Makela, Susanna; Si, Yajuan; Gelman, Andrew
Statistical graphics for survey weights. (English) Zbl 1435.62049

Summary: Survey weights are used for correcting known differences between the sample and the population due to sampling design, nonresponse, undercoverage, and other factors. However, practical considerations often result in weights that are not constructed in a systematic fashion. Graphical methods can be useful in understanding complex survey weights and their relations with other variables in the dataset, particularly when little to no information on the construction of the weights is available. Graphical tools can also assist in diagnostics, including detection of outliers and extreme weights. We apply our methods to the Fragile Families and Child Wellbeing Study, an ongoing longitudinal survey.

MSC:
62D05 Sampling theory, sample surveys
62A09 Graphical methods

Keywords:
diagnostics; graphics; sample survey; sampling scheme

Full Text: DOI