

GUI Data Workshop

Information Sheet 2: Tips on using SPSS syntax

This information sheet provides some introductory hints and tips for using SPSS syntax. Please note this information sheet is based on SPSS Version 17.

1) Why use SPSS syntax?

There are two ways of managing and manipulating data and running statistical analyses in SPSS. One is to use the drop-down menus along the top of each window. The other is to use the SPSS programming command language or syntax.

The advantages of using syntax are many:

- It is a **record** of all analyses you have performed i.e. you can save it and refer back to it when you want to see how you performed an analysis, how a variable was computed etc.
- It is **repeatable**. If you want to run the same analyses a number of times (for example, monthly as your database is updated) you can simply rerun your saved syntax.
- It is **flexible**. You can easily edit it, change it, correct it and rerun it.
- It is **quicker** for data manipulation (especially computing new variables) and for running multiple similar analyses, which you can generate by copying, pasting and minor editing.
- It has some **extra features** that are not available through the menus.

2) The syntax window

SPSS syntax commands are entered in the syntax window.

To create a new syntax window:

Select File → New → Syntax

To open an existing SPSS syntax file:

Select File → Open → Syntax

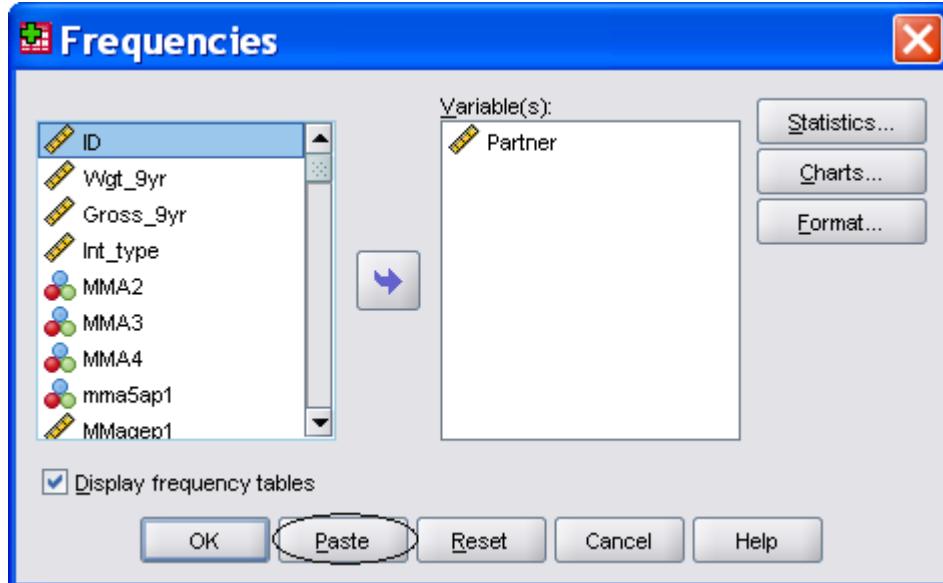
Syntax files will be saved with a ‘.sps’ extension.

3) Writing syntax

There are two ways of writing commands.

- One is to open the syntax window and simply type them in directly. Version 17 of SPSS has a predictive text feature to its syntax window. When you type the first few letters of your code, a drop down list of the various commands that start with those letters will appear that you can then select from. It is also colour-coded which makes it much easier to spot errors in your code. This is good for basic commands for data manipulations and simple statistical analyses that you use regularly and know well.
- The other is to build up a command using the menus then clicking the ‘Paste’ button rather than ok – this will automatically insert the command into your open syntax window. This is more suitable for more complex statistical analyses which require longer commands with numerous subcommands. It is

also a good way to get started with syntax and learn the various commands. To paste the syntax to run a frequency select Analyse → Descriptive Statistics → Frequencies. Move the variable of interest into the ‘Variable(s)’ box by highlighting it on the list on the left hand side and clicking the arrow in the middle. Then instead of clicking ‘OK’, click ‘Paste’ as highlighted below.



This will paste the following syntax into your syntax window:

```
FREQUENCIES VARIABLES=Partner
/ORDER=ANALYSIS.
```

Whether you write your own syntax or paste it from the menus, you must have a full stop at the end of each line of code. Forgetting the full stop is the cause of most syntax errors!

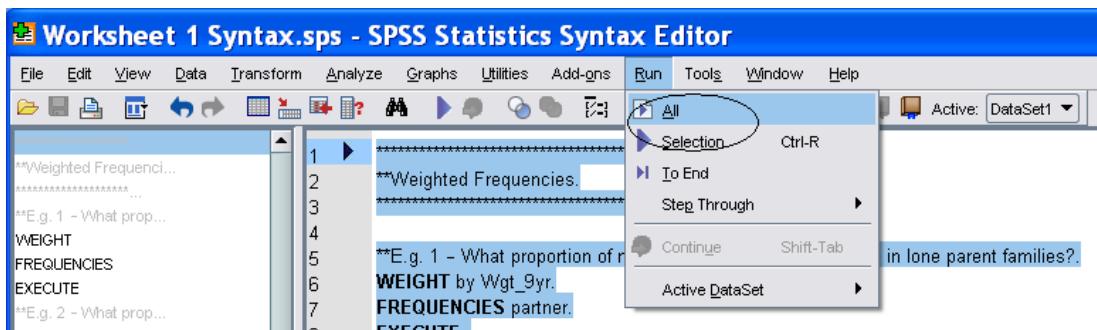
4) Running syntax

The most common way to run an SPSS syntax file is the interactive method. You simply select the part of your syntax file you would like to run, and then click on either

- The run button on the syntax window toolbar



- The run menu and select either ‘run all’ to run the whole file, or ‘run selection’ to run just your selected commands



5) Adding comments and documentation

It is helpful if you add notes to your syntax files explaining what you are doing, particularly if you will be passing your syntax on to someone else or if you will need to re-run it at some time in the future. It is possible to add notes to your file by placing a * at the start of a line – anything after the * on that line will be ignored by SPSS.

6) Tracking your syntax in the Output

SPSS can be set to display the command syntax on your output viewer, as a ‘log’ file, along with the output. Having this switched on makes error detection and correction in your syntax much easier. This facility can be switched on and off either via syntax or the menus.

The syntax command is simply

SET PRINTBACK = on.

EXECUTE .

To use the menus, select Edit → Options

1 : ID		.30
		1.85
		1.08
		.86
		.89
		.32
		1.71
		.56
		.69
		.81
		.96
		.69
13	13000	1.94
14	14000	2.40
15	15000	1.93
16	16000	.60

This will give the following dialog box. Under the ‘Viewer’ heading, click ‘Display commands in the log’

