

2-Day Course – Quantitative Methods for Psychology/Linguistics/Educational Studies using STATA

Date: TBC

Venue: TBC

1. Course Overview

This is a 2 day course provides an introduction to statistics, further advanced methods of analysis and their application in the quantitative social sciences with a focus on psychology, linguistics and educational studies. Especially for linguistics and educational studies, these methods have not been used until only recently. This course will provide participants with basic statistical methods with hands-on exercises, databases, in-class discussion, data and graphical management. By the end of this course, participants will be well positioned to apply statistical techniques to social data related to psychology, linguistics and education.

2. Agenda

Day 1

- Data input and export
- Command line / Output window
- Transformations to variables
- Transcoding from questionnaire data
- Descriptive statistics and output display
- ANOVA analysis
- Functional forms
- Regression Analysis (Time series and Panel data)
- Output interpretation and discussion
- Practical session

Day 2

- Models for continuous data
- Models for binary/cardinal data
- Heteroskedasticity and Robust standard errors
- Outliers – detection and treatment techniques
- Bootstrapping and Clustering procedures
- Small sample estimation and techniques
- Propensity Score Matching/Matching on many characteristics
- Comparison to regression
- Factor Analysis and Principle Component Analysis
- How to apply statistical techniques to questionnaire/qualitative data
- Using questionnaire data in a regression
- Practical session