Simulation studies are a critical aspect of ILSA research and development. The design of ISLAs are such that simulations either ignore important aspects of the design or implement them at a smaller scale

The islasim package enables researchers to generate data for conducting research on all aspects of international large scale assessments. Background questionnaire data correlated continuous, dichotomous, and ordinal data. Item responses are generated from matrix sampling designs and exploratory IRT models. Although users have the ability to specify each part of the data generating process, the package comes with population parameters from previous PISA and TIMMS assessments as well as functions that facilitate the generation of random population parameter. This paper will provide an overview of the methodology used to generate each part of the data as well as two vignettes that demonstrate the functionality of the package.