Unbiased variance estimates for multiple imputation in R

James L. Reilly

1. Department of Statistics, University of Auckland, Auckland, New Zealand
* Contact author: reilly@stat.auckland.ac.nz

Keywords: multiple imputation, estimating equations, variance estimation

A new R package implementing Robins and Wang's (2000) estimating equation approach to multiple imputation is presented. This produces unbiased variance estimates, even with misspecified models and disagreements between the imputer's and analyst's models.

Extensions to handle data from complex surveys, building on Lumley's (2004) survey package, will be discussed, along with an interface to the Zelig package (Imai, King and Lau; 2008).

References

