

Generating correlated discrete ordinal data using R and SAS IML.

ABSTRACT

Correlated ordinal data are common in many areas of research. The data may arise from longitudinal studies in biology, medical, or clinical fields. The prominent characteristic of these data is that the within-subject observations are correlated, whilst between-subject observations are independent. Many methods have been proposed to analyze correlated ordinal data. One way to evaluate the performance of a proposed model or the performance of small or moderate size data sets is through simulation studies. It is thus important to provide a tool for generating correlated ordinal data to be used in simulation studies. In this paper, we describe a macro program on how to generate correlated ordinal data based on R language and SAS IML.

Keyword: Generating data; Correlated ordinal data; Simulation study; R language; SAS IML.