Research Report

Methodology and Statistics for the Behavioural, Biomedical and Social Sciences

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2019-09-19

ShinyMICE: an Evaluation Suite for Multiple Imputation

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Goals:

- find an answer to a research question in the field of Methods and Statistics

- get work experience in the field of Methods and Statistics

- a first step in writing a scientific paper: perform research and report the findings in a short research report

Grading:

- The amount of work done

- Work independency

- Clarity and logic of the research report (clear and correct formulations, a logical structure of sections and of paragraphs within sections, no typos or errors in grammar, and flow of sections, like key questions from literature or conclusions from results).

- Nice looking and consistent lay-out of the report (conciseness in presentation of tables, figures, and formulas (if any)).

- General comments

Format (either/or):

- It is written as a (mini) thesis, with an introduction, methods section, some results (i.e., preliminary analyses, or pilot simulations), and a discussion of results. The length of the research report should be maximally 2500 words of text (without references list and/or tables and figures). Please do not include appendices, and no more than 6 tables/figures. Table and Figure captions do not count towards the word limit. An abstract may be included, but is not necessary.

- It is the first 'half' of the thesis, i.e., there are no results included yet, but the report contains a full introduction including a literature review and a methods section that contains details about the data, instruments and/or statistical procedures. There is no (absolute) word limit but the length of the report should comply with recommendations/expectations of the proposed journal. Note that most journals have word limits or rather strong opinions on (too) lengthy manuscripts.

Introduction

- MI (and ad hoc solutions?)

Theoretical Background

- Terminology (MCAR, MAR, MNAR)

- Rubin's rules

- FCS vs. JM

Methods

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References