PRACTICAL TOOLS FOR NONRESPONSE BIAS STUDIES

A one-day short course sponsored by the Joint Program in Survey Methodology

November 12, 2019
Presented at RTI International, DC.

COURSE OBJECTIVES
This course is designed to help in addressing the OMB guidelines for conducting nonresponse bias studies when response rates in surveys are less than 80 percent or there is reason to suspect that estimates are biased from nonresponse. Practical tools are described and examples are used to illustrate methods that can be used to conduct these studies. The advantages and disadvantages of these methods are presented, and the value of having multiple approaches is highlighted. The need to devise strategies for nonresponse and for its analysis in the planning stage, prior to completing the survey are emphasized.

An important component of the course will be the use specialized software for calculations. We emphasize R but will also include some examples in SAS. Sample size calculations can be done using the R PracTools package written by the instructors or with Microsoft Excel, which will be used for mathematical programming. Survey weights can be computed with the R survey package for many designs and estimators. The survey package will also compute variances using linearization and replication methods.

WHO SHOULD ATTEND
Survey researchers in government, business and academia who want to learn methods for diagnosing the risk of nonresponse bias in important survey estimates. Researchers who are conducting federally funded research subject to the OMB requirements for planning for a nonresponse bias study. Researchers who collect paradata or data documenting the survey recruitment process and want to learn how to use these data for nonresponse bias analyses.

THE INSTRUCTORS

**JILL DEMATTEIS** In addition to her position on the faculty of the JPSM, Jill DeMatteis is an Associate Director of the Statistical Staff and a senior statistician at Westat. Her experience in survey statistics includes sample design and selection, imputation, and weighting and estimation for numerous surveys. Jill has undertaken methodological research to evaluate nonresponse bias, noncoverage bias, and measurement error; to assess the effects of different incentives offered to survey participants; and to compare different treatments for samples selected using address based sampling. Her current research interests include address based sampling and time-and-venue based sampling. Jill is a fellow of the American Statistical Association. She is currently serving as Chair of the Survey Research Methods Section of the ASA, and as Chair-Elect of the Government Statistics Section of the ASA.

**J. Michael Brick, Ph.D.**, is a Senior Vice President, Statistical Sciences and Research. He is a senior statistician and survey methodologist with more than 40 years of experience in sample design and estimation for large surveys, the theory and practice of address-based and telephone surveys, the techniques of quality management and survey quality control, nonresponse and bias evaluation, and survey methodology. Dr. Brick is a Fellow of the American Statistical Association (ASA) and is an elected Member of the International Statistical Institute. He is an Associate Editor of *Survey Methodology* and is on the Editorial Board of *Public Opinion Quarterly* and the *Journal of Survey Methodology and Statistics*. He has also co-authored *Advances in Telephone Survey Methodology*. 
Dr. Brick has served as President of the Washington Statistical Society and on the Executive Council of the American Association for Public Opinion Research. He chairs the Statistics Canada Advisory Committee on Statistical Methods, and was a member of the National Academy of Science Panel on Food Insecurity, and the ASA Advisory Committee for the U.S. Census Bureau. Dr. Brick is also a research professor in the Joint Program in Survey Methodology at the University of Maryland.

COURSE MATERIALS AND MEALS
Registrants will be provided with a course lecture notebook. JPSM group continental breakfasts, lunches and refreshments are included in the course fee.

TENTATIVE SCHEDULE

**Tuesday; November 12, 2019.**

7:30 - 8:30  Registrant Check-in and Continental Breakfast.
8:30 - 10:00  Introduction.
10:00 - 10:15  Morning break.
10:15 - 12:30  Study designs using external data.
12:30 - 1:30  Lunch.
1:30 - 3:00  Study designs using internal data.
3:00 - 3:15  Afternoon break.
3:15 - 4:30  Postsurvey adjustment analyses.
4:30 - 5:00  Summary.
5:00  Adjourn.