



Questionnaire Design – Tentative Syllabus Summer 2010

Instructors:

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A. Objective

The objective of this course is to introduce the scientific literature on the design, testing, and evaluation of survey questionnaires. The course will also provide hands on applications of the methods discussed in class. This will include some computing component. Students will be expected to draw on the material covered in the lectures and readings in conducting a series of exercises in the development of a questionnaire.

B. Course Assignments and Requirements

Students are expected to complete:

- 5 homework assignments (worth 10% each)
- Study presentations (worth 20%)
- Quizzes and final exam (worth 30%)

The exercises will be short written assignments, probably not more than a couple of pages. The assignments need to be typed, and handed in at the beginning of class on the due date.

For all students and classes, I am looking for contributions to the class discussion that demonstrates familiarity with the readings. Familiarity with the readings and the class discussion will be tested in short quizzes each Friday throughout the course (except for the exam date).

C. Course policies:

Late assignments will be marked down by 5% for each day the assignment is late.

D. Office hours

After class or by appointment.

E. Readings

How to access the class site:

- U. of Michigan students just need to log on to c-tools (<https://ctools.umich.edu/portal>) with their university account password to get access.
- U. of Maryland students will need to get a University of Michigan's Friend Account, a special kind of computer account that is used to give non-University of Michigan members access to some University of Michigan web resources.
- Steps:
 - You will receive an email informing you that you have been added to the c-tools website. This message will be sent to the email address where you generally receive University of Maryland communications.
 - If you do not have a friend account, go to <https://friend.weblogin.umich.edu/friend/> and follow the instructions to create one. This is just a few simple steps. You can then go to the c-tools site <https://ctools.umich.edu/portal>, click on “login in” in the upper right-hand corner, and use your Friend Account login and password.
 - Note that if you have previously created a friend account with the same email address, you will get an error message stating that the account already exists. If you remember the password to the account, go to <https://ctools.umich.edu/portal> to log in. You can also choose to reset the password.
 - On the site, look for readings under “Resources.”
 - For some of the readings, a password is needed. This password is always included in the filename, when applicable.

Required textbooks are

1. Fowler, F.J. Jr., (1995), *Improving Survey Questions: Design and Evaluation*, Applied Social Research Methods Series Volume 38, Thousand Oaks, CA: SAGE Publications. (required to buy)
2. Tourangeau, R., L. J. Rips, and K. Rasinski. 2000. *The Psychology of Survey Response*. Cambridge, England: Cambridge University Press

We will use a series of articles available through c-tools as well as chapters from the following books:

3. Converse, J., and Presser, S. (1986), *Survey Questions: Handcrafting the Standardized Questionnaire*, Sage Series No 63, Thousand Oaks, CA: Sage Publications, Inc.
4. DeVellis, R.F. (2003), *Scale Development: Theory and Applications*, 2nd Edition, Thousand Oaks, CA: Sage.

5. Willis, G. (2005), *Cognitive Interviewing: A tool for Improving Questionnaire Design*, Sage. (recommended to buy)
6. Saris, W.E., and Gallhofer, I.N. (2007): *Design, Evaluation, and Analysis of Questionnaires for Survey Research*. Wiley.
7. Sudman, S., and Bradburn N. (1982) *Asking Questions : A Practical Guide to Questionnaire Design (Jossey Bass Social and Behavioral Science Series – alternatively e-book: Sudman, S., and Bradburn N. (2004), Asking Questions: The Definitive Guide to Questionnaire Design -- For Market Research, Political Polls, and Social and Health Questionnaires*, Wiley

Other Recommended Books

- Biemer, P. P., R. M. Groves, L. E. Lyberg, N. A. Mathiowetz, and S. Sudman. (eds.). 1991. *Measurement Errors in Surveys*. New York: Wiley.
- Couper, M. P., 2008. *Designing Effective Web Surveys*. New York: Wiley.
- Fowler, F. J., and T. Mangione. 1990. *Standardized Survey Interviewing: Minimizing Interviewer-Related Error*. Newbury Park: Sage.
- Lyberg, L., et al. (eds.). 1997. *Survey Measurement and Process Quality*. New York: Wiley.
- Maynard, D. W., et al. (eds.). 2002. *Standardization and Tacit Knowledge: Interaction and Practice in the Survey Interview*. New York: Wiley.
- Presser, S., et al. (eds.). 2004. *Methods for Testing and Evaluating Survey Questionnaires*. Hoboken, New York: Wiley.
- Schuman, H., and S. Presser. 1981. *Questions and Answers in Attitude Surveys*. New York: Academic Press.
- Stone, A. A., et al. (eds.) 2000. *The Science of Self-Report: Implications for Research and Practice*. Mahwah, New Jersey: Lawrence Erlbaum.
- Tanur, J. M., (ed.) 1992. *Questions about Questions*. New York: Russell Sage.

Outline (subject to change)

Date	Topic	Assignment
Tuesday, June 8 FK	Introduction	HW 1 distributed
Wednesday, June 9 FK	General principles	
Thursday, June 10 FK	Facts and Quasi-Facts	HW1 due HW2 distributed
Friday, June 11 FK	Recall and Memory	
Monday, June 14 FK	Sensitive Questions	HW1 returned HW2 due HW3 distributed
Tuesday, June 15 JB	Attitude questions	
Wednesday, June 16 JB	Response Scales	
Thursday, June 17 FK	Multi-item scales	HW2 returned
Friday, June 18 FK	Multi-item scales	HW3 due HW4 distributed
Monday, June 21 JB	Student Presentations	
Tuesday, June 22 JB	Student Presentations	
Wednesday, June 23 FK	Pre-testing	HW3 returned
Thursday, June 24 FK	Pre-testing	
Friday, June 25 FK	Layout, order, mode	
Monday, June 28 FK	Layout, order, mode	HW4 due HW5 distributed
Tuesday, June 29 FK	Panel studies	
Wednesday, June 30 FK	Cross cultural/ translation	HW4 returned HW5 due
Thursday, July 1 JB	Review	
Friday, July 2 JB	Exam	HW5 returned

Outline and Reading Schedule (subject to change)

June 8: Introduction – From Research Question to Questionnaire Instrument Development - Writing survey questionnaires

What is measurement error? What route to go when designing a questionnaire? What does standardization mean?

Fowler, F. J. 1995. Chapter 1

Schnell, R. and F. Kreuter. (2005). Separating Interviewer and Sampling-Point Effects. *Journal of Official Statistics*, 21: 389-410.

Beatty, P. (1995), Understanding the Standardized/Non-Standardized Interviewing Controversy, *Journal of Official Statistics*, 11(2), 147-160.

June 9: Writing Survey Questions: General Principles

How to translate concepts into question? How does knowing about the response process affect questions we write? What is a good logical flow for a questionnaire? Checklist for first draft

Converse, J., and Presser, S. (1986), pages 9-51

Schaeffer, N.C., and Presser, S. (2003): "The Science of Asking Questions" *Annual Review of Sociology* v.29 (2003): 65-88.

Krosnick, J. A. & Presser, S. (in press). Questionnaire design. In J. D. Wright & P.V. Marsden (Eds.), *Handbook of Survey Research (Second Edition)*. San Diego, CA: Elsevier.

Optional:

Fowler, F.J., Jr. (1992), How Unclear Terms Affect Survey Data, *Public Opinion Quarterly*, 56(2), 218-231.

Tourangeau R. & Bradburn N. (in press). The Psychology of Survey Response. In J. D. Wright & P.V. Marsden (Eds.), *Handbook of Survey Research (Second Edition)*. San Diego, CA: Elsevier.

Belson, W. (1981), *The Design and Understanding of Survey Questions*, Aldershot, Hants: Gower. Pages 350-397.

June 10: Facts and Quasi-Facts

- Martin, E. T., DeMaio, and P. Campanelli. 1990. Context Effects for Census Measures of Race and Hispanic Origin, *Public Opinion Quarterly*, 54: 551-566.
- Galesic, M., and Roger Tourangeau. 2007. "What is sexual harassment? It depends on who asks! Framing effects on survey responses." *Applied Cognitive Psychology*, 21:189-202.
- Smith, T. (1984), The Subjectivity of Ethnicity, in C.F. Turner and E. Martin, *Surveying Subjective Phenomena, Volume 2*, New York: Russell Sage Foundation. - Pages 117-128.
- Bailar, B.A. and Rothwell, N.D. (1984), Measuring Employment and Unemployment, Smith, T. (1984), The Subjectivity of Ethnicity, in C.F. Turner and E. Martin, *Surveying Subjective Phenomena, Volume 2*, New York: Russell Sage Foundation. - Pages 129-142.

June 11: Recall and Memory

- Tourangeau, R. 2000. "Remembering What Happened: Memory Errors and Survey Reports." pp. 29-48 in Arthur A. Stone et al. (eds.). *The Science of Self-Report: Implications for Research and Practice*, New Jersey: Lawrence Erlbaum.
- Huttenlocher, J., L.V. Hedges, and N.M. Bradburn. 1990. "Reports of elapsed time: bounding and rounding processes in estimation". *Journal of Experimental Psychology Learning Memory and Cognition*, 16: 196-213.

June 14: Sensitive Questions

- Fowler, F.J. Jr., (1995): Chapter 2
- Sudman, S., and Bradburn N. (1982): Chapter 3
- Tourangeau, Roger, and T. Yan. (2007). "Sensitive questions in surveys." *Psychological Bulletin*, 133(5):859-883.
- Kreuter F, Presser S, Tourangeau R (2008) Social Desirability Bias in CATI, IVR, and Web Surveys: The Effects of Mode and Question Sensitivity, *Public Opinion Quarterly* (Vol. 5, Special issue on Web Surveys).

Optional:

- Droitcour, J., Caspar, R.A., Hubbard, M.L., Parsley, T.L., Visscher, W., Ezzati, T.M. (1991), The Item Count Technique as A Method Of Indirect Questioning: A Review of Its Development and a Case Study Application, in: P.P. Biemer, R.M. Groves, L.E. Lyberg, N.A. Mathiowetz, and S.

- Sudman (eds), *Measurement Errors in Surveys*, New York: John Wiley and Sons, Inc. – Chapter 11, pages 185-210
- Campanelli, P., Dielman, T., and Shope, J. (1987), Validity of Adolescents' Self-Reports of Alcohol Use and Misuse Using a Bogus Pipeline Procedure, *Adolescence*, XXII(85), pages 7-11 only.
- Lensvelt-Mulders, G., Hox, J., van der Heijden, P., Maas C. (2005), Meta-Analysis of Randomized Response Research Thirty-Five Years of Validation *Sociological Methods & Research*, Vol. 33, No. 3, 319-348.

June 15 - Questions about Subjective Things (Attitudes)

What is an Attitude, Belief, Value? What is Acquiescence Bias? Open vs. Closed Questions?

- Fowler, F.J. Jr., (1995): Chapter 3
- Converse and Presser (1986) – pages 35-39.
- Schwarz, N. (2007). Attitude construction: Evaluation in context. *Social Cognition*, 25, 638-656.
- Schaeffer, E. M., Krosnick, J. A., Langer, G. E., & Merkle, D. M. (2005). Comparing the quality of data obtained by minimally balanced and fully balanced attitude questions. *Public Opinion Quarterly*, 69, 417-428.

Optional

- Schuman, H. and Ludwig, J. (1983), The Norm of Even-Handedness in Surveys as in Life, *American Sociological Review*, 48:112-120.
- Kalton, G. and Schuman, H. (1982), The Effect of the Question on Survey Responses: A Review, *The Journal of the Royal Statistical Society, Series A (General)*, 145(1), 42-57.
- Schuman, H. and Presser, S. (1981), *Questions and Answers in Attitude Surveys: Experiments on Question Form, Wording, and Context*. New York: Academic Press. – Chapter 3.

June 16 - Response Categories and Response Scales

How many scale points? Rating vs. Ranking? What is satisficing? Should you give a no opinion filter?

- Holbrook, A.L., J.A. Krosnick, D. Moore, and Roger Tourangeau. 2007. "Response order effects in dichotomous categorical questions presented orally - The impact of question and respondent attributes." *Public Opinion Quarterly*, 71(3):325-348.

- Galesic, M., Tourangeau R., Couper M.P., Conrad, F. (2008). Eye-Tracking Data: New Insights on Response Order Effects and Other Cognitive Shortcuts in Survey Responding. *Public Opinion Quarterly*, 72, 5, 892-913
- Malhotra, N., Krosnick, J. A., and Thomas, R. K. (in press). Optimal design of branching questions to measure bipolar constructs. *Public Opinion Quarterly*.

Optional

- Alwin, D.F. and Krosnick, J.A. (1985), The Measurement of Values in Surveys: A Comparison of Ratings and Rankings, *Public Opinion Quarterly*, 49, 535-552.
- Krosnick, J. A., Miller, J. M., & Tichy, M. P. (2004). An unrecognized need for ballot reform: Effects of candidate name order. In A. N. Crigler, M. R. Just, and E. J. McCaffery (Eds.), *Rethinking the vote: The politics and prospects of American election reform*. New York, NY: Oxford University Press.

June 17+18: Multi-Item Scales

- Fowler, F.J. Jr., (1995): Chapter 6
- DeVellis, R.F. (2003), *Scale Development: Theory and Applications*, 2nd Edition, Thousand Oaks, CA: Sage.
- Biemer, P.P., Wiesen, C. (2002): Measurement error evaluation of self-reported drug use: a latent class analysis of the US National Household Survey on Drug Abuse, *J. R. Statist. Soc. A* 165, Part 1, pp. 97–119

June 21+22: Student Presentations

June 23 + 24: Pretesting

- Fowler, F.J. Jr., (1995): Chapter 5.
- Willis, G. (2005), *Cognitive Interviewing: A tool for Improving Questionnaire Design*, Sage. Chapter 1-2
- Conrad, F. and Blair, J. (2009): Sources of Error in Cognitive Interviews. *Public Opinion Quarterly*, 73, 1, 32-55
- Forsyth, B.H., and Lessler, J.T. (1991), *Cognitive Laboratory Methods: A Taxonomy*, Chapter 20 in Biemer, et al (eds), *Measurement Errors in Surveys*, New York: Wiley. – Chapter 20, pages 393-418.
- Oksenberg, L., Cannell, C. and Kalton, G. (1991), New Strategies for Pretesting Survey Questions, *Journal of Official Statistics*, 7(3), 349-365.
- Saris, W.E., and Gallhofer, I.N. (2007): *Design, Evaluation, and Analysis of Questionnaires for Survey Research*. Wiley. Chapter 10 and 13.

Additional Sources for Testing Survey Questionnaires

- Hunter, J., and DeMaio, T. (2003): Results & Recommendations from the Cognitive Pretesting of the 2003 Public School Questionnaire from the Schools and Staffing Survey (example on how a report can be written) <http://www.census.gov/srd/papers/pdf/ssm2003-16.pdf>
- DeMaio, T. and Landreth, A. (2004), Do Different Cognitive Interview Techniques Produce Different Results? in Presser, et. al. (Eds.), *Methods for Testing and Evaluating Survey Questionnaires*, New York: Wiley.
- Forsyth, B., Rothgeb, J., and Willis, G. (2004), Does Question Pretesting Make a Difference? An Empirical Test Using a Field Survey Experiment, in Presser, et. al. (Eds.), *Methods for Testing and Evaluating Survey Questionnaires*, New York: Wiley.
- Hansen, S. and Couper, M. (2004), Usability Testing as a Means of Evaluating Computer Assisted Survey Instruments, in Presser, et. al. (Eds.), *Methods for Testing and Evaluating Survey Questionnaires*, New York: Wiley.
- Presser S., and Blair, J. (1994), Survey Pretesting: Do Different Methods Produce Different Results? *Sociological Methodology*.
- Willis, G. (2004), Cognitive Interviewing Revisited: A Useful Technique, in Theory? in Presser, et. al. (Eds.), *Methods for Testing and Evaluating Survey Questionnaires*, New York: Wiley.
- Yan, T., and Tourangeau, Roger. (2008). "Fast times and easy questions: The effects of age, experience and question complexity on web survey response times." *Applied Cognitive Psychology*, 22(1):51-68.

June 25 + June 28: Layout and Mode dependencies

- Fowler, F.J. Jr., (1995): Chapter 4
- Sudman, S., and Bradburn N. (1982): Chapter 8-9, 11
- Couper, Mick P., Conrad, Frederick G., and Roger Tourangeau. 2007. "Visual context effects in web surveys." *Public Opinion Quarterly*, 71(4):623-634.
- Redline, C. and Dillman, D. (2002), The Influence of Alternative Visual Designs on Respondents' Performance with Branching Instructions in Self-Administered Questionnaires, in R. Groves, D. Dillman, J. Eltinge, and R. Little (eds), *Survey Nonresponse*, New York, Wiley. – Chapter 12, pages 179-193

Optional

- Dillman, D. (2000), *Mail and Internet Surveys: The Tailored Design Method*, New York: Wiley. – Chapter 3, pages 79-140; chapter 11.
- House, C. and Nicholls, W. (1988), "Questionnaire Design for CATI" chapter 26 in R. Groves et al., *Telephone Survey Methodology*. Wiley: 1988.

- Jenkins, C. and Dillman, D. (1997), Towards a theory of self-administered questionnaire design. In L.Lyberg, P.Biemer, M.Collins, E.DeLeeuw, C.Dippo, N.Schwarz, D.Trewin (eds), *Survey Measurement and Process Quality*, New York: John Wiley and Sons. – Chapter 7, pages 165-196.
- Suchman, L. and Jordan, B. (1990), "Interactional troubles in face-to-face survey interviews," *Journal of the American Statistical Association*, v85: 232-241.
- Schaeffer, N. (1991), "Conversation with a Purpose--or Conversation? Interaction in the Standardized Interview," Ch. 19 in Biemer et al., *Measurement Errors in Surveys*, Wiley
- Hansen, S.E., and Couper, M. (2004). *Usability Testing To Evaluate Computer-Assisted Instruments*, in *Methods for Testing and Evaluating Survey Questionnaires*. Hoboken, NY: Wiley. Pages 337-360

June 29: Questionnaires in Panel Surveys – Special Question Types

- Beaule, A., and Leissou, E., and Lui, Y. (2007). Experiences using an Event History Calendar in the Panel Study of Income Dynamics. *Panel Study of Income Dynamics. Technical Paper Series. 07-02.*
- Belli, R.F., and Smith L.M., and Andreski, P.M., and Agrawal, S. (2007). Methodological Comparisons Between CATI Event History Calendar and Standardized Conventional Questionnaire Instruments, 71, 4, 603-622.
- Pyy-Martikainen, M., and Rendtel, U. (2009). Measurement Errors in Retrospective Reports of Event Histories. A Validation Survey with Finnish Register Data. *Survey Research Methods*, 3,3, 139-155.
- Toepoel, Vera, and Das, Marcel, and van Soest, Arthur (2009). Relating Question Type to Panel Conditioning: Comparing Trained and Fresh Respondents. *Survey Research Methods*, 3, 2, 73-80.

June 30: Cross Cultural Surveys, Translation and Documentation

- Hopkins, D.J., and King, G. (2010). Improving Anchoring Vignettes. *Designing Surveys to Correct Interpersonal Incomparability*, *Public Opinion Quarterly* Advance Access, March 24, 2010.
- Jaekle, A. (2008). Dependent Interviewing: Effects on Respondent Burden and Efficiency of Data Collection. *Journal of Official Statistics*, 24, 3, 441-430.
- Kleiner, Brian, and Pan, Yuling, and Bouic, Jerelyn (2009). The Impact of Instructions on Survey Translation: An Experimental Study, 3, 3, 113-122

July 1: Review

July 2: Final Exam

Additional Sources

- Belson, W. A. 1986. *Validity in Survey Research*. Aldershot, England: Gower.
- Biderman, A.D., and Cantor, D. 1984. A longitudinal analysis of bounding, respondent conditioning and mobility as sources of panel bias in the National Crime Survey. *Proceedings of the Survey Methodology Section of the American Statistical Association*, pp. 708-713.
- Bradburn, N M., S. Sudman, and associates. 1979. *Improving Interview Method and Questionnaire Design*. San Francisco: Jossey-Bass.
- Briggs, C. L. 1986. *Learning How to Ask*. New York: Cambridge University Press.
- Dillman, D. A. 1977. *Mail and Telephone Data Collection Methods*. NY: Wiley Interscience.
- Heath, A. and Martin, J. (1997), Why Are There so Few Formal Measuring Instruments in Social and Political Research? in L. Lyberg, P. Biemer, M. Collins, E. de Leeuw, C. Dippo, N Schwarz, and D. Trewin (eds), *Survey Measurement and Process Quality*, New York: Wiley.
- Jones, E.F. and J.D. Forrest 1992. "Underreporting of abortion in surveys of U.S. women: 1976 to 1988." *Demography*, 29, 113-126.
- Lessler J.T. and J. M. O'Reilly 1997. "Mode of Interview and Reporting of Sensitive Issues: Design and Implementation of Audio Computer-Assisted Self-Interviewing." In Harrison, Hughes (ed.) *The Validity of Self-Reported Drug Use: Improving the Accuracy of Survey Estimates*, NIDA Research Monograph 167.
- Payne, S. 1980. *The Art of Asking Questions*. Princeton, N.J.: Princeton University.
- Means, B., Nigam, A., Zarrow et al. 1989 Autobiographical memory for health-related events. *Vital Health Statistics* 6(2).
- Saris, W. E. 1988. *Variation in Response Functions: A Source of Measurement Error in Attitude Research*. Amsterdam: Sociometric Research Foundation
- Schwarz, N. and S. Sudman (eds.). 1994. *Autobiographical Memory and the Validity of Retrospective Reports*. New York: Springer Verlag.
- Sudman, S., and N. M. Bradburn. 1982. *Asking Questions: A Practical Guide to Questionnaire Design*. San Francisco: Jossey-Bass.
- Tourangeau, R., Rusingki, K., Jobe, J., Smith, T.W. and W.F. Pratt (1997). "Sources of Error in a Survey on Sexual Behavior." *Journal of Official Statistics*. 12:341-365.
- Turner, A.G. 1981. "The San Jose Recall Study." pp. 22-27 in Lehnen, R.G. and W.G. Skogan, *The National Crime Survey: Working Papers, NCJ-75374*. Bureau of Justice Statistics, U.S. Department of Justice.
- Turner, C. F. and E. Martin (eds.) 1984. *Surveying Subjective Phenomena*. New York: Russell Sage.