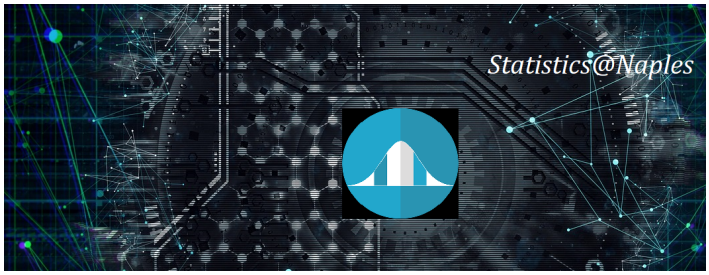

Contribution ID : **18** Type : **not specified**

Bayesian effect measures for a location scale model

Thursday, 29 June 2023 15:40 (20)

We consider a Bayesian approach for the analysis of rating data when a scaling component is taken into account, thus incorporating a specific form of heteroskedasticity. Our approach includes model-based probability effect measures that enable comparisons of distributions among multiple groups. These effect measures are adjusted for explanatory variables that have an impact on both the location and scale components. To estimate the parameters of our fitted model and derive the associated effect measures, we employ Markov Chain Monte Carlo techniques. Through an analysis of students' evaluations of a university curriculum counselor service, we assess the performance of our method and highlight its valuable support in the decision-making process. Our findings demonstrate the effectiveness of our approach and emphasize its ability to enhance decision-making processes by providing valuable insights and support to stakeholders involved.

Primary author(s) : TARANTOLA, Claudia (University of Pavia)

Co-author(s) : IANNARIO, Maria (University of Naples Federico II); KATERI, Maria (RWTH AACHEN)

Presenter(s) : TARANTOLA, Claudia (University of Pavia)

Session Classification : Fifth Session