

Multiple Imputation: Theory and Method

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Summary

In this review paper, we discuss the theoretical background of multiple imputation, describe how to build an imputation model and how to create proper imputations. We also present the rules for making repeated imputation inferences. Three widely used multiple imputation methods, the propensity score method, the predictive model method and the Markov chain Monte Carlo (MCMC) method, are presented and discussed.

Key words: Missing data; Incomplete data; Missingness mechanism; Multiple imputation.