

**SOCI 760**  
**DATA COLLECTION METHODS IN SURVEY RESEARCH**  
**FALL 2022**

UNC/Odum Institute  
Online via ZOOM  
Tuesdays 2:00 – 4:45 PM

**Instructor:**

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**Overview and Goals:**

This course reviews research focused on understanding the effect of data collection design features on major sources of survey error and, therefore, the quality of the data. Materials and sessions concentrate on how data collection methods specifically relate to coverage error, nonresponse error, and measurement error. The Total Survey Error paradigm informs the consequences of alternative design decisions, including the quality of the data collected under different designs.

Understanding the consequences of alternate data collection methods requires attention to how basic design features relate to major sources of error. For examples, choices must be made between a probability or non-probability sampling frame, paper versus computer-assisted data collection, and self-administration versus interviewer-administration. Tradeoffs in errors and costs between the most common single mode versus common multiple mode surveys are assessed.

The course includes a review of the literature on interviewer effects, in terms of both potential reduction in survey error and potential contributions to survey error. With respect to nonresponse error, the course includes literature on methods for reducing nonresponse error and methods of assessing nonresponse error in survey estimates. Finally, design considerations for longitudinal household surveys and surveys with organizations as the unit of analysis (as opposed to households or individuals) are also examined.

### **Format and Materials:**

This course is online only. Readings, materials, and recorded presentations will be available for students to review prior to each online class session on the course website. Each class session will be conducted via Zoom for all students. The class sessions will focus on discussion of the recorded presentations, questions on the weekly readings, and exercises and demonstrations to illustrate and expand on key concepts.

Instructor office hours are available by Zoom or phone appointments and students are encouraged to communicate with the instructor by email as needed. All recorded presentation, course materials, reserved readings, and student assignments will be posted to the course website on <https://sakai.unc.edu/portal> under SOCI760.001.FA22. Please let the instructor know if you experience any difficulties accessing the course website or specific materials on the site.

### **Grading:**

All course assignments function as components of a survey data collection proposal to be completed by each student over the course of the semester.

Grading will be based on:

- Participation in online class discussions that demonstrates reviewing the weekly recorded presentation and the assigned readings will count for 10% of the final grade. The participation portion of the grade will be evaluated by (1) questions students submit prior to each weekly online class and (2) contribution to the online class discussion. Weekly questions can address any topics covered through the current week's presentation or readings. Questions should be submitted to the instructor via email at least 24 hours before each online class session. Each class session will allow time for students to ask questions and discuss answers.
- Three assignments of about 5-6 pages each will be designed to sequentially develop a proposal for a survey data collection project will each count for 20% of the final, for a total of 60% of the final grade.
- The fourth and final proposal for a survey data collection project addressing instructor feedback on the three prior assignments and the most important sources of survey error for the proposed data collection will count for 30% of the final grade.

The schedule below indicates dates when the assignments will be available to students and when they will need to be completed and submitted. Assignments should be submitted to the instructor via Sakai or email; the instructor will

confirm receipt via email. Late assignments will not be accepted without prior arrangement with the instructor.

## **Schedule, Topics, and Readings:**

### **Week 1 – August 16**

#### **Topics:**

Overview; Goals, concepts, and challenges

#### **Readings:**

- (1) Biemer, P. (2010). Total survey error: Design, implementation, and evaluation. *Public Opinion Quarterly (special issue) 74*: 817-848
- (2) Olson, K., Wagner J., and Anderson, R. (2021) Survey costs: Where are we and what is the way forward? *Journal of Survey Statistics and Methodology 9*: 921-942.

### **Week 2 – August 23**

#### **Topic:**

Key dimensions of survey modes

#### **Readings:**

- (1) Couper, M.P. (2011). The future of modes of data collection. *Public Opinion Quarterly 75*: 889-908.
- (2) Dever, et al. (2021). Fit for purpose in action: Design, implementation, and evaluation of the National Internet Flu Survey. *Journal of Survey Statistics and Methodology 9*: 449–476. doi: 10.1093/jssam/smz050

### **Week 3 – August 30**

#### **Topics:**

Comparing modes, mixing modes, and responsive design

#### **Readings:**

- (1) deLeeuw, E. (2018). Mixed mode: Past, present, and future. *Survey Research Methods, 12*: 75-19.
- (2) Olson, K., Smyth, J., and Wood, H. (2012). Does giving people their preferred survey mode actually increase survey participation rates? An experimental examination. *Public Opinion Quarterly 76*: 611-635.

### **Week 4 – September 6 (NO CLASS, extended Labor Day holiday)**

### **Week 5 – September 13 (Assignment 1 posted)**

#### **Topic:**

Survey modes and survey errors

#### **Readings:**

- (1) Link, M. and Mokdad, A. (2006). Can web and mail survey modes improve participation in an RDD-based national health surveillance? *Journal of Official Statistics 22*: 293–312.

- (2) Felderer, B., Kirchner, A., and Kreuter, F. (2019). The effect of survey mode on data quality: Disentangling nonresponse and measurement error bias. *Journal of Official Statistics* 35: 93–115. [doi.org/10.2478/JOS-2019-0005](https://doi.org/10.2478/JOS-2019-0005)

### **Week 6 – September 20**

#### **Topic:**

Computer-assisted survey methods for self-interviewing

#### **Readings:**

- (1) Turner C.F., Ku L., Rogers S.M., Lindberg L.D., Pleck J.H., Sonenstein F.L. (1998) Adolescent sexual behavior, drug use, and violence: Increased reporting with computer survey technology. *Science* 280: 867–73.
- (2) Lind, L., Schober, M., Conrad, F., and Reichert, H. (2013). Why do survey respondents disclose more when computers ask the questions? *Public Opinion Quarterly* 77: 888-935.

### **Week 7 – September 27 (Assignment 1 due)**

#### **Topic:**

Web surveys, future of survey technologies

#### **Readings:**

- (1) Galesic, M. and Bosnjak, M. (2009). Effects of questionnaire length on participation and indicators of response quality in a web survey. *Public Opinion Quarterly* 72: 349–360.
- (2) Tourangeau, R., Maitland, A. Rivero, G., Sun, H., Williams, D. & Yan, Ting. (2017). Web surveys by smartphone and tablets: Effects on survey responses. *Public Opinion Quarterly* 81: 892-929.

### **Week 8 – October 4 (Assignment 2 posted)**

#### **Topics:**

Respondent selection procedures, proxy reporters

#### **Readings:**

- (1) Gaziano, C. (2005). Comparative analysis of within-household respondent selection techniques. *Public Opinion Quarterly* 69: 124-157.
- (2) Thomsen, I. and Villund, O. (2011). Using register data to evaluate the effects of proxy interviews in the Norwegian Labour Force Survey. *Journal of Official Statistics* 27: 87-98.

### **Week 9 – October 11**

#### **Topics:**

Interviewer effects: Coverage, Nonresponse & Measurement Error

#### **Readings:**

- (1) West, B. and Blom, A. (2017). Explaining interviewer effects: A research synthesis. *Journal of Survey Statistics and Methodology* 5: 175–211.

- (2) Jäckle, A., Lynn, P., Sinibaldi, J., and Tipping, S. (2013). The effect of interviewer experience, attitudes, personality and skills on respondent co-operation with face-to-face surveys. *Survey Research Methods* 7: 1-15.

### **Week 10 – October 18 (Assignment 2 due)**

#### **Topics:**

Interviewer quality control, interviewing techniques

#### **Readings:**

- (1) Li, J., Brick, M., Tran, B., and Singer, P. (2011) Using statistical models for sample design of a reinterview program. *Journal of Official Statistics* 27: 433-450.
- (2) Conrad, F., and Schober, M. (2000). Clarifying question meaning in a household telephone survey." *Public Opinion Quarterly* 64: 1-28.

### **Week 11 – October 25**

#### **Topics:**

Nonresponse definition, trends, and consequences

#### **Readings:**

- (1) Peytchev, A. (2013). Consequences of Survey Nonresponse. *The ANNALS of the American Academy of Political and Social Science* 2013 645: 88-111.
- (2) Williams, D., and Brick, M. (2018). Trends in U.S. face-to-face household survey nonresponse and level of effort. *Journal of Survey Statistics and Methodology* 6: 186–211. doi: 10.1093/jssam/smx019.

### **Week 12 – November 1 (Assignment 3 posted)**

#### **Topics:**

Nonresponse theories, actions, and assessment

#### **Readings:**

- (1) Groves, R. (2006). Nonresponse rates and nonresponse bias in household surveys. *Public Opinion Quarterly* 70: 646–675 (special issue).
- (2) Brick, J.M. and Tourangeau, R. (2017). Responsive survey designs for reducing nonresponse bias. *Journal of Official Statistics*, 33: 735–752

### **Week 13 – November 8**

#### **Topic:**

Longitudinal surveys

#### **Readings:**

- (1) Lynn, P. (2013). Alternative sequential mixed-mode designs: Effects on attrition rates, attrition bias, and costs. *Journal of Survey Statistics and Methodology* 1: 183–205.
- (2) Halpern-Manners, A., Warren, J., and Torche, F. (2014). Panel conditioning in a longitudinal survey of illicit behaviors. *Public Opinion Quarterly* 78: 565–590.

**Week 14 – November 15 (Assignment 3 due; Final Assignment posted)**

**Topic:**

Surveys of organizations

**Readings:**

- (1) Hedlin, D., Lindkvist, H., Bäckström, H., and Erikson, J. (2008). An experiment on perceived survey response burden among businesses. *Journal of Official Statistics* 24: 301-318.
- (2) Earp, M., Mitchell, M., McCarthy, J. and Kreuter, F. (2014). Modeling nonresponse in establishment surveys: Using an ensemble tree model to create nonresponse propensity scores and detect potential bias in an agricultural survey. *Journal of Official Statistics* 30: 701-719.

**Week 15 – November 22 (NO CLASS, Thanksgiving week)**

**Friday, December 2 – Final Assignments due by midnight**