

Block 1: From questionnaire to SPSS saved file

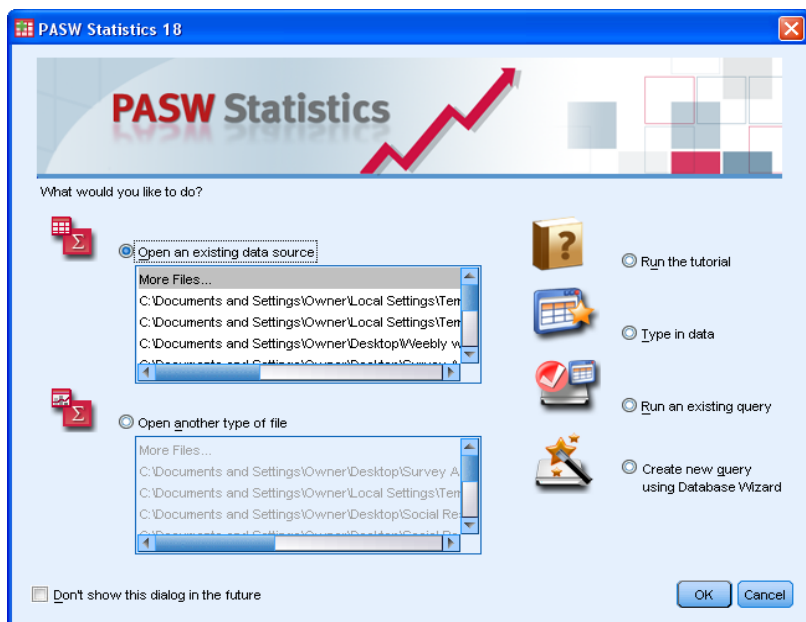
1.3.3.4: First shot at running SPSS

[23 November 2010]

Previous session: 1.3.3.3 First shot at SPSS syntax

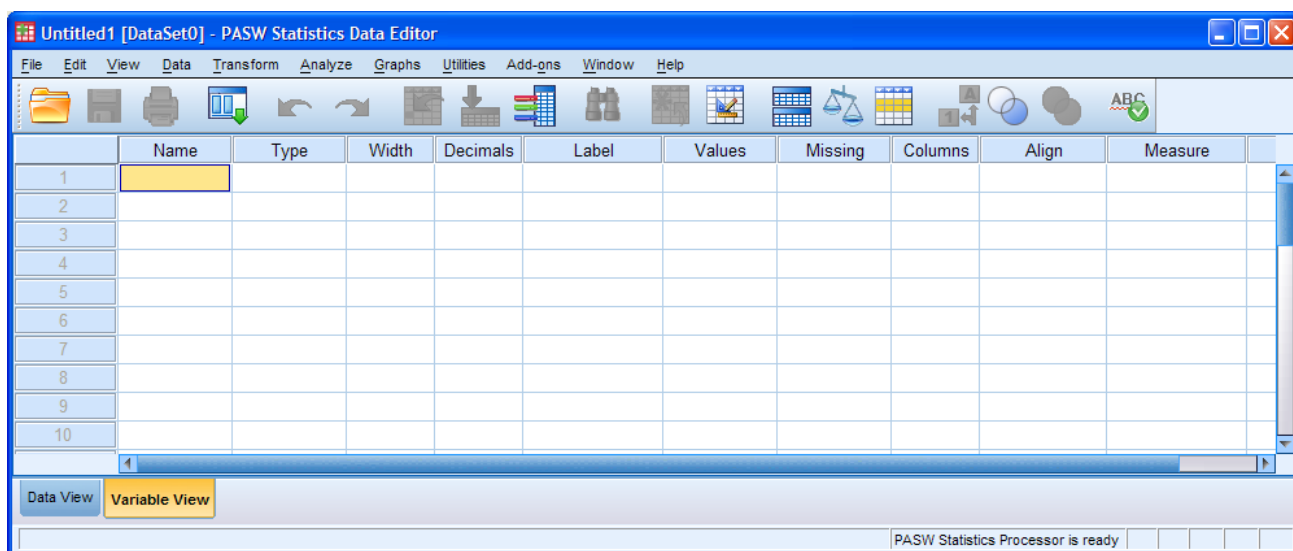


Call up SPSS by clicking on the icon, or however your local system works:



Opening screen for PASW18

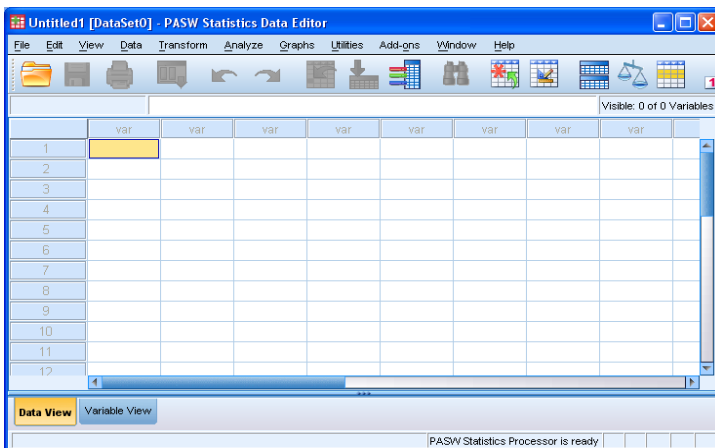
Click on **Cancel** (at bottom right, above) to display a blank **Data Editor**.



Initial Data Editor in Variable View (adjusted to show first 10 rows only)

This is the **Variable View** in which your variable names will eventually appear in the **Name** column and various additional information about them in the other columns. Sometimes, depending on how it was last used, it will open in **Data View**.

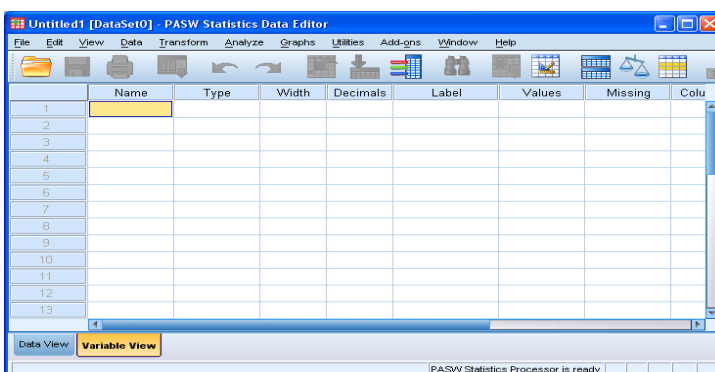
Now click on the **Data View** tab at bottom left to get:



Initial Data Editor in **Data View**

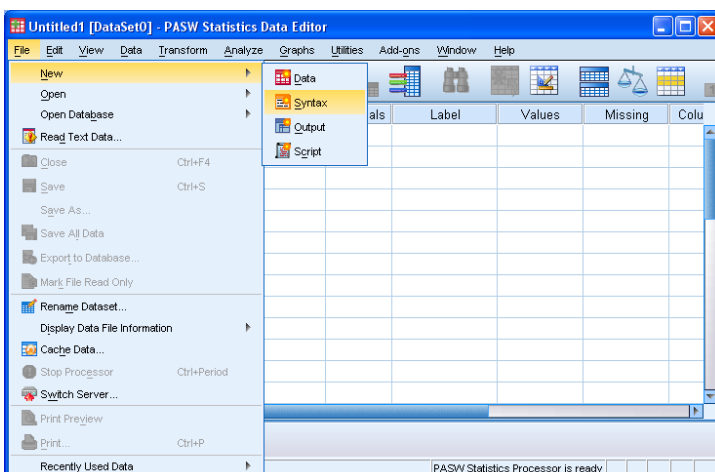
... in which your **variables** will eventually be arranged in the columns and your **cases** in the rows. This is the same format as the data matrix we created in the opening tutorial 1.1.2 [Introduction to survey data](#). Keep switching between the **Variable View** and **Data View** tabs to get used to changing views. Try changing the size of the display by moving the cursor to the edges or corners until the small black arrows appear, hold the left mouse button down and drag the edges or corners to enlarge or reduce the display.

Go back to the SPSS Data Editor and make sure you are in **Variable View**

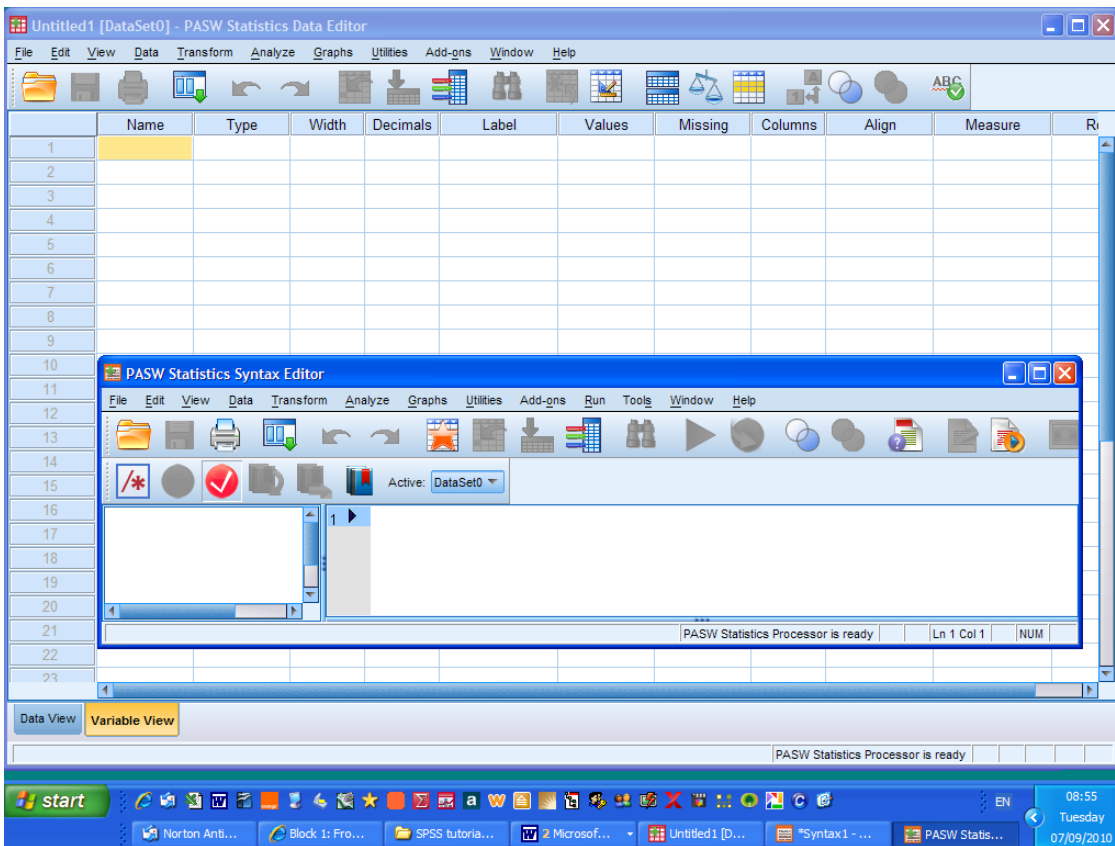


Initial Data Editor in **Variable View**

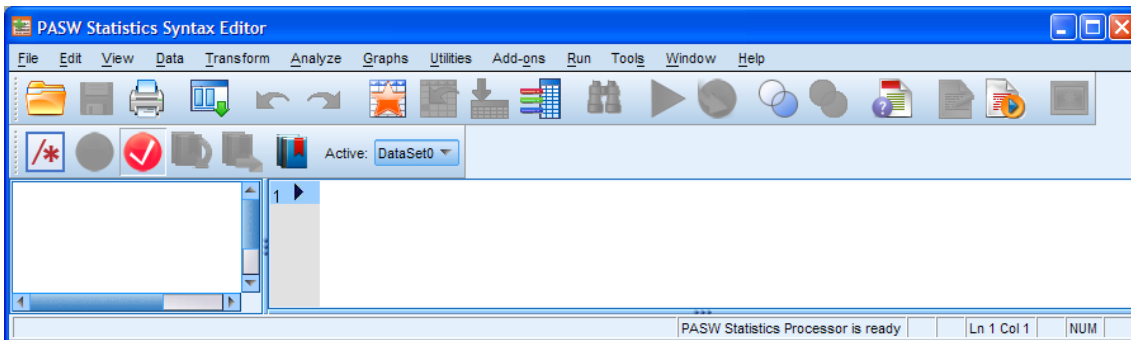
Now open a blank syntax editor by clicking (top left corner) **File** > **New** > **Syntax**



to get:



Screenshot showing blank Data Editor in Variable View overlaid with blank Syntax Editor



Blank Syntax Editor

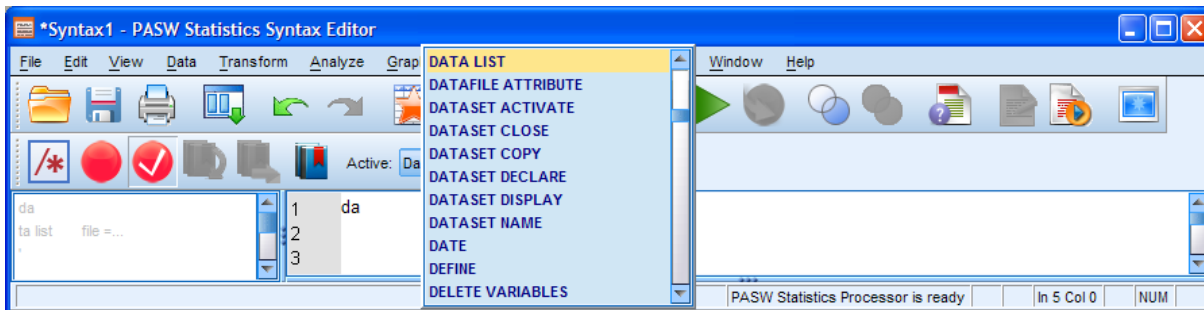
The **PASW Statistics Syntax Editor** has two panes: for now we're only interested in the right hand pane where your cursor will be flashing in the top left corner. Make sure the cursor is in the top left corner and carefully type in the following command syntax. The full pathway name is more complex, but is preferable as it works every time. You only have to do it once and it's a lot quicker and easier than fiddling around with floppies or CDs!

```
data list      file = 'C:\Documents and Settings\Owner\Desktop\myclass\myclass.txt'  
              records = 1  
              /1 serial 1-2   sex 22   age 26-27 .
```

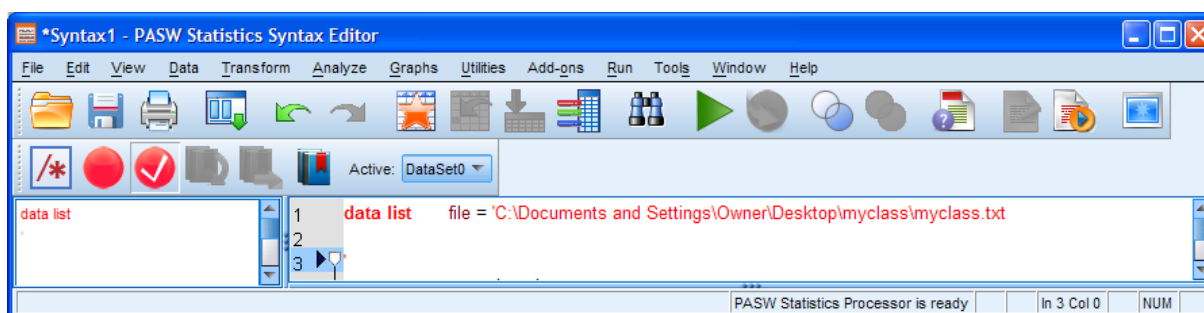
Don't forget to **start the first line in column 1** and inset the continuation lines with **at least one space**. For clarity the example below uses several spaces to inset the sub-commands and continuation lines, but provided you inset the continuation lines by at least one space it will work.

**Don't forget the full stop (period) at the end of the last line!**

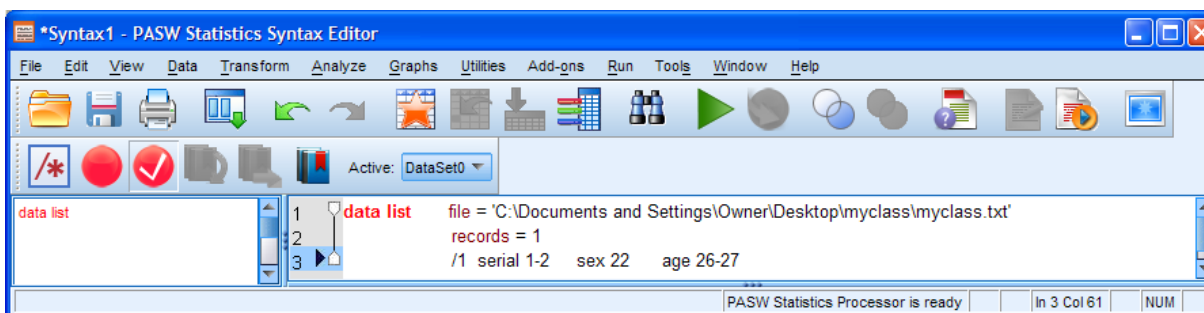
If you want to cheat, you can copy and paste the syntax into SPSS from above or from your previous exercise **myfirstspss.txt**, but that way you won't be learning much! The right hand pane will start to fill up with your text (colour coded for **commands** and **keywords**): **commands** are recorded in the left pane as and when they are entered. As soon as you start typing, SPSS prompts you with a menu of possible commands, but **ignore these** for the moment.



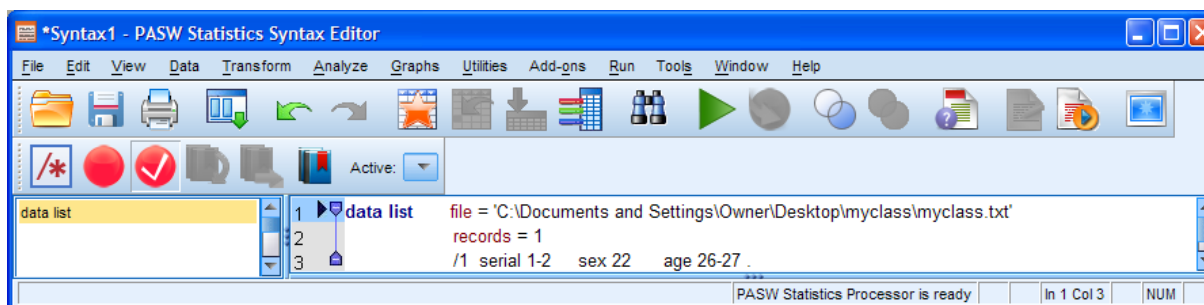
Just carry on typing, the menu will disappear and **\*Syntax1** appears at top left



All or part of your syntax will be displayed in **red** until a word or element is complete (in this case a missing prime after the external file name). If you insert the missing prime, SPSS will colour-code sub-commands and keywords, but the main command will remain in **red**



.. until you terminate the command with a full stop (period).



**Syntax file showing data list command**

Note that the **data list** command has been recorded in the left pane of the syntax window.

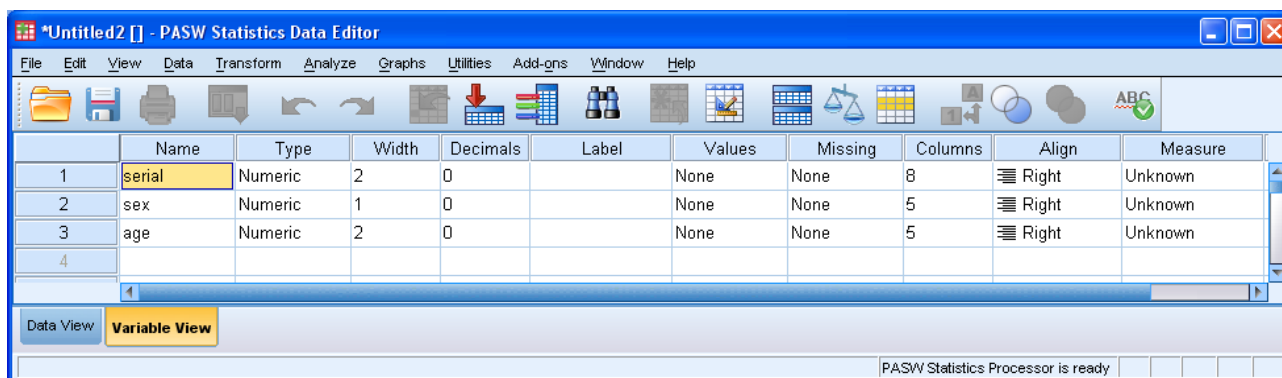
To run SPSS, make sure the cursor is somewhere in the text you have typed (the command will be highlighted) and click on the green triangle ► at the top of the window (quickest) or **Run > Selection** or press **[CTRL]+R** on the keyboard. SPSS will read your instructions and display the following output, including your syntax, in the **Viewer Window**.

```
data list file 'C:\Documents and
Settings\Owner\Desktop\myclass\myclass.txt'
  records 1
  /1 serial 1-2 sex 22 age 26-27.

Data List will read 1 records from C:\Documents and
Settings\Owner\Desktop\myclass\myclass.txt

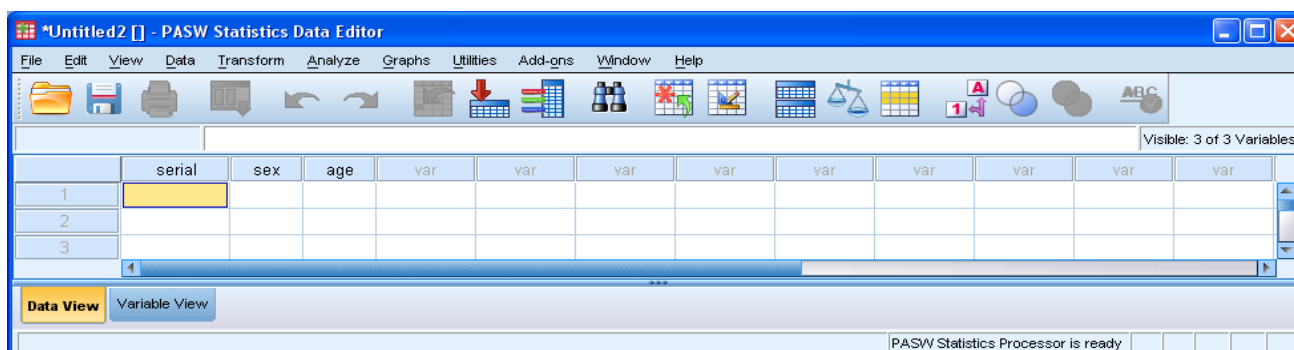
Variable          Rec   Start   End  Format
serial            1       1     2  F2.0
sex               1      22    22  F1.0
age              1      26    27  F2.0
```

Either way, the **Variable View** in the **Data Editor** will have filled up like this:



**Data Editor with variables defined**

However, if you click on **Data View** you will see it appears to be empty.

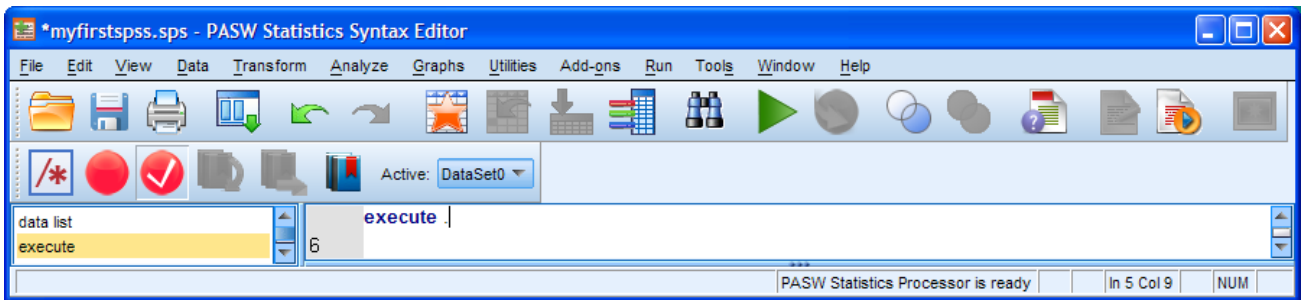


**Data View after running data list**

Do not panic! You have not lost your data: SPSS hasn't actually read it yet! You've only told it what to expect. Look carefully at the screen and you will see a small difference: your three variable names, **serial**, **sex** and **age** appear at the top of the first three columns instead of **var**, **var**, **var**.

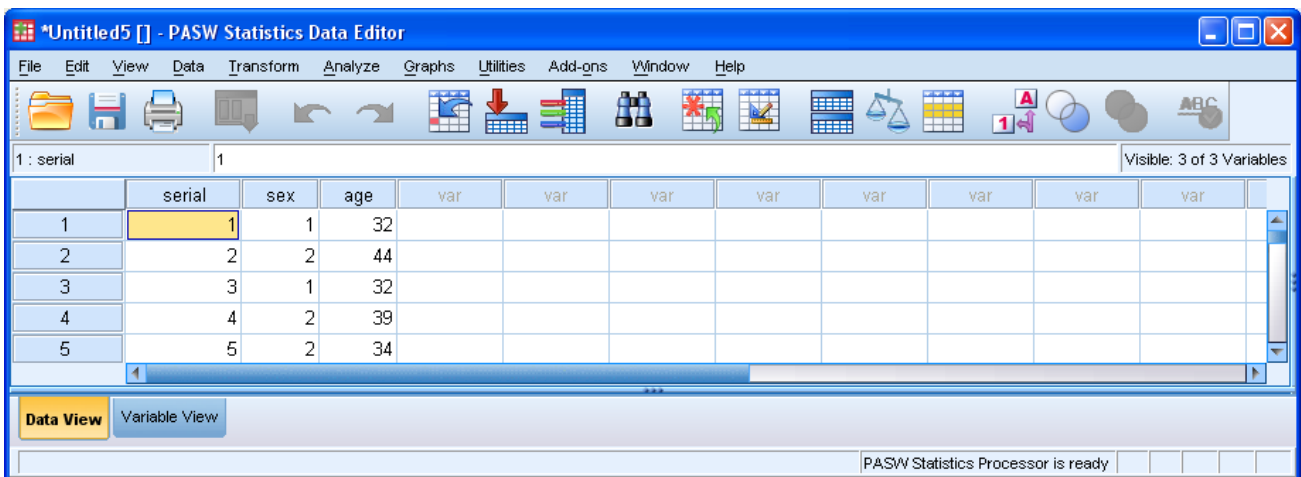
Go back to your syntax file and type **execute .** on the next line.

**Don't forget the full stop (period)!**



Note that **execute** has now appeared in the left pane. Press the green triangle ►

The Data Editor in **Data View** will now look like this:

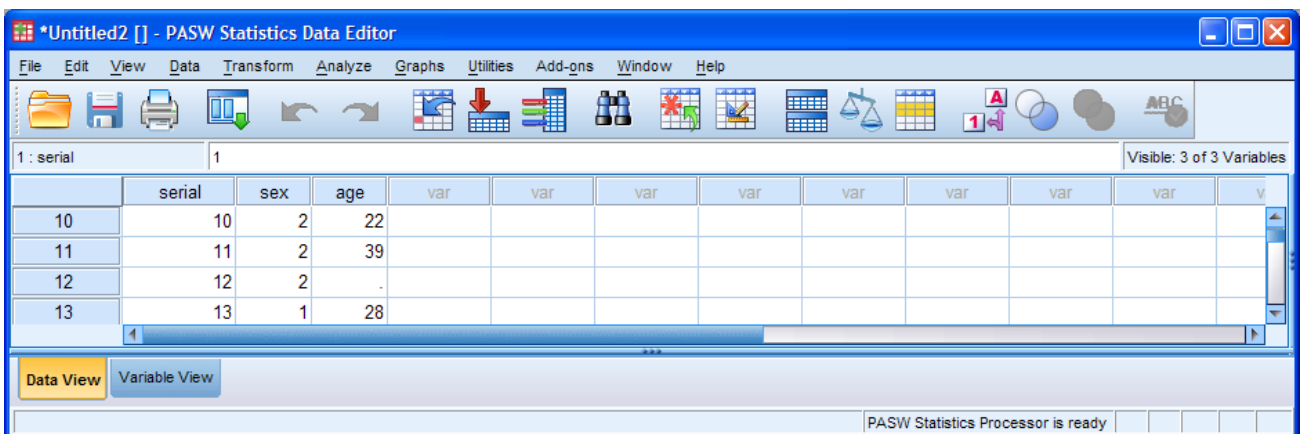


Data Editor in **Data View** after reading in raw data

Although the **execute** command can be used immediately (which forces SPSS to make a pass through the data) it is preferable not to use it unnecessarily. If you are going to perform some analysis or run some data checks, the data get read into SPSS anyway and each pass takes up time (and money).

In the above window, you can see that SPSS has copied the raw data for your three variables as numeric **values** into the **cells** of the **data matrix** in the Data Editor, in which the **rows** denote the **cases** and the **columns** denote the **variables**.

SPSS is expecting to find numeric data: if it finds any blanks or alphabetic data (as for the blank **age** for case 12 below) it will substitute a **full stop** (period). This is known in SPSS as the **system missing** value **sysmis** and will automatically be treated as a **missing value** in any analysis.

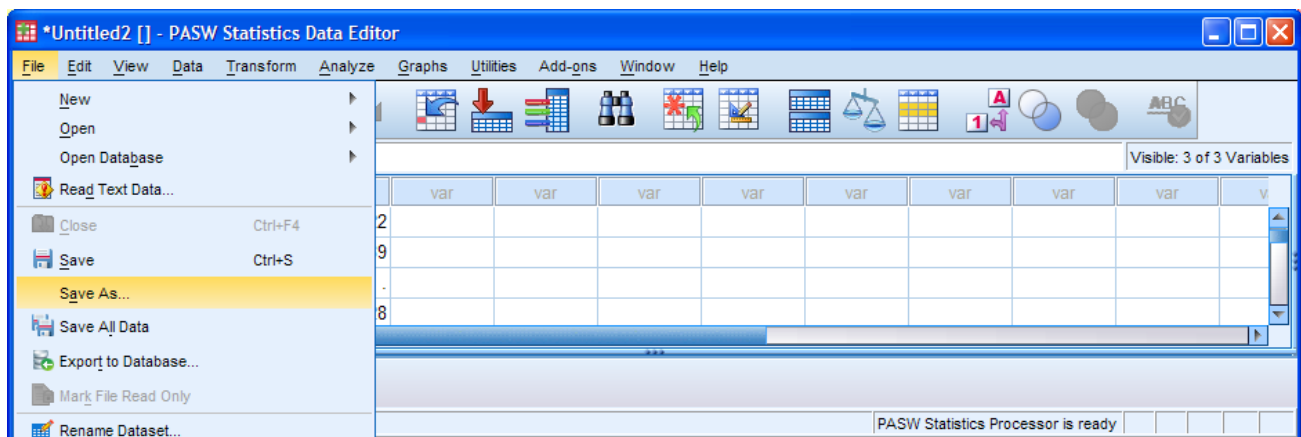


If you scroll up and down the file you will notice that the serial numbers stop at 99 and start again at 0, then stop at 50 and start again at 0: this is explained in the footnote<sup>1</sup> below.

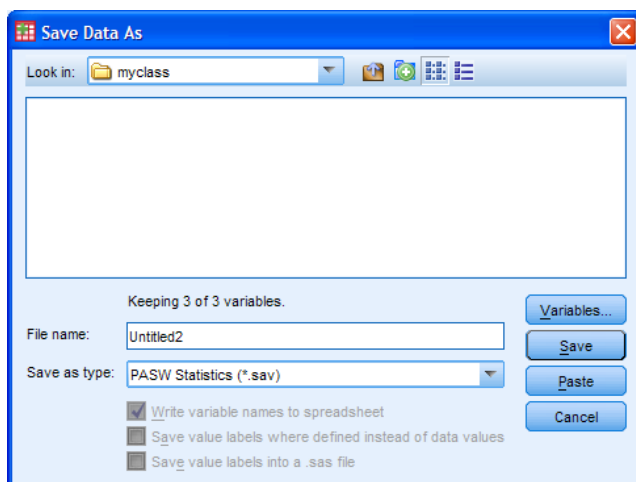
Well done! You have just run your first SPSS syntax job.

At this point you need to practice **saving your working files** from SPSS and also get into the habit of **regularly saving your work**. Every time you try to close a file in SPSS you will be asked if you want to save it, but you can also save files directly with a file name of your choosing.

In the **Data Editor** click on **File > Save As ...**



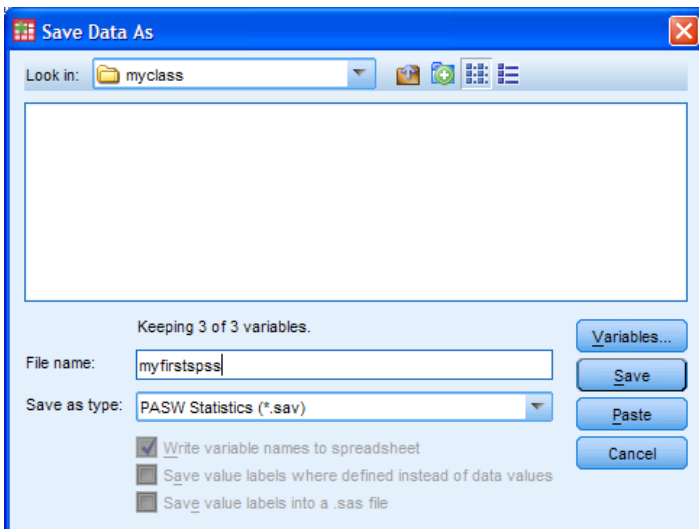
Navigate to your folder **myclass**. If the folder contains any SPSS files in **\*.sav** format, they will be displayed as icons, but this is your first attempt, so the window should be empty. Don't panic! There may be other types of file in the same folder (eg myclass.txt and myfirstspss.txt) but they will not be displayed.



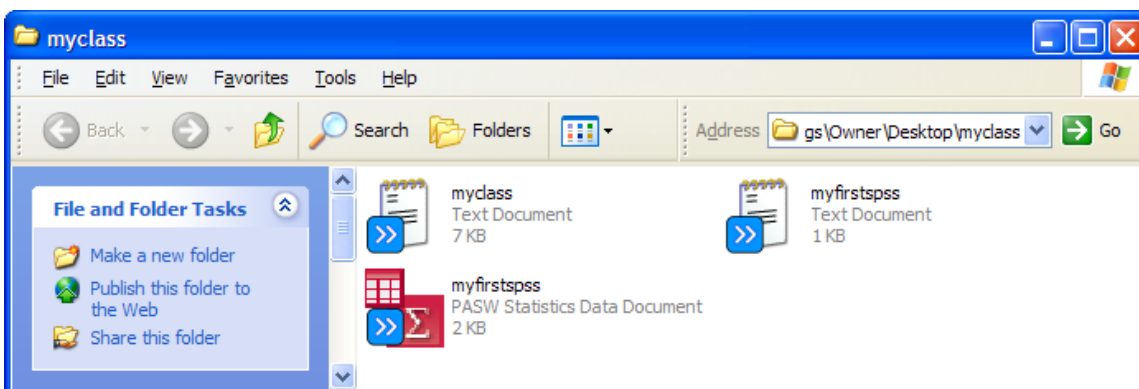
<sup>1</sup> The questionnaire was used with several waves of the course, but, because there were only around 25 students in each wave, only two columns were allowed for the serial number.

The data used here are accumulated across all waves, but to keep things as simple as possible, there was no item on the questionnaire, or field on the transfer sheet, for recording who was on which course. So far there are 169 cases in the file, but more may be added as website users add their own responses. With hindsight the course code, starting month and year of the course should have been coded somewhere as well. Data from all courses were later concatenated to produce a larger data set, but there are no duplicate cases. Examination of the ages might help to find the separation point for each wave since post-graduates taking SR501 were normally older than undergraduates taking SR206.

SPSS will automatically assign the extension **.sav** to the file to be saved. Write **myfirstspss** in the File name: box, make sure PASW Statistics (\*.sav) is displayed in the Save as type: box



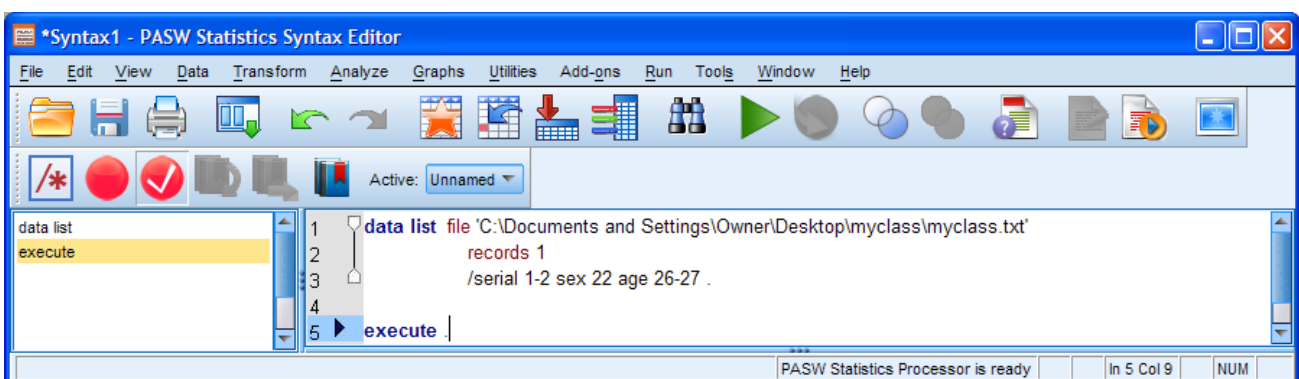
Click on **Save**



**Congratulations!** You have just created your very first SPSS saved file!

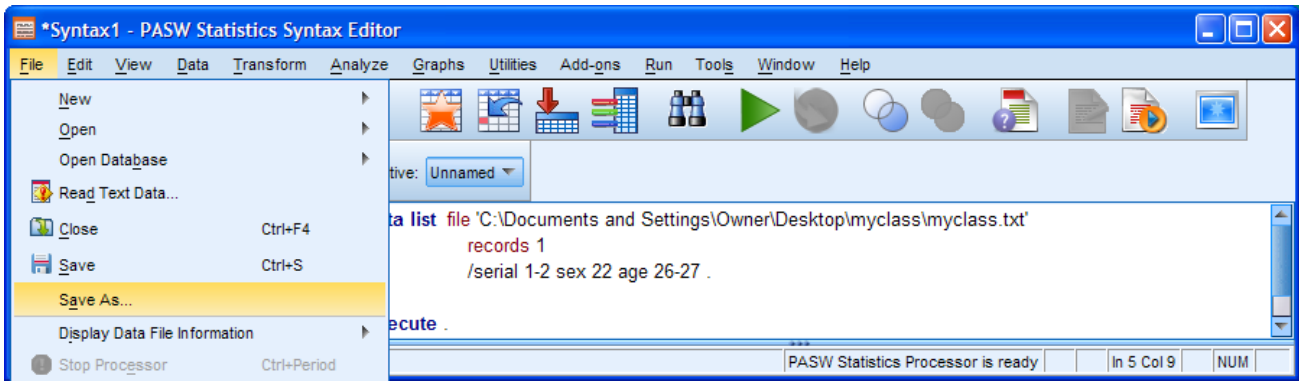
Hang on, we haven't finished yet! You also need to save your syntax file, preferably with a name linked directly to your SPSS saved file, but this time with a **\*.sps** extension ie **myfirstspss.sps** .

Go back to your syntax file:

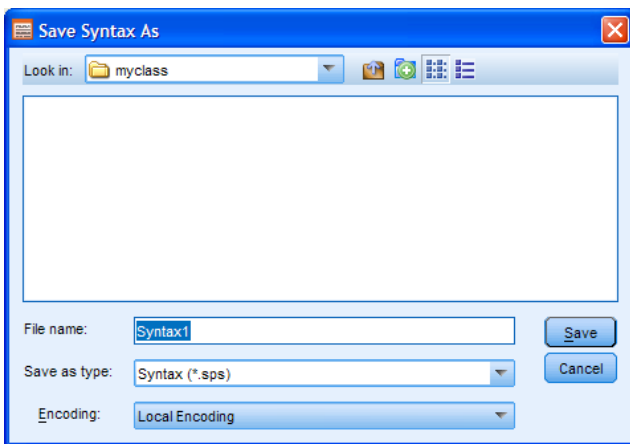




Click **File** > **Save As ...**

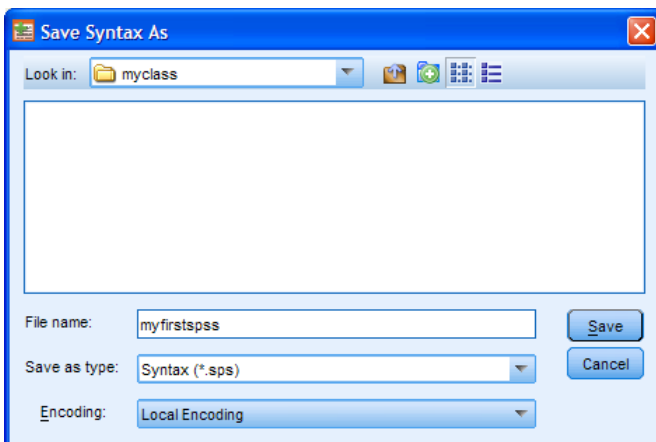


Navigate to your folder **myclass**

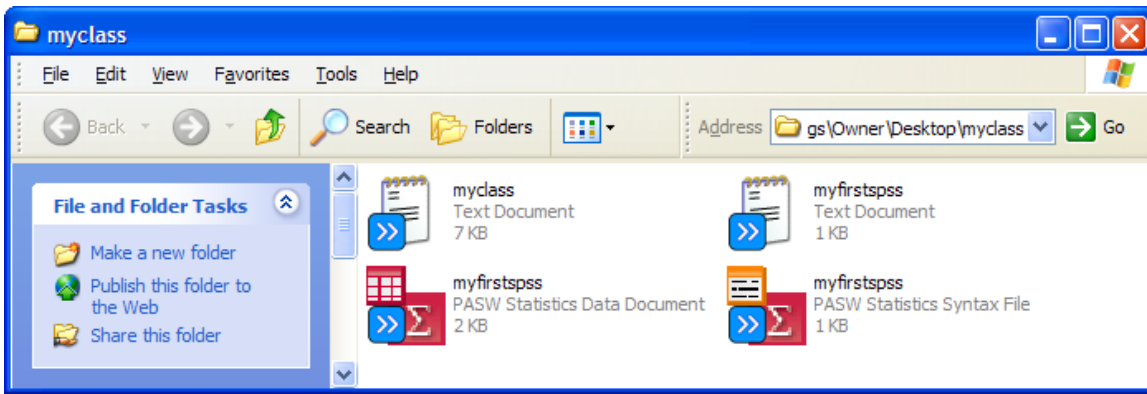


If the folder contains any SPSS syntax files in **\*.sps** format, they will be displayed as icons, but this is your first attempt, so the window should be empty. Don't panic! There should be other types of file in the same folder (eg **myclass.txt** , **myfirstspss.txt** and your new **myfirstspss.sav**) but they will not be displayed.

SPSS will automatically assign the extension **.sps** to the file to be saved. Write **myfirstspss** in the File name: box, make sure Syntax (\*.sps) is displayed in the **Save as type:** box



... and click on **Save** to save your syntax file as **myfirstspss.sps** in folder **myclass**



SPSS automatically generates related syntax and displays it in the output file:

```
SAVE OUTFILE='C:\Documents and Settings\Owner\Desktop\myclass\myfirstspss.sav'  
/COMPRESSED.
```

This was a practice run to familiarise you with opening SPSS, executing a command and saving your work. It also demonstrates good practice in the use of file names, so you should now have three related files all with same name part ( **myfirstspss** ) but with different extensions ( **.txt**, **.sav** and **.sps** ) denoting the filetype. If you like you can save the output file as well, but this is not really necessary as you can always re-open the syntax file and run SPSS again.

You can now close down SPSS. If you have made any unsaved changes to the data or syntax editors, SPSS will ask you if you want to save the files. You can close syntax and output files without closing SPSS. Closing the Data Editor will close SPSS, but you get a warning first.

**End of session**

**Next session: 1.3.3.5 Checking your data**

[\[Back to Block 1 menu\]](#)