Block 2: Analysing one variable

2.3 Data Transformations

2.3.0 Download raw data and SPSS files from this site

[Draft only: updated 4 June 2013]

We have now reached the stage where you are about to experience a change of gear, moving from one variable to two variables and then three (or more). For some of you this will be like changing straight from 1st to 3rd (stick-shift for those in the USA) without going through 2nd.

Some of the exercises in <u>Block 3</u> for 2- and 3-way contingency tables (zero order and 1st order tables using SPSS command **CROSSTABS**) involve some quite complex recoding of variables (qualifications obtained by education or training, combinations of income from various sources) to generate derived variables with only two to five categories suitable for beginners to tabulate.

Using **DATA LIST** to read in the raw data and then **RECODE** ~ ~ ~ **INTO** or **DO IF** ~~~ **END IF** to create such derived variables would be quite forbidding and I have therefore uploaded whole surveys in SPSS *.sav format: these files already include some such derived variables. For the more adventurous of you I am working on supplementary exercises to do this in syntax yourselves.

The idea is for you to download one or more of these files and save them on a CD or a USB stick designated as drive **E**: These download perfectly and can be even opened immediately in SPSS. So far so good. They can also be saved direct to drive E: (in my case a 1 mb Coolmate USB stick) for later use with **GET** ~ ~ ~ / **KEEP** <varlist> to enable work on smaller sub-sets.

I have also uploaded some of the associated raw data files in *.txt format (actually major surveys in 80-column ASCII files, Courier New fixed width font) for use with **DATA LIST**.

SPSS (19 and 21) can open *.sav and *.sps files downloaded from this site and also save them to a drive on your computer. Earlier tutorials and exercises require you to define a few variables, read in raw data and add dictionary information, then save the files. However, for surveys with dozens, if not hundreds, of variables, this would be too onerous a requirement, especially for beginners. Later tutorials and exercises will need access to the saved files from complete surveys. I have therefore prepared and uploaded the necessary SPSS saved files: these can be downloaded from this site and either opened on your own computer or saved to a folder or drive. For convenience, and because some files on your computer may have very long pathways, I shall assume this to be a USB memory stick and refer to it as drive e:

The SPSS saved files we shall need are:

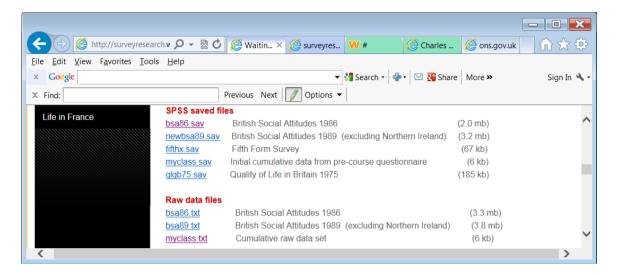
bsa86.sav	British Social Attitudes 1986	2.0 mb
newbsa89.sav	British Social Attitudes 1989 (excluding Northern Ireland)	3.2 mb
fifthx.sav	Fifth Form Survey	67 kb
myclass.sav	Initial cumulative data from pre-course questionnaire	6 kb
qlgb75.sav	Quality of Life in Britain 1975	185 kb

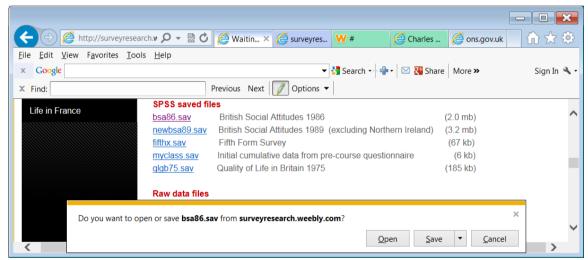
You can either download and save them to a USB stick or download and open them immediately in SPSS. Do them one at a time.

Opening the saved files and then saving them is quite a slow way, but it does allow you to examine the data and run analyses. If you prefer you can download and save them direct to drive **E**: without opening them first.

The slow but interesting way

Step 1: From page 2.3 Data transformations, click on <u>bsa86.sav</u> to download the file:

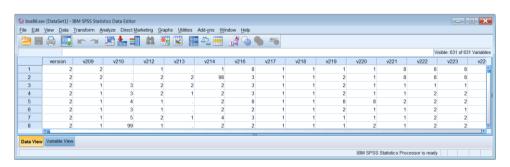




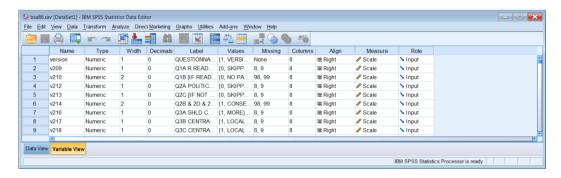
Click on Open If you do not already have SPSS open,



.. and the Data Editor will open:



If it opens in Data View, click on Variable View:



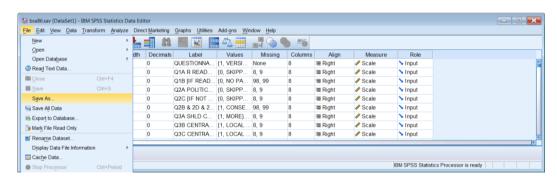
File **bsa86.sav** does not contain all the data from the original survey: it is an extract for teaching purposes in which the variable names have been changed from their original mnemonic names to positional names to make it easy to work directly from the questionnaire. When this file was first compiled in 1973 (by John Curtice and Ann Mair at Strathclyde University) variable names were limited to 8 characters and the length of labels was limited to 40 characters for variable labels and 20 for value labels (only 16 in column headers). SPSS did not provide for mixed case and variable names, variable labels and value labels were all in UPPER CASE. Also, because of the way SPSS has read the raw data when recreating the files, the level of measurement is SCALE for all variables: this will need changing as and when necessary. As yet there are no derived variables.

Step 2:

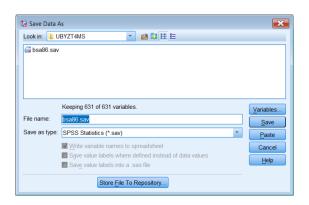
As a precaution, save this file to a safe location or to a USB stick or a CD. SPSS can access files with long pathway names, but these are a nuisance to type out (and error prone). For current purposes, I'll assume a memory stick in drive e: and henceforth refer to the file as e:bsa86.sav.

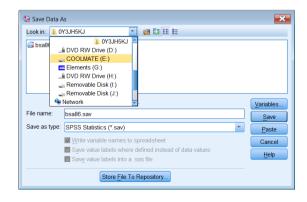
Insert a memory stick in drive e:

File > Save as:



Navigate from your download folder to your USB e:





... and click on Save

Your USB stick should now contain file bsa86.sav.





Repeat above steps to download and save the other files. Your USB stick should now look something like this:



File <u>newbsa89.sav</u> has been modified from the 1989 original. All variable and value labels have been changed from UPPER CASE to mixed case and all variables have the correct level of measurement.

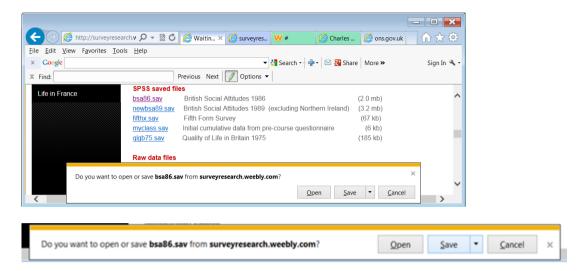
File fifthx.sav has mixed case labels, but the levels are all SCALE and will need changing.

File <u>myclass.sav</u> is my version of the initial data from the pre-course questionnaire file (variables serial to inches).

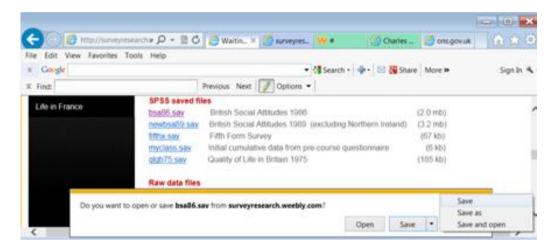
File <u>glgb75.sav</u> is my version of the 1975 Quality of Life in Britain survey and includes some derived variables which will be explained as and when necessary. Don't be put off by the age of the survey: it's one of the pioneering surveys I did with Mark Abrams in collaboration with Angus Campbell and his colleagues at ISR (Ann Arbor). Although I say it myself, the <u>Questionnaire</u> is a work of art and the survey itself is a joy to work with.

The quick but possibly confusing way

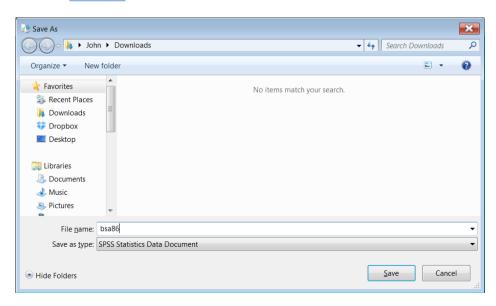
From page 2.3 Data transformations, click on <u>bsa86.sav</u> to download the file:



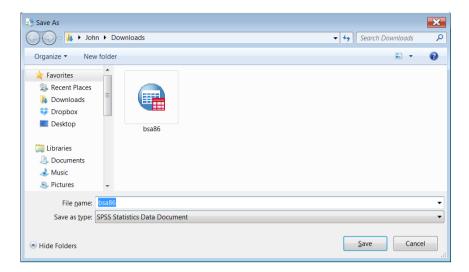
Click on the ▼ next to Save



Click on Save as



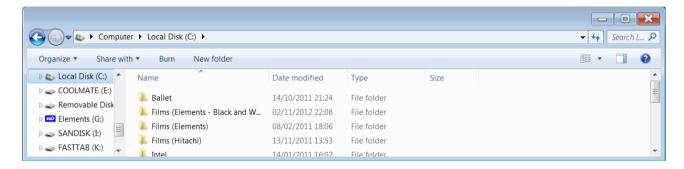
Click on Save



Open drive E:



Where's my file?? Well this is the bit I don't understand, but if you move to another location such as Local disk (C:)

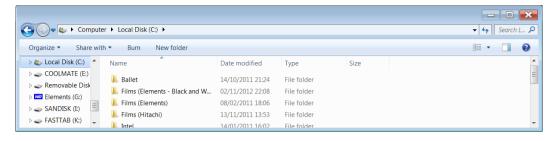


. . and then go back to E: there it is!



You can do this separately for each file you want to download, but it actually works if you download more than one file: your files won't actually appear in **E**: until you toggle out and back in again.

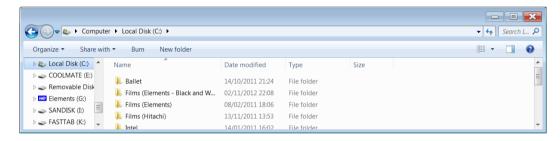
Toggle out



Toggle back in



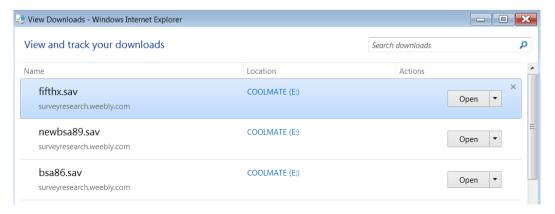
Toggle out



Toggle back in



If you view your downloads, you'll see that files are in twice, once in downloads and once in E: so you can delete them from downloads:



Raw data files

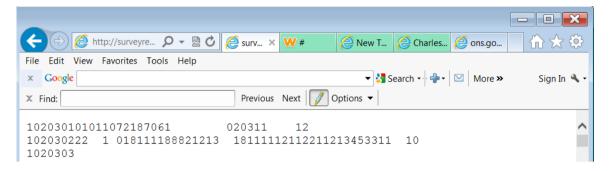
We also need to download some raw data files:

bsa86.txt British Social Attitudes 1986 (3.3 mb)

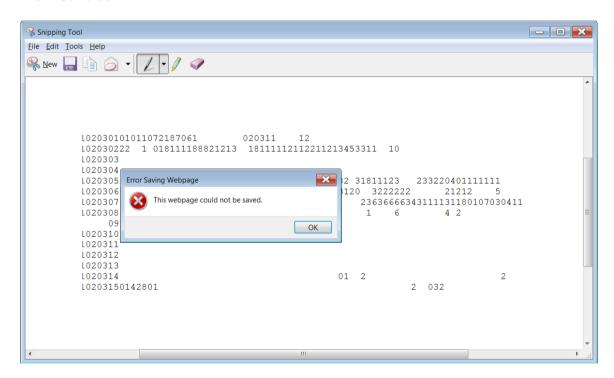
bsa89.txt British Social Attitudes 1989 (excluding Northern Ireland) (3.8 mb)

myclass.txt Cumulative raw data set (N =169)

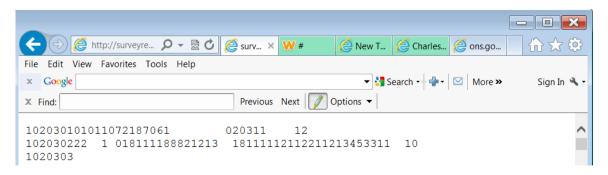
but the sequence is different. Clicking on a link immediately opens the file as a webpage:



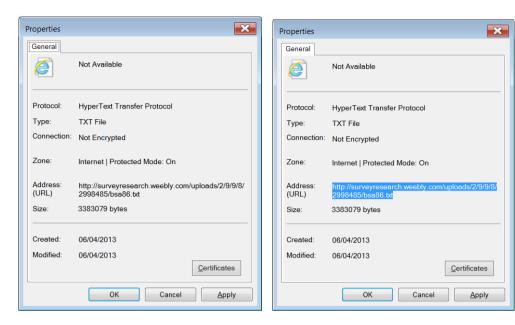
File > Save as



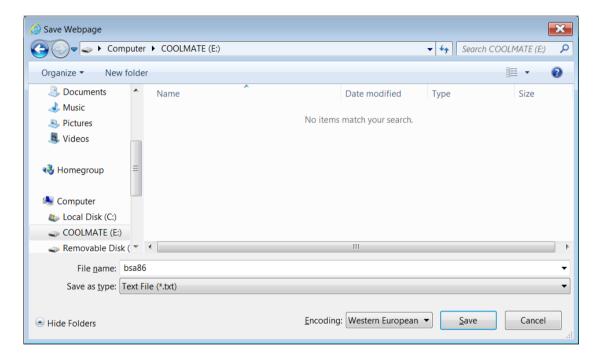
What??!! Go back to file:



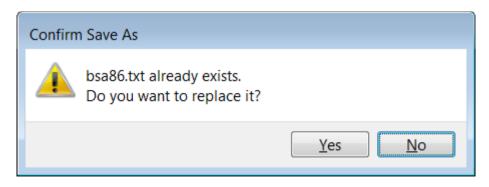
File > Properties



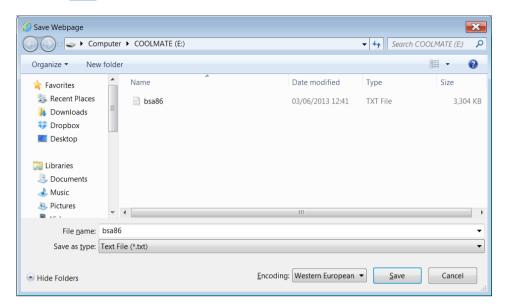
.. but by then:



Click on Save



Click on No Sure enough the file is there now.



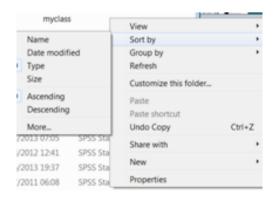
Click on Save and open E:



Still not there, but if you toggle to C: and then toggle back, all the pending files appear:

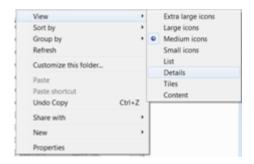


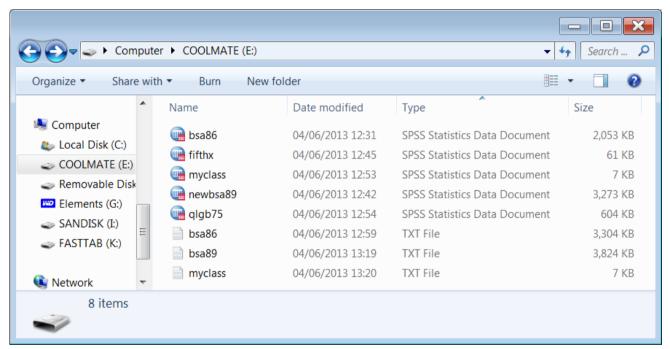
Right click and sort by type:





. . or right click and View > Details:





At least you only have to do this once!

You are now ready to start.

End of session 2.3.0: Preliminary file downloads

Next tutorial: 2.3.1.1 Data transformations
Back to page: 2.3 Data transformations

[Back to Block 2 menu]