Towards a standardized evaluation of multiple imputation routines

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Abstract

Developing new imputation methodology has become a very active field. Unfortunately, there is no consensus on how to perform simulation studies to evaluate the properties of imputation methods. In this paper I propose a move towards a standardized evaluation of imputation methods. To demonstrate the need for standardization, I highlight a set of potential pitfalls that bring forth a chain of potential problems in the objective assessment of the performance of imputation routines. This may lead to suboptimal use of multiple imputation in practice. Additionally, I suggest a course of action for simulating and evaluating missing data problems.

Introduction