

JPSM Distinguished Lecture Series

Friday, April 13, 2007 3:30 – 5:00 pm 2205 Lefrak Hall, University of Maryland, College Park

Roderick J. Little
Wait! Should We Use the Survey Weights to Weight?

Abstract

A fundamental idea in survey sampling is to weight cases by the inverse of their probabilities of inclusion, when deriving survey inferences. The weight indicates the number of population units the included case represents, and thus can be seen as a fundamental feature of the design-based view of survey inference. Modelers, on the other hand, seem more ambivalent about weighting, and argue that (at least in some settings) weighting is unnecessary. I will discuss various perspectives and myths about survey weights. I then argue that, from my robust Bayesian perspective, weights are a key feature of the data that cannot be ignored, but weighting may not be the best way to use them.

Discussants for Professor Little's talk

John Eltinge, Bureau of Labor Statistics Richard Valliant, University of Michigan, JPSM

Dr. Little is Richard D. Remington Collegiate Professor and Chair of the Department of Biostatistics at the University of Michigan, where he is also Professor of Statistics and Research Professor in the Institute for Social Research. Prior to that, Little held faculty appointments at the University of California at Los Angeles and University of Chicago, an ASA/Census/NSF research fellowship at the U.S. Bureau of the Census, and non-academic positions at the United States Environmental Protection Agency and the World Fertility Survey. He was Coordinating and Applications Editor of the Journal of the American Statistical Association from 1992-1994. Actively interested in federal statistical issues such as census undercount, he has served as a member of the Committee on National Statistics and a number of other National Research Council committees. In 2005, he was awarded the American Statistical Association's Wilks Medal, and gave the President's Invited Address at the Joint Statistical Meetings. He has over 150 publications, notably on methods for the analysis of data with missing values and model-based survey inference, and the application of statistics to diverse scientific areas, including medicine, demography, economics, psychiatry, aging, and the environment.

Please join us for a reception afterwards in LeFrak Hall. Please RSVP to rjeapen@survey.