



For ASSESS York 2015 meeting

WRITING AND USING SPSS SYNTAX: BEGINNERS	2
WRITING AND USING SPSS MACROS	3
AN INSIGHT INTO USING SPSS TO CONDUCT BIVARIATE AND MULTI-VARIATE ASSOCIATIONS WITHIN DATA FROM THE BRITISH CRIME SURVEY ERROR! BOOKMARK NOT DEFINED.	
STATISTICAL ANALYSIS OF INDEPENDENT GROUPS IN SPSS	5

WRITING AND USING SPSS SYNTAX: BEGINNERS

(10am to (approx) 12-30pm including (approx) 20 minute coffee break)

Frances Provan

University of Edinburgh

Target audience:

This workshop is suitable for users who are familiar with using SPSS interactively through its menus and dialog boxes but have no knowledge of using SPSS syntax - SPSS's own command language.

The course tutor, Frances Provan, is a Chartered Statistician and has taught SPSS courses at Edinburgh University over a number of years.

Aim

This course aims to introduce you to the SPSS syntax. This command language offers a very different but incredibly flexible way to use SPSS. Syntax is easily edited, saved and run as often as you like. Syntax provides an audit trail of what you have done. It is often more efficient to run SPSS commands interactively for various commonly needed operations involving data management, production of summary measures in tables and repetitive analyses. Syntax also has available some commands and subcommands not available via the menus.

This half-day course is aimed at complete beginners to SPSS syntax. It introduces basic concepts and structures and uses these to read in and prepare data ready for analysis and perform data manipulations using core commands.

Learning outcomes

- How to find SPSS Syntax underlying the SPSS menus
- Using the SPSS Syntax window to Run Commands
- Basic Syntax structure
- Acquiring good programming habits
- SPSS Journal File
- Opening and Saving Data Files
- Commands for defining data
- Commands for calculations and selections

WRITING AND USING SPSS MACROS

(2-00pm to (approx) 4-30pm including (approx) 20 minute coffee break)

Peter Watson

Medical Research Council

This workshop builds on areas such as the management of data presented in the morning syntax course (WRITING AND USING SPSS SYNTAX:BEGINNERS) and extends to constructing and running programs to run blocks of SPSS syntax repeatedly with varying input arguments.

Target audience:

This workshop is suitable for SPSS users who are familiar with the SPSS command language who would like to expand their knowledge to use syntax in more advanced statistical procedures.

The course tutor, Peter Watson, is a statistician at the Medical Research Council Cognition and Brain Sciences Unit in Cambridge and has given talks and courses for ASSESS in the past running this particular course from 2006-2010. He has been using SPSS since 1992 when he began working for the MRC.

Aim

This course builds upon the morning course 'WRITING AND USING SPSS SYNTAX:BEGINNERS' and introduces how to utilise the power of SPSS syntax by incorporating commands into macros.

Learning Outcomes

- What is a Macro?
- Creating and running a macro
- Inputting values into a macro: positional tokens and keyword arguments
- Adding flexible numbers of arguments
- Loops
- Conditional structures
- Nesting macros

AN INSIGHT INTO USING SPSS TO LOOK AT BIVARIATE AND MULTI-VARIATE ASSOCIATIONS WITHIN DATA FROM THE BRITISH CRIME SURVEY.

(10am to (approx) 12-30pm including (approx) 20 minute coffee break)

Keith Bentley

University of Salford

Target Audience

Doctors, dentists, nurses, allied health professionals, researchers, academics, service staff, and students, who want to understand concepts and techniques of correlation and chi-square and also intend to use SPSS software to analyse their research data.

The course tutor, Keith Bentley, is currently a lecturer at the University of Salford and has given talks (identifying crime hotspots) and courses (Introducing SPSS syntax using the British Crime Survey) for ASSESS at past meetings.

Pre-requisites

This course assumes a basic working knowledge of SPSS.

Aim

This workshop will provide a 'hands on' experience, making use of data from the British Crime Survey, as to how SPSS can be presented to final year undergraduate students, as an analytical tool for studying relationships existing within data. The emphasis will be on the use of bivariate and multi-variate techniques making use of Correlations and Chi Square. The workshop will be at an introductory level, but will require attendees to be familiar with the concepts of variables and data entry using SPSS. Issues appertaining to re-coding of variables will also be covered within the session. The teaching material references contemporary Level 6 university input.

Learning Outcomes

By the end of the course, you will be able to use:

- Measure relationship between two variables using correlation coefficient.
- Graph the relationship using scatter plots - simply, overlay and matrix plots.
- Understand parametric and non-parametric correlation – Pearson, Spearman, Kendall's tau.
- Examine partial correlation and semi-partial correlation.
- Examine relationship in frequency tables.

STATISTICAL ANALYSIS OF INDEPENDENT GROUPS IN SPSS

(2-00pm to (approx) 4-30pm including (approx) 20 minute coffee break)

Peter Samuels

Birmingham City University

Target audience

This course is a practical introduction to the use of tests of group differences in SPSS which can be applied in many fields including social, medical and ecological studies.

The course tutor, Dr Peter Samuels, is an Academic Skills Tutor in the Centre for Academic Success at Birmingham City University where he helped to set up a Statistics Advisory Service in 2011. He was also recently involved in the donation of a large number of basic statistics learning resources to the **statstutor** website.

Learning outcomes

- Descriptive statistics (boxplots, histograms with fitted normal curves, error bar charts and confidence intervals)
- Assumption checking using the Shapiro-Wilk normality test and Levene's equality of variances test
- Two groups: Unpaired t-test, robustness and the Mann Whitney U test
- Three or more groups: Introduction to parametric and nonparametric one-way ANOVA (assumption checking, robustness, running the tests and post hoc testing)
- Introduction to resources available on **statstutor**