20 Ways to Test Your Survey Questions

Summer Institute in Survey Research Techniques, 2018

Instructor: Dr. Pamela Campanelli

Time: 11 – 15 June, 1.00 to 4.00 pm

Location: To be determined

Office and Phone: To be determined

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Course Description

This course aims to introduce the broad range of techniques currently available to test and improve survey questionnaires. It has two strands: the first focusing on the theoretical and experimental literature related to question testing; the second, a "hands-on" approach, focusing on how to implement each method. Question testing methods covered include standard field pretesting, expert review, cognitive forms appraisal, Quaid (Question Understanding Aid), SQP (Survey Quality Predictor), interviewer rating form, respondent debriefing and vignettes, web probing, classical behavior coding, sequence-based and reduced versions of behaviour coding, cognitive interviewing and variations, focus groups for testing survey questions, split ballot experiments and an introduction to analysis-based methods such as item response theory, latent class analysis, and multi-trait-multi-method experiments. Discussion will focus on the strengths and weaknesses of each individual method as well as proposals for multi-method question evaluation strategies.

Evaluation

Grading for the course will be based on a two-part assignment due 2 weeks after the last day of class. The first part will involve writing about your practical insights from the "hands on" component of the course. The second component will tap your knowledge of the required readings. (Please submit your assignments on time, as points will be removed for late assignments.)

Prerequisite

There is no prerequisite, but some knowledge of questionnaire design is of value.

Course Website

The course website will be on CANVAS which can be accessed through (https://ctools.umich.edu/gateway/). The website contains assigned articles (for some you need the password 'surv630cam') and pdfs of the course slides. It is maintained by Dr. Pamela Campanelli [dr.pamela.campanelli@thesurveycoach.com]. Once the website is "published/open" . . .

- Students using a UMich e-mail can access the site instantly with their UMich e-mail address and password.
- Visiting students will be given a UMich username and password upon arrival. This is an important account as all details about the Summer Institute will come through this email. BE SURE TO GO TO THE SUMMER INSTITUTE OFFICES ON YOUR FIRST DAY TO GET THIS.

- It is also possible for Visiting students and UMich students who wish to use a non-UMich e-mail (in addition to their UMich one) to access the course website by getting a Friend Account. A UMich Friend Account, a special kind of computer account that is used to give non-University of Michigan members access to the general University of Michigan web environment. You can use any e-mail address you want for your Friend Account, but this same e-mail address has to be entered into the CANVAS system by Dr. Campanelli in order for you to access the course materials.

- Steps to accessing the website with a non-UMich e-mail:

    1. Tell Dr. Campanelli your preferred e-mail address so this can be put in CANVAS.
    2. When you receive a reply from her that it is in, go to https://weblogin.umich.edu/friend/ and do what it says to create a Friend Account. This is just a few simple steps.
    3. You can then go to https://ctools.umich.edu/portal, choose CANVAS and "login in" using your Friend Account username and password.
    4. This will then show you a tab for the class (and any other classes where that e-mail has been entered in CANVAS)
    5. Be sure to contact Dr. Campanelli if you have any problems.

Course Schedule

Day	Topic	Suggested Reading
11 June	• Introductions and overview of the course • Traditional testing methods and overview of innovative ones • Expert review • Systematic forms appraisal with review of 4 cognitive steps • Workshop in systematic forms appraisal	• Converse and Presser (1986)-Chapter 3, Pages 65-75 • Cannell, Oksenberg, Kalton, Bischoping, Fowler, (1989) – Pages 1-4, 15-17 • Scheuren (2005), Chapter 7
12 June	• Workshop (continued) • Quaid (Question Understanding Aid) and SQP (Survey Quality Predictor) • Interviewer rating form and other interviewer guidelines for testing • Preparing for the workshop on standard field test • **Workshop** in standard field test • How to do respondent debriefing • **Workshop** in respondent debriefing • Web Probing • Vignettes (including CUB models for choosing vignettes)	• Snijkers (2002) Chapter 4-Pages 63-96 • Martin (2006)
13 June	• Vignettes (continued) • How to do classical behaviour coding Classical behaviour coding (continued) • **Workshop** in behaviour coding • Sequence-based approaches and reduced versions of behaviour coding • How to do cognitive interviewing • **Workshop** in cognitive interviewing	• Fowler and Cannell (1996) • Van der Zouwen and Smit (2004) • Willis (1999)

14 June	• 3-step test interview and other variations/uses of cognitive interviewing • Usability testing • How to do focus groups for question testing and variations • How to do card sorts and with focus group **Workshop** • Split ballot experiments / variation with discrete choice experiments • Introduction to analysis-based methods for testing survey questions: latent class analysis and multi-trait-multi-method experiments (used to generate the SQP). Item Response Theory in Appendix, but may be discussed, time permitting • Paradata	• Van der Veer, Hak and Jansen (2002) • Fowler (2004)
15 June	• Reliability and validity • Record check studies • Comparison of different techniques discussion • Highlights of the advantages and disadvantages of the various techniques • How do we decide what techniques to use? With recommendations for multi-method testing procedures	• Presser and Blair (1994)

Required Readings

Converse, J., and Presser, S. (1986), The Tools at Hand, Chapter 3 in *Survey Questions: Handcrafting the Standardized Questionnaire*, Sage Series No 63, Thousand Oaks, CA: Sage Publications, Inc. – Pages 65-75.

Cannell, C., Oksenberg, L., Kalton, G., Bischoping, K., Fowler, F.J. (1989), *New Techniques for Presting Survey Questions*, Final Report August, 1989) – Pages 1-4, 15-17.

Fowler, F. J. Jr. (2004), The case for more split-sample experiments in developing survey instruments, in Presser et al (eds), *Methods for Testing and Evaluating Survey Questionnaires*, Hoboken, NJ: Wiley.

Fowler, F. Jr., and Cannell, C.F. (1996), Using Behavioral Coding to Identify Cognitive Problems with Survey Questions, in: N. Schwarz and S. Sudman, S.(eds), *Answering Questions: Methodology for Determining Cognitive and Communicative Processes in Survey Research*, San Francisco: Jossey-Bass. – Pages 15-36.

Martin, E. (2006), Vignettes and Respondent Debriefing for Questionnaire Design and Evaluation, Research Report Series, Survey Methodology #2006-8, Washington, D.C.: U.S. Bureau of the Census.

Scheuren, F. (ed), What is a Survey, Chapter 7 How to Conduct Pretesting, American Statistical Association (Available on https://www.whatisasurvey.info/overview.htm)

Snijkers, G. (2002), Cognitive Laboratory Methods: Current Best Practice, Chapter 4 in *Cognitive Laboratory Experiences on Pre-testing Computerised Questionnaires and Data Quality*, Heerlen: Statistics Netherlands, pages 63-96.

Presser, S., and Blair, J. (1994), Survey Pretesting: Do Different Methods Produce Different Results?, *Sociological Methodology*, 73-104.

Van der Veer, K., Hak, T., and Jansen, H. (2002), The Three-Step Test-Interview (TSTI): An Observation Instrument for Pre-testing Self-Completion Questionnaires, Paper presented at the International Conference on Questionnaire Development, Evaluation, and Testing Methods, Charleston, SC, November 2002.

Van der Zouwen, J and Smit, J.H. (2004), Evaluation survey questions by analysing patterms of behaviour codes and question-answer sequences: A diagnostic approach, in Presser et al (eds), *Methods for Testing and Evaluating Survey Questionnaires*, Hoboken, NJ: Wiley.

Willis, G. (1999), Cognitive Interviewing: A "How To" Guide, Research Triangle Institute.

Other Useful Readings (ON CANVAS)

Blair, J. and Conrad, F. (2011), Sample Size for Cognitive Interview Pretesting, *Public Opinion Quarterly*, 75(4) 636–658.

Other Useful Readings (NOT ON CANVAS)

Biemer, P. (2004), Modeling Measurement Error to Identify Flawed Questions, in Presser et al (eds), *Methods for Testing and Evaluating Survey Questionnaires*, Hoboken, NJ: Wiley.

Dijkstra, W. and Ongena, Y. (2006), Question-Answer sequences in Survey Interviews, *Quality & Quantity*, 40(6), 983-1011.

Fowler, F. Jr. (2011), Coding the Behavior of Interviewers and Respondents to Evaluate Survey Questions, in: J. Madans, K. Miller, A. Maitland, and G. Willis (eds), *Question Evaluation Methods*, Hoboken, NJ: Wiley, pages 7-21.

Miller, K. (2011), Cognitive Interviewing, Chapter 5 in J. Madans, K. Miller, A. Maitland, and G. Willis (eds), *Question Evaluation Methods*, Hoboken, NJ: Wiley, pages 51-75.

Reeve, B. and Mâsse, L. (2004), Item Response Theory Modeling for Questionnaire Evaluation, in Presser et al (eds), *Methods for Testing and Evaluating Survey Questionnaires*, Hoboken, NJ: Wiley.

Saris, W., van der Veld, W. and Gallhofer, I. (2004), Development and Improvement of Questionnaire Using Predictions of Reliability and Validity, in Presser et al (eds), *Methods for Testing and Evaluating Survey Questionnaires*, Hoboken, NJ: Wiley.

Willis, G. (2005), *Cognitive Interviewing: A Tool for Improving Questionnaire Design*, Thousand Oaks, CA: Sage.

Willis, G. (2011), Response 1 to Miller's Chapter: Cognitive Interviewing, Chapter 6 in J. Madans, K. Miller, A. Maitland, and G. Willis (eds), *Question Evaluation Methods*, Hoboken, NJ: Wiley, pages 77-91.