a week, and much of the material from lecture does not overlap with that of the text, attendance is crucial. Everyone is allowed one unexplained absence per term. However, if you are absent more than once you must make an appointment to see me or risk losing credit for the course.

**2. Reading assignments** — The lectures presume you have done the assigned reading prior to coming to class. The lectures will make much more sense if you have done the background reading ahead of time.

**3. Weekly assignments.** — Ten assignments each focusing on one aspect of survey construction or validation will be due at the beginning of the following class. Each will be worth 3% of your overall grade for a total of 30%.

**4. Midterm** — A 10-12 page (not counting references and appendices which will contain your survey instrument) research proposal will constitute 30 % of your overall grade. This should include a literature review and method section (and a draft of your proposed survey instrument in the appendix). The topic is up to you but must be cleared with me beforehand.

**5. Final paper** — The final research paper should follow the format of an APA research article (intro, methods, results, a discussion section interpreting your findings) and be approximately 16 -20 pages in length (excluding references and appendices) and is worth 30% of your final grade.

**6. In class presentation** — Students will prepare and present a 10 minute Powerpoint summary of their survey results. This presentation will account for the final 10% of your grade in the course.

### **Assignments:**

Please note that all assignments are to be typed (double-spaced) in 12-point Times Roman font, with 1 inch margins. Be sure to proofread your paper carefully to ensure that it is free of grammatical and spelling errors. If a paper contains 10 or more grammar or spelling errors it will receive a grade of F. (If you are not a native English speaker it is recommended that you have a native English speaker look over your paper for grammar. The content of the paper, however, must be yours alone.) There will also be substantial penalties for assignments turned in after the deadline. An “incomplete” will be given only in an emergency.

### **Cheating and plagiarism:**

Any individual found to have copied the work or ideas of others without appropriate citation will receive an F in this course and will be recommended for expulsion from the University.

### **Schedule of classes:**

### **1/16 Week 1: Reliability and Validity: Determining what you need to know and how to find out.**

This week's lecture will be dedicated to conveying the importance of having a clearly defined goal guiding your research. Issues of internal, external, face, construct, concurrent, predictive and convergent validity will be discussed.

#### Required reading:

Chapter 1 & 2 of Survey Methodology (p.1-63)

Chapter 1 Schuman and Presser (p.1-14)

#### Recommended but not required:

Carmines, E. G. and Zeller, R. A. (1979). Reliability and Validity Assessment. Thousand Oaks, CA, Sage.

### **1/23 Week 2: Measurement:**

The purpose of this lecture is to introduce students to the relative benefits of open versus close-ended response options as well as the advantages of various levels of measurement (nominal, ordinal, interval and ratio). Finally, we will discuss the issue of nonattitudes and whether the use of response time measurement in surveys is a reliable indicator of attitude strength

#### Required reading for Measurement:

Chapters 6 Survey Methodology (p.169-197).

Chapters 6-7 Schuman and Presser (p.161-199).

#### Other recommended reading:

Ch. 2 Converse & Presser (p.23-74)

Bassili, J. (1996). The how and why of response latency measurement in telephone surveys. In N. Schwarz & S. Sudman (Eds.), *Answering questions* (pp. 319-346). San Francisco: Jossey-Bass.

Krosnick, J. A., & Abelson, R. P. (1992). The case for measuring attitude strength in surveys. In J. M. Tanur (Ed.), *Questions about questions* (pp. 177-203). New York: Russell Sage

Schwarz, N., & Bohner, G. (2001). The construction of attitudes. In A. Tesser & N. Schwarz (Eds.), *Intraindividual processes* (Blackwell Handbook of Social Psychology, pp. 436-457). Oxford, UK: Blackwell.

Bassili, J. (2001). Cognitive indices of social information processing. In A. Tesser & N. Schwarz (Eds.), *Intraindividual processes* (Blackwell Handbook of Social Psychology; pp. 68-87). Oxford, UK: Blackwell.

Dovidio, J. F., & Fazio, R. H. (1992). New technologies for the direct and indirect assessment of attitudes. In J. M. Tanur (Ed.), *Questions about questions* (pp. 204-237). New York: Russel Sage.

Krosnick, J. A., & Schuman, H. (1988). Attitude intensity, importance, and certainty and susceptibility to response effects. *Journal of Personality and Social Psychology*, 54, 940-952.

### **1/30 Week 3: Question wording.**

Required reading:

Chapter 7 Survey Methodology (p. 201-238)  
Chapters 3-5 & 11 Schuman and Presser (p. 79-158, p. 275-294)

Recommended:

Chapter 1 Converse & Presser (p.1-14)

**2/6 Week 4: Potential biases: Context, order effects, acquiescence bias, social desirability, and interviewer effects in attitude measurement**

This week will introduce students to possible biases that can invalidate survey responses and possible ways to counteract them.

Required Reading for Biases:

Chapter 9 in Survey Methodology (p. 269-290)  
Chapter 8 & Appendix D of Schuman and Presser (p. 203-228 and 341-342)

Other recommended reading:

DeMaio, T. J. (1984). Social desirability and survey measurement: A review. In C. F. Turner & E. Martin (Eds.), *Surveying subjective phenomena* (Vol. 2, pp. 257-281). New York: Russell Sage.

Bishop, G., & Smith, A. (2001). Response order effects and the early Gallup split-ballots. *Public Opinion Quarterly*, 65, 479-505.

Krosnick, J.A. & Alwin, D. F. (1987). An evaluation of a cognitive theory of response order effects in survey measurement." *Public Opinion Quarterly*, 51, 201-219.**2/27**  
Required

**2/13 Week 5: Validation (In class workshop)**

Issues of scale and measurement validation will be discussed and demonstrated in class.

Required reading:

DeVellis, R. F. (2003). *Scale Development. Theory and Applications*. (2<sup>nd</sup> Edition). Applied Social Research Methods Series (Volume 26). Sage.

**2/20 Week 6. No class**

**2/27 Week 7: Survey Sampling and Design**

This week will cover distinctions between various probability and nonprobability sampling techniques (simple random, stratified random and quota, snowball, and convenience) as well as design (cross-sectional, longitudinal and experimental).

Required reading:

Chapters 3 & 4 Survey Methodology (p.67 -132)

**3/5 Week 8: The pros and cons of various survey modes**

Students will be introduced to the relative strengths and weaknesses of face-to-face interviews, phone, online and mail surveys.

Required reading:

Chapter 5 in Survey Methodology.

Schwarz, N., Strack, F., Hippler, H.J., & Bishop, G. (1991). The impact of administration mode on response effects in survey measurement. Applied Cognitive Psychology, 5, 193-212.

Recommended reading:

Bourque, L. B. & Fielder, E. P. (2003) How to conduct telephone surveys (2<sup>nd</sup> edition). The Survey Kit Volume 4, Sage.

Bourque, L. B. & Fielder, E. P. (2003) How to conduct self-administered and mail surveys (2<sup>nd</sup> edition). The Survey Kit Volume 3, Sage.

Oishi, S. M. (2003) How to conduct in-person interviews for surveys (2<sup>nd</sup> edition). The Survey Kit Volume 5, Sage.

Chapter 10 of Tourangeau, Rips & Rasinski (2000). The psychology of survey response. New York: Cambridge University Press.

**3/12 Week 9: One-on-one midterm meetings regarding your survey (no class).**

**3/19 Week 10: Spring Break**

**3/26 Week 11. Piloting your instrument**

***Midterm due — A literature review and method section (and a draft of your revised proposed survey instrument in the appendix).***

***Also remember to bring 2 copies of your survey for each class member to pilot.***

We will discuss piloting techniques such as “talk alouds” or “cognitive interviewing.” We describe the process and discuss the legitimacy of these techniques. Timing and trimming are also discussed.

Required Reading:

Chapter 8 of Survey Methodology (p.241-267)

Other recommended reading:

Ch. 3 Converse & Presser (p.79-107)

Chapter 10 of Sudman, Bradburn, & Schwarz

DeMaio T. J., & Rothgeb J. M. (1996). Cognitive interviewing techniques: In the lab and in the field. In N. Schwarz and S. Sudman (Eds.), Answering questions: Methodology for determining cognitive and communicative processes in survey research. San Francisco: Jossey-Bass.

Willis, G., DeMaio, T., & Harris-Kojetin (1999). Is the bandwagon headed to

the methodological promised land? Evaluating the validity of cognitive interviewing techniques. In Sirken, M, Herrmann, D., Schechter, S., Schwarz, N., Tanur, J., and Tourangeau, R. (Eds.) *Cognition and Survey Research* (pp 133-153). New York: Wiley.

Crutcher, R. J. (1994) Telling what we know: The use of verbal report methodologies in psychological research. *Psychological Science*, 5, 241-244.

Payne, J. W. (1994). Thinking aloud: Insights into information processing. *Psychological Science*, 5, 241-248.

Wilson, T. D. (1994). The proper protocol: Validity and completeness of verbal reports. *Psychological Science*, 5, 249-252.

Conrad, F.G. & Blair, J. (2004). Aspects of data quality in cognitive interviews: The case of verbal reports. In S. Presser, J. Rothgeb, M. Couper, J. Lessler, E. Martin, J. Martin & E. Singer (Eds.) *Questionnaire Development Evaluation and Testing Methods*. New York: John Wiley and Sons, pp. 67-88.

#### **4/2 Week 12: In class review of piloting of your surveys.**

***PRIOR TO CLASS PILOT EACH OF YOUR CLASSMATES SURVEYS ON AT LEAST 2 PEOPLE (at least one with a high school education or less) and be prepared to discuss results***

***PILOT YOUR SURVEY TO AT LEAST 10 PEOPLE (at least two with a high school education or less).***

***Run initial validation of all scales in your survey using the factor analytic techniques discussed earlier in the semester.***

#### ***Hand in:***

- 1. Updated survey instrument.***
- 2. Factor analyses validating all scales in your survey***
- 3. A write up of your observations and the implications for both your survey and your classmates.***

#### **4/9 Week 13: Issues of memory, self-report and indirect measures.**

We review how knowledge about our own behavior is represented in memory and how the structure of autobiographical memory influences what we can recall and how well we can date events in our lives. We also discuss the Experience Sampling Method (ESM) that avoids recall problems altogether by collecting concurrent reports at random moments in time but is expensive and places considerable burden on researchers as well as respondents and the Day Reconstruction Method (DRM) which provides a “cheaper” approximation to ESM. Finally, we discuss the pros and cons of “proxy” reporting where a single household member reports on the behavior of all members.

#### **Required reading:**

Chapter 7 in *Survey Methodology*. (p.201-238)

Chapters 7 to 9 of *Sudman, Bradburn, & Schwarz* (p.163-197)

#### **Other recommended reading:**

- Loftus, E. F., & Marburger, W. (1983). Since the eruption of Mt. St. Helens, has anyone beaten you up? Improving the accuracy of retrospective reports with landmark events. *Memory & Cognition*, 11, 114-120.
- Strube, G. (1987). Answering survey questions: The role of memory. In H.J. Hippler, N. Schwarz, & S. Sudman (Eds.), *Social information processing and survey methodology* (pp.86 - 101). New York: Springer Verlag.
- Ross, M. (1989). The relation of implicit theories to the construction of personal histories. *Psychological Review*, 96, 341-357.
- Barsalou, L. W. (1988). The content and organization of autobiographical memories. In U. Neisser & E. Winograd (Eds.), *Remembering reconsidered: Ecological and traditional approaches to the study of memory* (pp. 193-243). New York: Cambridge University Press.
- Blair, E., & Burton, S. (1987). Cognitive processes used by survey respondents to answer behavioral frequency questions. *Journal of Consumer Research*, 14, 280-288.
- Conway, M. A. (1996). Autobiographical knowledge and autobiographical memories. In D. C. Rubin (Ed.), *Remembering our past: Studies in autobiographical memory* (pp. 67-93). New York: Cambridge University Press
- Menon, G. (1994). Judgments of behavioral frequencies: Memory search and retrieval strategies. In N. Schwarz & S. Sudman (eds.), *Autobiographical memory and the validity of retrospective reports* (pp. 161-172). New York: Springer-Verlag.
- Belli, R. (1998). The structure of autobiographical memory and the event history calendar: Potential improvements in the quality of retrospective reports in surveys, *Memory*, 6, 383-406.
- Kahneman, D., Krueger, A. B., Schkade, D., Schwarz, N., & Stone, A. A. (2004). A survey method for characterizing daily life experience: The Day Reconstruction Method (DRM). *Science*, 306, 1776-1780.
- Stone, A.A., Shiffman, S.S., & DeVries, M.W. (1999). Ecological momentary assessment. In D. Kahneman, E. Diener, & N. Schwarz (eds.), *Well-being: The foundations of hedonic psychology* (pp. 61-84). New York: Russell-Sage.
- Belli, R., Shay, W.L., Stafford, F.P. (2001). Event history calendars and question list surveys: A direct comparison of interviewing methods. *Public Opinion Quarterly*, 65, 45-74.
- Freedman, D., Thornton, A., Camburn, D., Alwin, D., & Young-DeMarco, L. (1988). The life history calendar: A technique for collecting retrospective data. In C.C. Clogg (Ed.), *Sociological Methodology* (Vol. 18, pp. 37-68). San Francisco; Jossey-Bass.
- Robinson, M. D., & Clore, G. L. (2002). Belief and feeling: Evidence for an accessibility model of emotional self-report. *Psychological Bulletin*, 128, 934-960.
- Schwarz, N., & Wellens, T. (1997). Cognitive dynamics of proxy responding: The diverging perspectives of actors and observers. *Journal of Official Statistics*, 13, 159-179.
- Mingay, D. J., Shevell, S. K., Bradburn, N. M., & Ramirez, C. (1994). Self and proxy reports of everyday events. In N. Schwarz & S. Sudman (Eds.), *Autobiographical memory and the validity of retrospective reports* (pp. 235-250). New York: Springer Verlag.
- Sudman, S. Bickart, B., Blair, J., & Menon, G. (1994). The effect of level of participation

on reports of behavior and attitudes by proxy reporters. In N. Schwarz & S. Sudman (Eds.), *Autobiographical memory and the validity of retrospective reports* (pp. 251-266). New York: Springer Verlag.

#### **4/16 Week 14: Tailoring surveys for a multicultural audience.**

Culture and ethnicity play a major role in our lives. This lecture will incorporate a summary of the empirical evidence on ethnic differences in survey research.

##### Required reading:

Smith, T. W. (2003). Developing comparable questions in cross-national surveys.

In J. Harkness, F. van de Vijver, & P. Ph. Mohler (Eds.), *Cross-cultural survey methods* New York: Wiley. (p. 69-92).

Schwarz, N. (2003). Culture-sensitive context effects: A challenge for cross-cultural surveys.

In J. Harkness, F. van de Vijver, & P. Ph. Mohler (Eds.), *Cross-cultural survey methods* New York: Wiley. (p. 93-100).

Braun, M. (2003). Errors in comparative survey research: An overview.

In J. Harkness, F. van de Vijver, & P. Ph. Mohler (Eds.), *Cross-cultural survey methods* New York: Wiley. (p. 137-156).

Gudykunst, W.B. & Lee, C. M. (2002). Cross-cultural communication theories. In Handbook of International and Intercultural Communication. (2<sup>nd</sup> edition), Gudykunst and Mody, Eds., (p.25-50).

##### Other recommended reading:

Gudykunst and Kim, Chapters 3-5 and 7-14.

Harkness, J., van de Vijver, F., & Mohler, P. P. (Eds.) (2003). *Cross-cultural survey methods*. New York: Wiley.

Johnson, T.P., & Van de Vijver, F. (2003). Social desirability in cross-cultural research.

In J. Harkness, F. van de Vijver, & P. Ph. Mohler (Eds.), *Cross-cultural survey methods* (pp.195-204). New York: Wiley.

#### **4/23 Week 15: No class. Work on collecting and analyzing data on final survey**

#### **4/30 Week 16: Final paper due**

**In class presentation of final survey and statistical validation of your measures.**

**Include a discussion of changes that would be needed if you ran your survey in another culture.**

### **Other General References:**

Below are some useful general reference volumes pertaining to cognitive and communicative aspects of survey measurement:

Harkness, J., van de Vijver, F., & Mohler, P. P. (Eds.) (2003). *Cross-cultural survey methods*. New York: Wiley.

Hippler, H.J., Schwarz, N., & Sudman, S. (Eds.) (1987). *Social information processing and survey methodology*. New York: Springer Verlag.

Jabine, T.B., Straf, M.L., Tanur, J.M., & Tourangeau, R. (Eds.) (1984). *Cognitive aspects of survey methodology: Building a bridge between disciplines*. Washington, DC: National Academy Press.

Jobe, J. B., & Loftus, E. F. (Eds.) (1991). *Cognition and survey measurement*. Special issue of *Applied Cognitive Psychology*, 5, whole No. 3.

Presser, S., et al. (Eds.) (2004). *Methods for testing and evaluating survey questionnaires*. New York: Wiley.

Schwarz, N. & Sudman, S. (Eds.) (1992). *Context effects in social and psychological research*. New York: Springer Verlag.

Schwarz, N. & Sudman, S. (Eds.) (1994). *Autobiographical memory and the validity of retrospective reports*. New York: Springer Verlag.

Schwarz, N. & Sudman, S. (Eds.) (1996). *Answering questions: Methodology for determining cognitive and communicative processes in survey research*. San Francisco: Jossey-Bass.

Sudman, S., Bradburn, N. M., & Schwarz, N. (1996). *Thinking about answers: The application of cognitive processes to survey methodology*. San Francisco: Jossey-Bass.

Sirken, M., Hermann, D., Schechter, S., Schwarz, N., Tanur, J., & Tourangeau, R. (Eds.) (1999). *Cognition and survey research*. New York: Wiley.

Tanur, J. M. (Ed.) (1992). *Questions about questions*. New York: Russel Sage.

Tourangeau, R., Rips, L.J., Rasinski, K. (2000). *The psychology of survey response*. New York: Cambridge University Press.