

An introduction to Factor Analysis using SPSS.

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(1-50pm to (approx) 4-30pm including (approx) 20 minute coffee break)

Target Audience

Anyone who wants to use Exploratory Factor Analysis in SPSS and who wants to understand the concepts, assumptions and checks for this technique. A basic working knowledge of SPSS and hypothesis testing would be useful.

The course tutor, Darren Walker, is a cognitive psychologist at Cardiff Metropolitan University. As a teacher he has taught courses on SPSS for many years as part of a Research Methods course for MSc Health and Forensic psychology and as a researcher he has published academic papers on a wide range of topics. Darren gave a further syntax in SPSS course for ASSESS at York in 2013.

Aim

This course is a practical hands-on introduction to Exploratory Factor Analysis where there are a large number of variables such as items from a questionnaire. It explains the reasoning behind Factor Analysis, how to carry it out in SPSS and what to look for in the output. The course considers choosing the best factor analysis method, deciding on the optimal number of factors, rotation methods, assessing model fit and reporting results. Examples are taken from Psychology and Health.

Course Content

- When do we use Factor Analysis?
- Factor Analysis in SPSS
- Checking underlying assumptions in Factor Analysis
- How many factors do I use?
- Rotations
- Assessing model fit
- Obtaining and using Factor scores
- Reporting results