# Non-convergence in iterative imputation

#### H.I. Oberman

### Abstract

Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Ut enim ad minim veniam, quis nostrud exercitation ullamco laboris nisi ut aliquip ex ea commodo consequat. Duis aute irure dolor in reprehenderit in voluptate velit esse cillum dolore eu fugiat nulla pariatur. Excepteur sint occaecat cupidatat non proident, sunt in culpa qui officia deserunt mollit anim id est laborum.

#### Introduction

- Theorethical background
- Research question

#### Methods

- Simulation design (ADEMP)
- Simulation checklist (Table 1)

#### Pseudo-code:

```
for (data geneneration conditions) {
generate complete data
for (amputation conditions) {
  ampute complete data
  for (imputation conditions) {
     impute incomplete data
    analyze imputed data
  }}}
```

#### Results

Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Ut enim ad minim veniam, quis nostrud exercitation ullamco laboris nisi ut aliquip ex ea commodo consequat. Duis aute irure dolor in reprehenderit in voluptate velit esse cillum dolore eu fugiat nulla pariatur. Excepteur sint occaecat cupidatat non proident, sunt in culpa qui officia deserunt mollit anim id est laborum.

#### Discussion

Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Ut enim ad minim veniam, quis nostrud exercitation ullamco laboris nisi ut aliquip ex

Table 1: Checklist for reporting on imputation methodology evaluations.

1	Simulation scope
	Aim
	Design (incl. pseudo-code or flow diagram)
	Number of simulation repetitions
2	Comparative truth
	Data-generating mechanism (model-based or design-based)
	Sampling variance
	Data characteristics (incl. multivariate relations and structures e.g. clustering)
	Estimand
3	Induced missingness
	Missingness mechanism (incl. type or functional form of the missing data model)
	Missingness pattern (incl. missingness proportion)
4	Applied methods
	Imputation methods (incl. parameters e.g. the number of imputations)
	Analytic methods (incl. calculation of standard errors e.g. pooling rules)
	Reference method (e.g. complete case analysis)
5	Imputation evaluation
	Imputation-generating process (e.g. algorithmic non-convergence)
	Imputation model fit (e.g. posterior predictive checks)
	Distributional characteristics (e.g. plausibility of imputed values)
6	Performance evaluation
	Statistical properties (e.g. confidence validity)
	Comparative performance (e.g. predictive accuracy)

ea commodo consequat. Duis aute irure dolor in reprehenderit in voluptate velit esse cillum dolore eu fugiat nulla pariatur. Excepteur sint occaecat cupidatat non proident, sunt in culpa qui officia deserunt mollit anim id est laborum.

## References