



## The R package "hmi" - a convenient tool for imputing missing values in hierarchical datasets

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Hierarchical data (e.g. students nested into schools or repeated measurements of individuals) are not spared from deficiencies like non-response or rounding. Accompanied by a short recapitulation of multilevel models and imputation strategies, I want to show what the impact of non-response on the analysis model might be and how the R package "hmi" tries to handle this problem.

"hmi" is a tool designed to conveniently impute hierarchical data. The user only has to give his data and analysis model into the function and it will figure out the type of the variables and what imputation routines are needed for those variables. The supported types are "classical" ones like continuous, binary, categorical etc. but also more special cases like zero-inflated data, rounded values and interval data. In the talk the handling of those variables will be presented and discussed.

A key part of the presentation is showing examples on how to run "hmi". This includes the most basic set up, optional parameters, the output itself and the further use of the output via pooling the parameters of interest.