

Simple Bayesian analysis with SPSS v25+

Date: Wednesday 14 October 2020

Time: 12:00-13:00

Venue: E33-G021, Faculty of Education

Language: English

Audience: UM Staff / Postgraduate Students

Registration: Online Registration (<https://go.um.edu.mo/nmwn1eu4> or )

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Speaker:

Prof. Shing On LEUNG is now Associate Professor in Faculty of Education, University of Macau. His teaching and research areas are in educational measurement and applications of statistics in education and social sciences.

Abstract:

Bayesian analysis is now available in SPSS v25+ and the latest version in UM is v26. We start with a simple example from PISA, but the focus is on what we can get more from the Bayesian approach. This is especially apparent when the null hypotheses are always rejected because of large sample sizes. The posterior distribution as produced has taken both (i) effect and (ii) sample sizes into considerations and presented probabilistically. Theoretically it is the difference between $\Pr(\text{Model}/\text{data})$ vs $\Pr(\text{data}/\text{Model})$. Practically, Bayesian analysis is a complement or supplement of classical approach.