

LTF 2017 pre-conference workshop

Topic: Introduction to the construction and analysis of questionnaire data using latent variables

Overview:

Often in classroom research it is of interest to gain insight into constructs that are not directly observable. Examples from the language learning classroom might include motivation, anxiety, and willingness-to-communicate, amongst others. This workshop presents some best-practice approaches for collecting and analysing data of this nature. Some of the possibilities that exist for linking this to achievement are also discussed.

The statistical technique employed during the workshop is factor analysis, both exploratory (EFA) and confirmatory (CFA) approaches. Use of the statistical software Mplus is introduced, including how to format the data, set up basic models and interpret the main elements of the output. Participants are not required to have any prior experience of either factor analysis or Mplus in order to take part.

Pre-workshop activities:

- Essential: Download and install the Mplus demo version on laptop computer to be brought to the workshop.
- Optional: In order to view diagrams within Mplus, 64-bit Java is also required.

Workshop facilitator:

Dr. Karen Dunn is a Senior Researcher in measurement and evaluation at the British Council. She holds a PhD in Applied Social Statistics and Masters in Language Studies. The focus of Karen's PhD research was on using Explanatory Item Response Theory modelling approaches to investigate word difficulty for L2 learners of English. Karen has delivered a number of short courses for the Postgraduate Statistics Centre in Lancaster on Factor Analysis and Structural Equation Modelling, and has also contributed to both face-to-face and online postgraduate statistics courses for both the Linguistics and Psychology departments at Lancaster University. Her current research interests involve looking into the scoring validity of reading reordering tasks, investigating the factorial structure of a test to assess grammar and vocabulary, and linking motivational profiles of teenage language learners to proficiency outcomes.