Software guides & resources

# Using analytical software – resources and tips

## Choosing your software

I recommend you only use Excel for simple analysis, but the example datasets are all provided in Excel format in case you want to use more advanced techniques. This is also the handier format for you to copy if you want to paste these datasets into some other analytical software.

SPSS is a standard software, available via most universities to staff and students, or at a reduced licence fee for students to use at home. R is harder to use (in the sense that it is largely based on syntax without menus), but it is free and open source. There is also a growing library of pre-existing programs for common, and even not so common, analytical methods in R.

## Software resources

### Excel

A ‘for dummies’ resource on using Excel for statistical analysis: <https://www.dummies.com/software/microsoft-office/excel/statistical-analysis-with-excel-for-dummies-cheat-sheet/>

A guide to drawing graphs in Excel: <https://blog.hubspot.com/marketing/how-to-build-excel-graph>

### SPSS

A succinct account of variables, values, file-handling and other housekeeping activities for SPSS: IBM (2016) *IBM SPSS Statistics 24 Guide*, ftp://public.dhe.ibm.com/software/analytics/spss/documentation/statistics/24.0/en/client/Manuals/IBM\_SPSS\_Statistics\_Brief\_Guide.pdf

The best single source(s) on how to use techniques in SPPS, and why. Any edition for any version of SPSS. This is much more than a manual: Norusis, M. (2011) *IBM SPSS Statistic Guides*, <http://www.norusis.com/>

Or see this book: Pallant, J. (2016) *SPSS Survival Manual*, Berkshire: Open University Press.

Perhaps even more useful for SPSS beginners, look at this YouTube account: <https://www.youtube.com/user/patrickkwhite>

It has brief introductory videos explaining how to set up SPSS, how to use the basic interface, entering and editing data, conducting simple analyses such as frequency counts or correlations, and even basic regression modelling. It has the major advantage of not confusing viewers with considerations about significance testing.

### R

This book should contain everything you need if you want to use the open-source software R. However, I advise you skip the parts on significance testing, as with the SPSS resources.

Field, A., Miles, J and Field, Z (2012) *Discovering statistics using R*, London: SAGE