Survey Analysis Workshop

Block 2: Analysing one variable **Interval and ratio variables**

2.2.1.3 [BSA86] Extending your data dictionary

[4 December 2010]

Previous session: **2.2.1.2: [BSA86] Exercise - Data for interval variables**

Exemplar: British Social Attitudes (1986 survey)

File: **bsa86_3.sav** (saved file from session 2.2.1.2 containing two interval scale variables from the 1986 British Social Attitudes survey)

[If you don't have file **bsa86_3.sav***, go back and do the previous exercise 2.2.1.2]*

Task: 1: Add missing values, variable labels and value labels for **v1508** (Number of persons in household) and **v1512** (Age of respondent)

2: Save contents of data editor in a ***.sav** file and syntax editor in a ***.sps** file.

SPSS commands[1] used:

TITLE

MISSING VALUES

VARIABLE LABELS

---

[1] **General format:**

TITLE **'<Any text you like>' .**

MISSING VALUES **<variable list>** **(<value list>)**
<variable list> **(<value list>)**
~ ~ ~ ~

where <value list> can be:

(i) up to three numeric or alphanumeric values enclosed in round brackets and separated by commas or blank spaces eg:

missing values age (0,98,99)

(ii) for numeric values only, a **range** of the form:

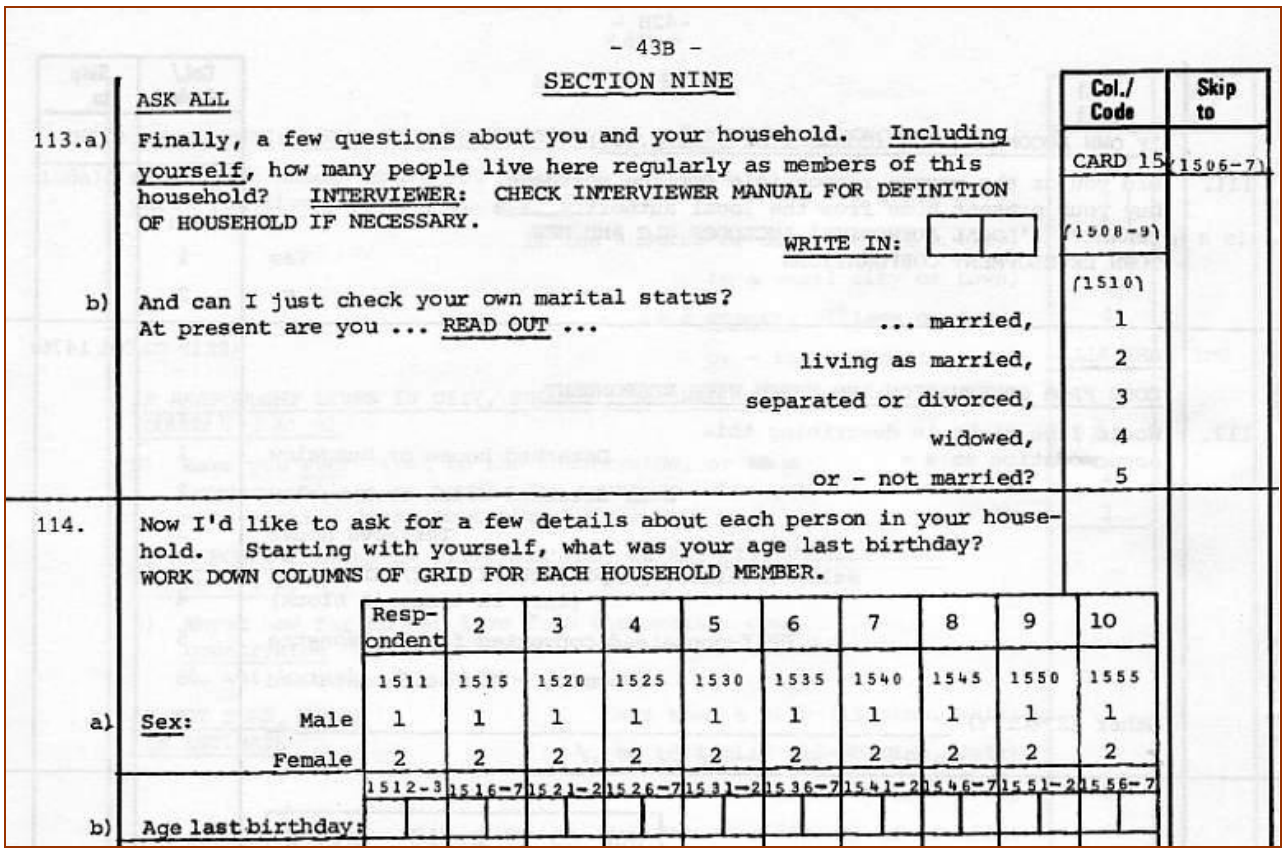
<value> **THRU** <value>
LOWEST THRU <value>
<value> **THRU HIGHEST**

. . . enclosed in round brackets, eg:

missing values age (0, 98 thru highest)

VARIABLE LABELS **<varname> ' <label > '**
/<varname> ' <label > '
/ ~ ~ ~ ~

Below is a facsimile extract from page 43B of the interviewer-administered[2] questionnaire which has all the information we need.



- 43B -

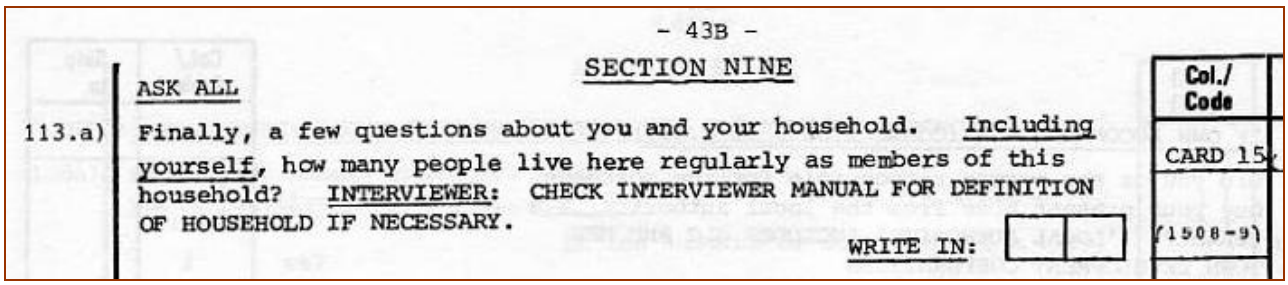
SECTION NINE

		Col./ Code	Skip to
113.a)	ASK ALL Finally, a few questions about you and your household. Including yourself, how many people live here regularly as members of this household? INTERVIEWER: CHECK INTERVIEWER MANUAL FOR DEFINITION OF HOUSEHOLD IF NECESSARY. WRITE IN:	CARD 15 (1508-9)	(1506-7)
b)	And can I just check your own marital status? At present are you ... READ OUT ...	(1510)	
	... married,	1	
	living as married,	2	
	separated or divorced,	3	
	widowed,	4	
	or - not married?	5	

114. Now I'd like to ask for a few details about each person in your household. Starting with yourself, what was your age last birthday? WORK DOWN COLUMNS OF GRID FOR EACH HOUSEHOLD MEMBER.

		Resp-ondent	2	3	4	5	6	7	8	9	10
		1511	1515	1520	1525	1530	1535	1540	1545	1550	1555
a)	Sex: Male	1	1	1	1	1	1	1	1	1	1
	Female	2	2	2	2	2	2	2	2	2	2
		1512-3	1516-7	1521-2	1526-7	1531-2	1536-7	1541-2	1546-7	1551-2	1556-7
b)	Age last birthday:										

Look closely at Q.113a)

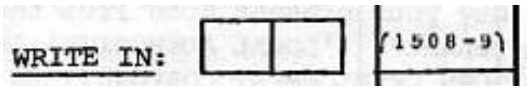


- 43B -

SECTION NINE

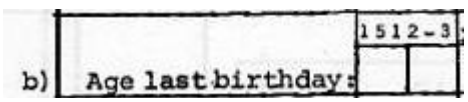
		Col./ Code
113.a)	ASK ALL Finally, a few questions about you and your household. Including yourself, how many people live here regularly as members of this household? INTERVIEWER: CHECK INTERVIEWER MANUAL FOR DEFINITION OF HOUSEHOLD IF NECESSARY. WRITE IN:	CARD 15 (1508-9)

The number of persons in the household is asked in question 113a) and the reply is to be written in as a 2-digit number (with leading 0 or blank for fewer than 10 persons) to be punched in columns 8-9 of card 15 (there's a small (**1508 - 9**) in the margin).



WRITE IN: (1508-9)

Similarly the age of the respondent last birthday is asked at question 106b) and is entered as a 2-digit number to be punched in columns 12-13 of card 15 (**1512 - 3** in margin).



b) Age last birthday: (1512-3)

[2] There were two versions of the interviewer administered questionnaire, each covering a different set of topics, but with a common core of questions asked of all respondents. This is from version B. Respondents also filled in a self-completion questionnaire to be collected later or returned by post.

Again, it helps to prepare a table with your variable names and locations: the question number and summary question text can also be used later as variable labels.

Question	Record number	Variable name	Start column	End column	Missing
Q105a Persons in household	15	v1508	8	9	None
Q106b Age of respondent	15	v1512	12	13	99

Before reading on, try completing the syntax yourself in the space below:

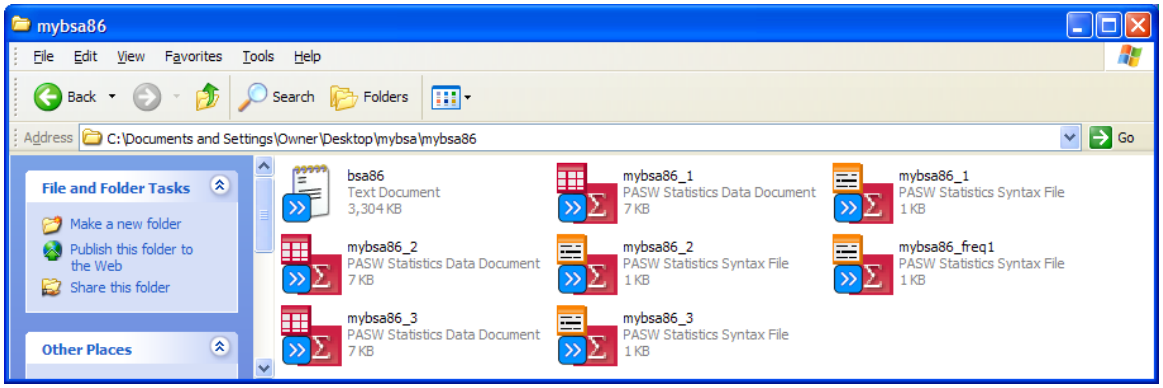
title ' _____ '.

missing values _____ (_____) .

variable labels _____ ' _____ '

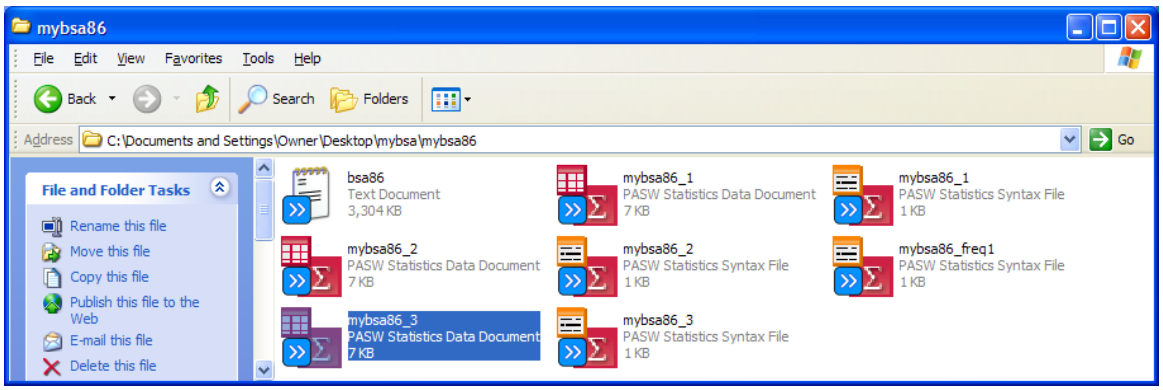
/ _____ ' _____ ' .

Now let's complete the data dictionary by specifying missing values and writing variable labels. Go to your folder **mybsa86**. (If you have done the previous exercises your folder should look like this)



*[If you don't already have folder **mybsa86** or file **mybsa86_3.sav**, go back to the Block 2 menu and do exercises **2.1.2.3 to 2.1.2.7**, the housekeeping exercise **2.1.2.8** and the previous exercise in this section **2.2.1.2 [BSA86] Exercise - Reading in data for interval variables**]*

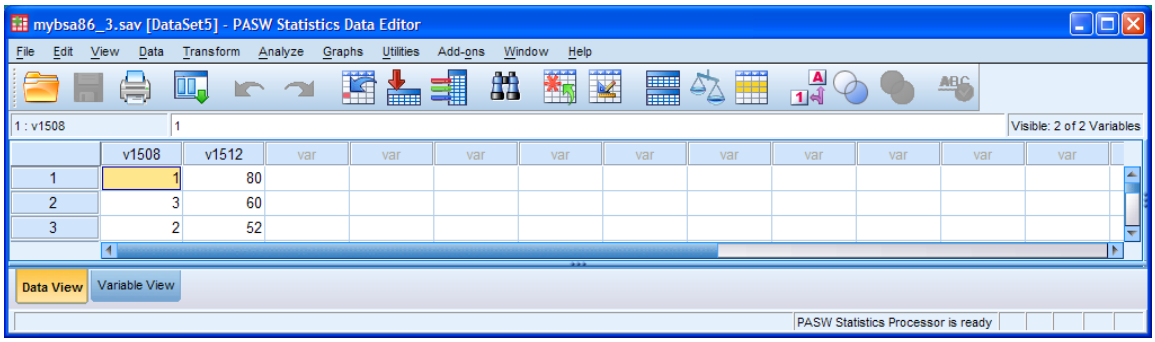
Double click on **mybsa86_3.sav**:



SPSS automatically generates the following syntax and displays it it the output viewer.

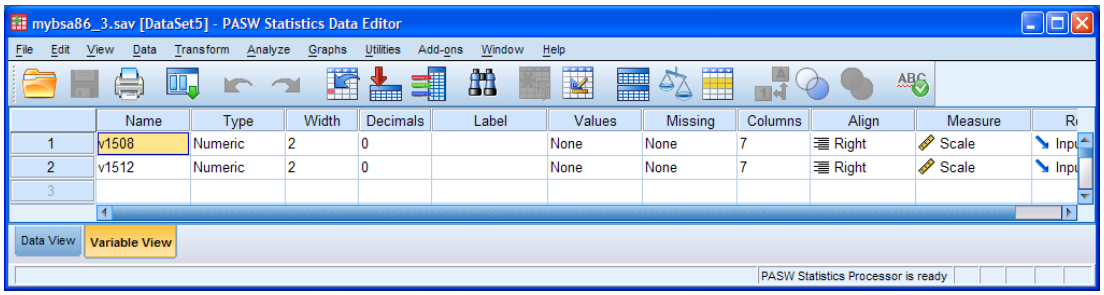
```
GET
  FILE='C:\Documents and Settings\Owner\Desktop\mybsa\mybsa86\mybsa86_3.sav'.
DATASET NAME DataSet1 WINDOW=FRONT.
```

If the data editor opens in Data View . . .

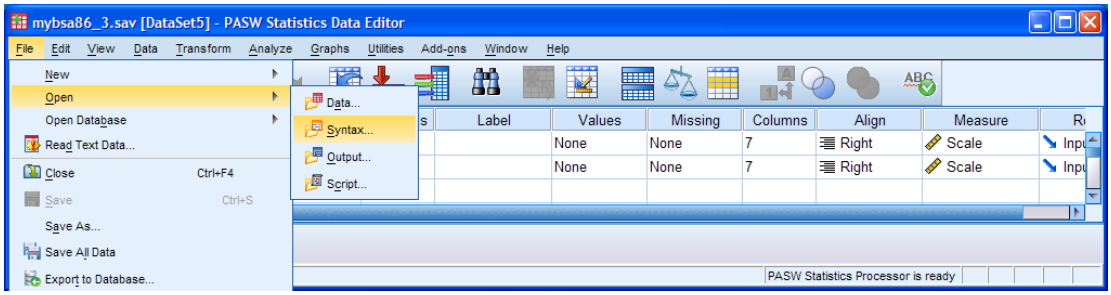


. . . click on Variable View in the bottom left corner . . .

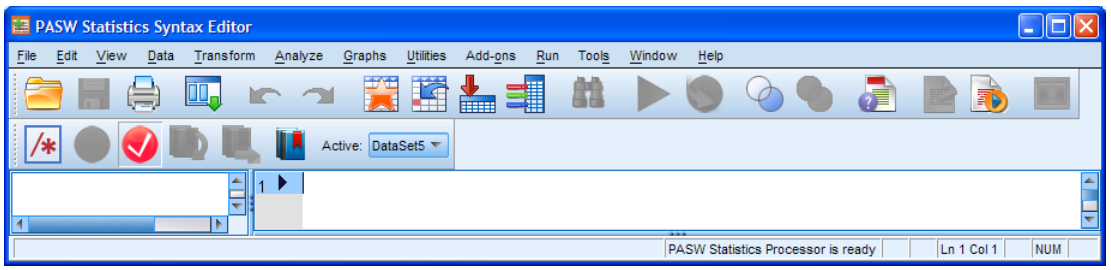
. . . to display it in Variable View (this one has been adjusted by shrinking it to three rows):



Click on File > New > Syntax

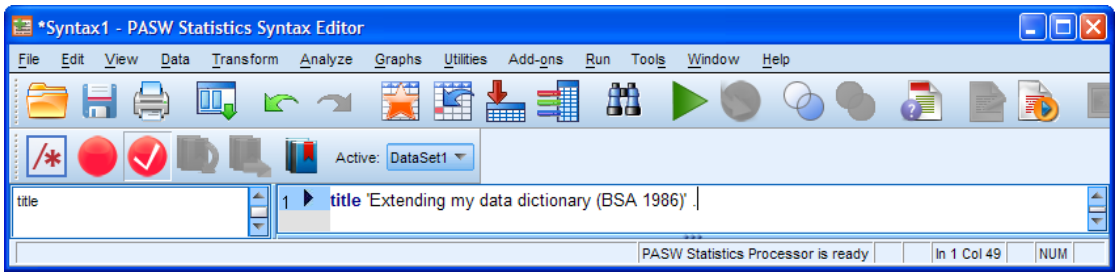


. . . to display a blank syntax editor:



Give your job a title:

```
title 'Extending my data dictionary (BSA 1986)' .
```



The syntax file header has changed from PASW Statistics Syntax Editor to *Syntax1.sps. Make sure the cursor is on this line and click on the green ►

Your title command will be added to the output file:

```
GET
  FILE='C:\Documents and Settings\Owner\Desktop\mybsa\mybsa86\mybsa86_3.sav'.
DATASET NAME DataSet1 WINDOW=FRONT.
title 'Extending my data dictionary (BSA 1986)' .
```

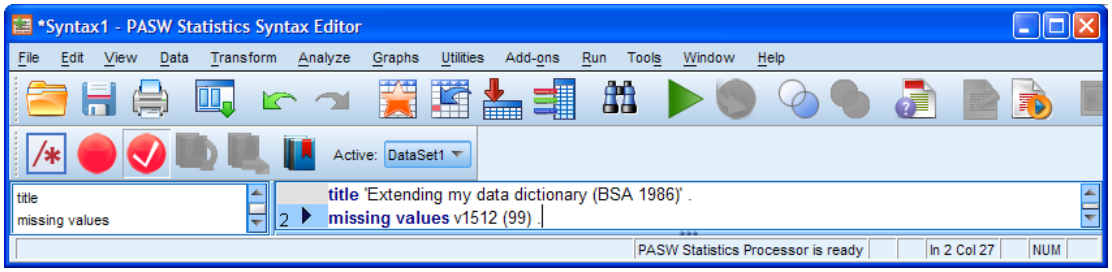
. . and the title will be repeated:

>> Extending my data dictionary (BSA 1986)

MISSING VALUES

There are no cases missing for **v1508** (number of persons in household) but 99 has been entered where **v1512** (age of respondent) was not given. Go back to the syntax editor and write in the **MISSING VALUES** command on the next line:

```
missing values v1512 (99) .
```

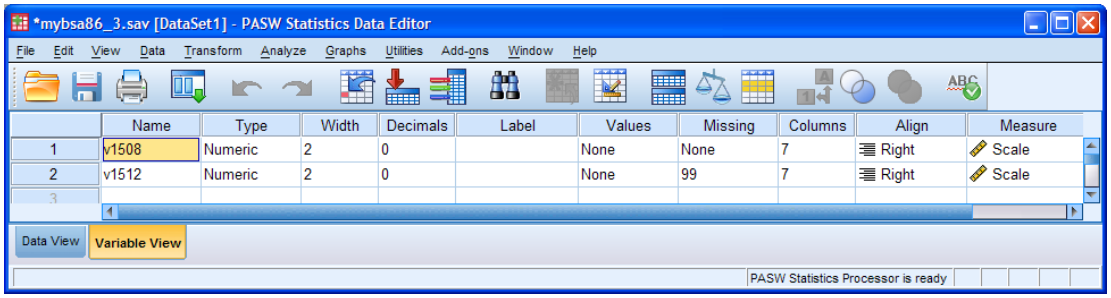


Make sure the cursor is on this line and click on the green ▶ (or **[CTRL]+R** or Run **>** Current)

The command will be added to the output file:

```
missing values v1512 (99) .
```

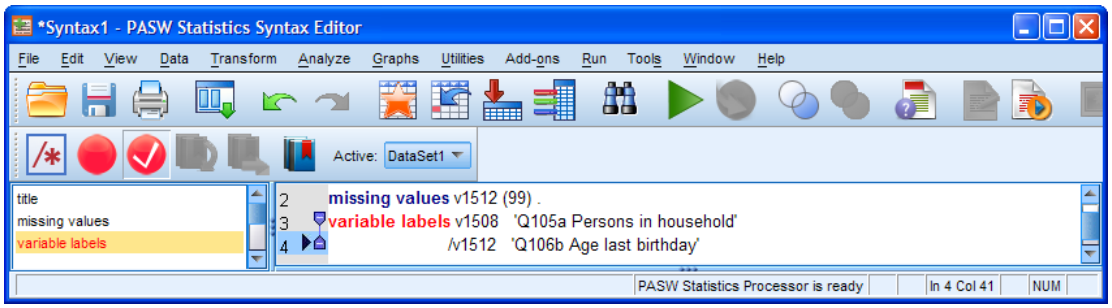
Now check the data editor again and you will see that the value **99** has been added under **Missing** for **v1512**.



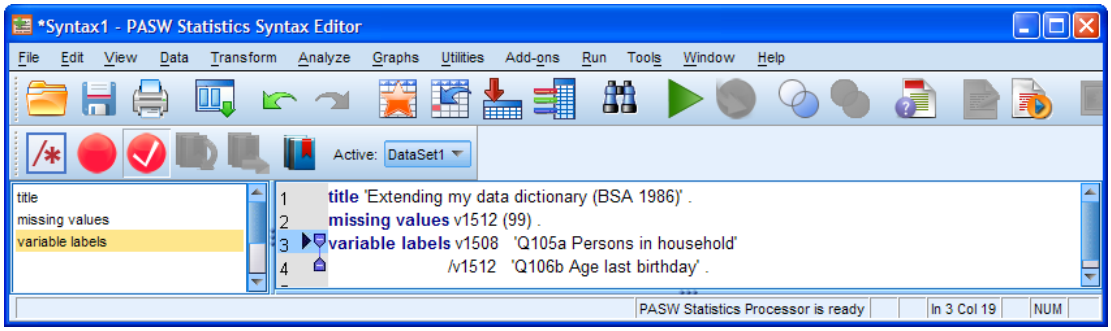
VARIABLE LABELS

Finally let's specify the variable labels. Go back to the syntax editor and type:

```
variable labels    v1508  'Q105a Persons in household'
                  /v1512  'Q106b Age last birthday' .
```



Oops! Forgot the full stop!

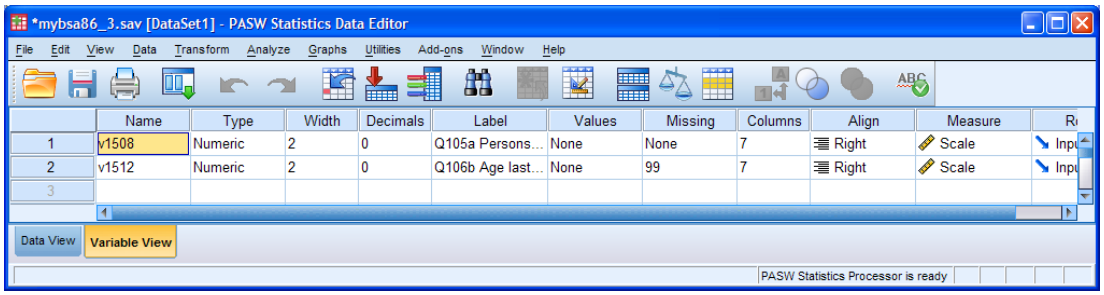


Make sure the cursor is somewhere inside the command (variable labels will be highlighted in the left pane) and run it by clicking on the green ► (or **[CTRL]+R** or Run **>** Current).

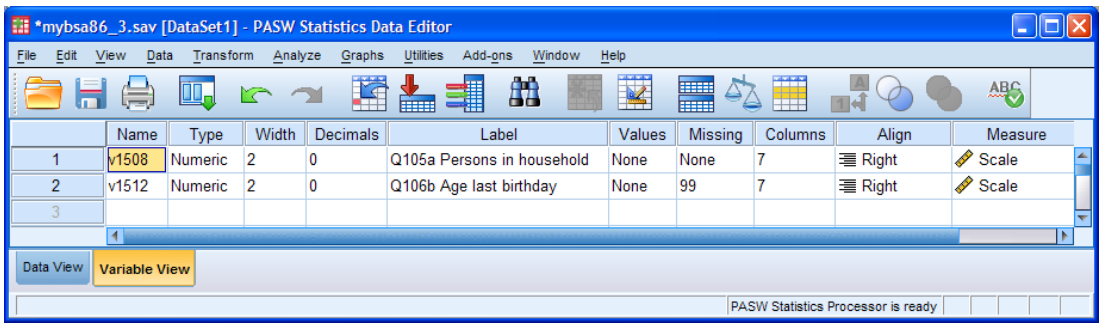
Your syntax will be added to the output file:

```
missing values v1512 (99) .
variable labels v1508   'Q105a Persons in household'
     /v1512   'Q106b Age last birthday' .
```

. . . and your labels will have been added to the data editor:



The labels are masked, but you can drag the column separators around to reveal them: this makes the screenshot easier to read and keeps only the columns of immediate interest, thus:

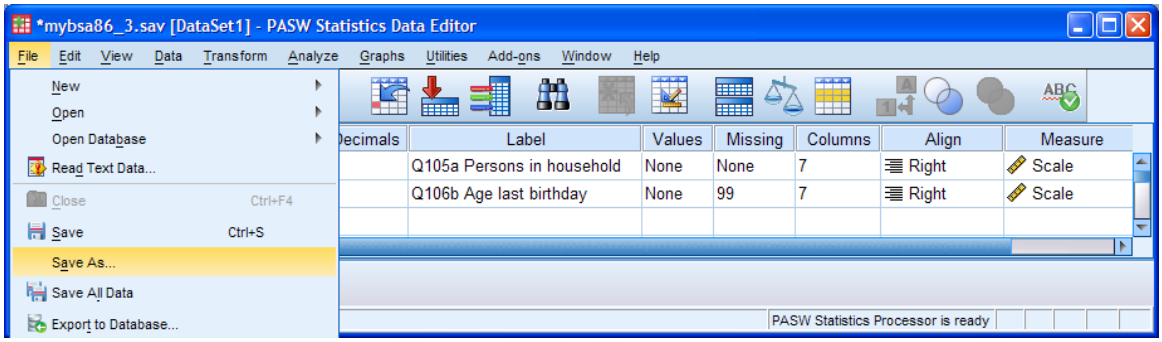


You have now completed your data dictionary.

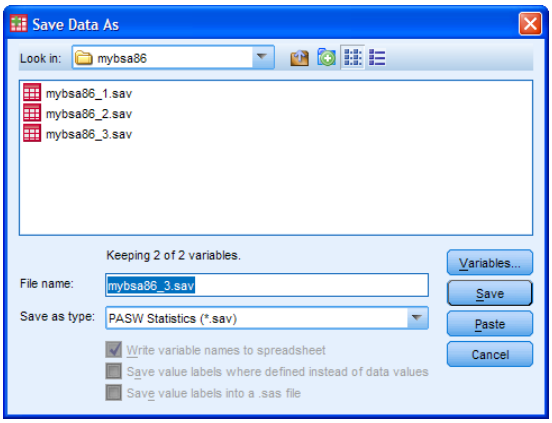
This has been an exercise in file-building following a logical progression from reading in and checking raw data (2.1.2.2) and then adding information about missing values and writing variable labels for printing back (exactly as typed) on your output.

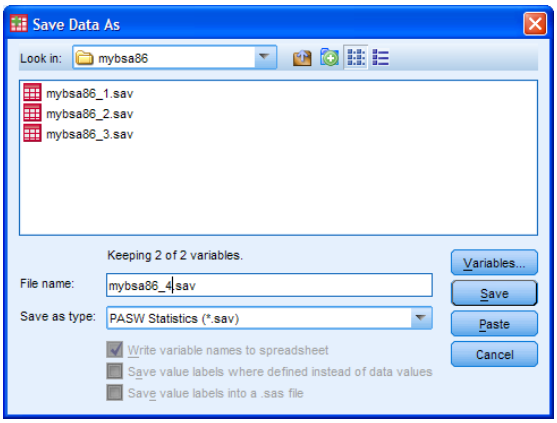
At this stage we need to save "hard copies" of the files. Whilst not strictly necessary for this exercise, it's good practice to get into the habit of **regularly saving your work** as you complete each stage.

Go back to the data editor and click on File > Save As ..



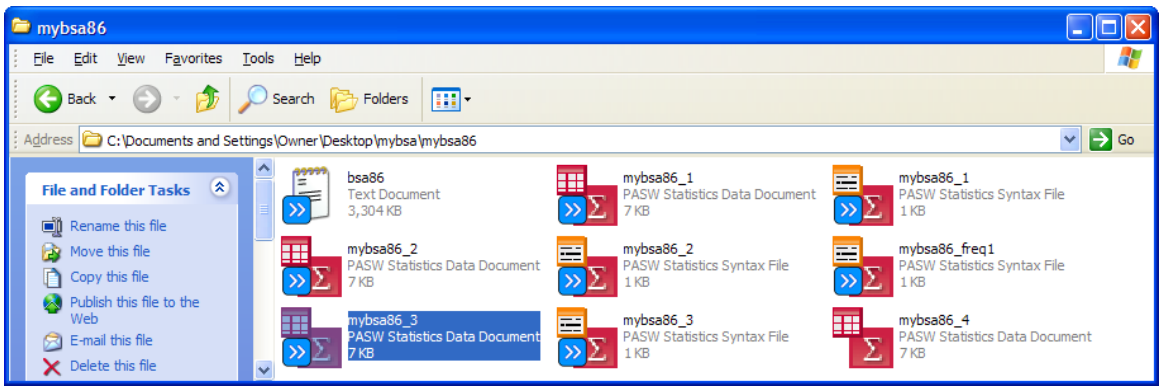
Navigate to folder **mybsa86** . . . and write **mybsa86_4** in the File name: box



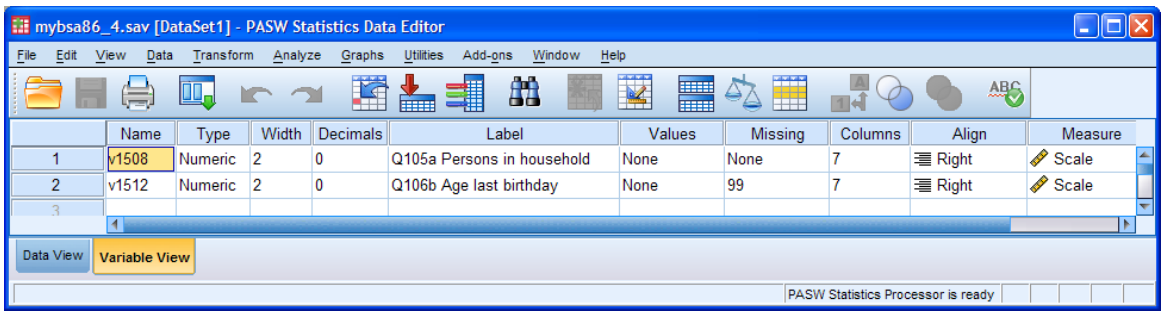


Make sure the Save as type: box displays PASW Statistics (*.sav) and click on Save

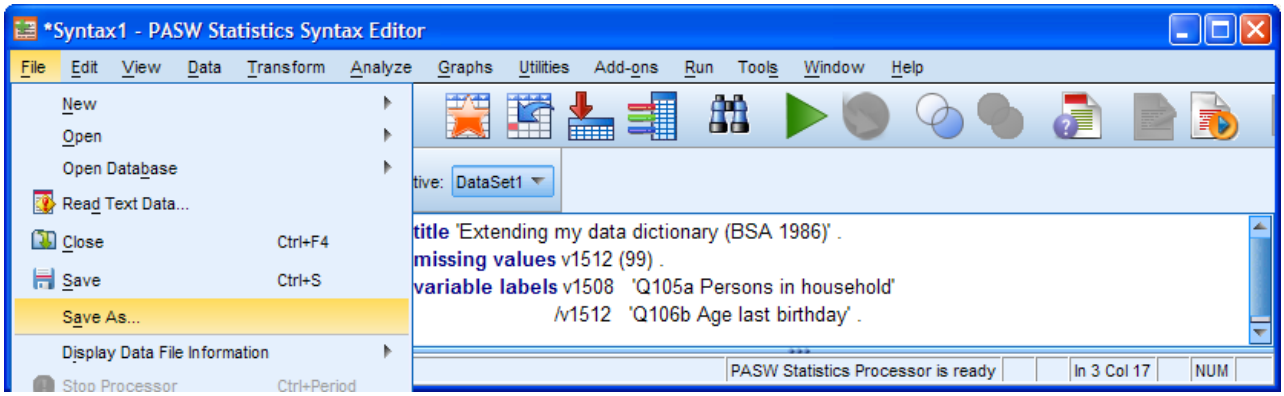
A "hard copy" of the data editor will be saved as **mybsa86_4.sav** in folder **mybsa86**.



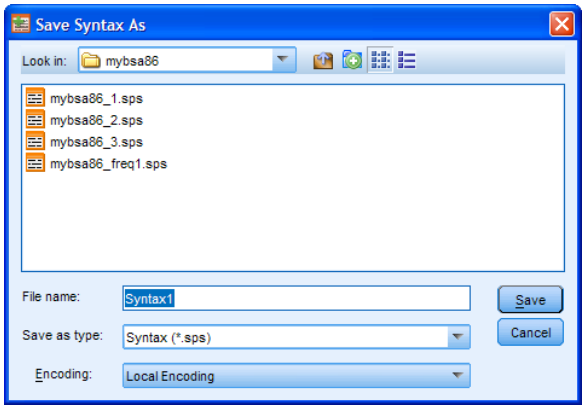
The data editor remains open as the **active file** in SPSS, but the header will change from **bsa86_3.sav** to **bsa86_4.sav**.

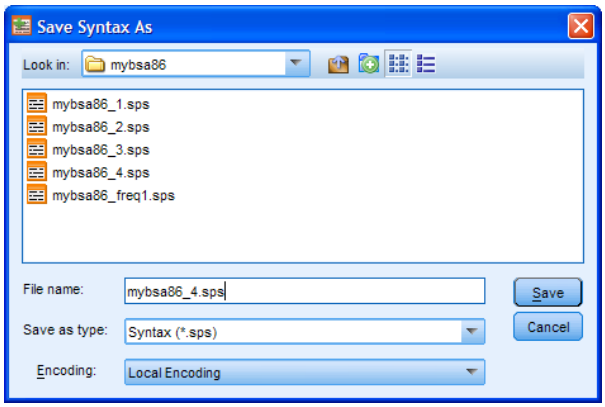


You should also get in to the habit of saving your file-building syntax. Good practice is to have the same name as the ***.sav** file it creates, but with a ***.sps** extension, in this case **bsa86_4.sps**. Go back to the syntax editor and click on File > Save As ..



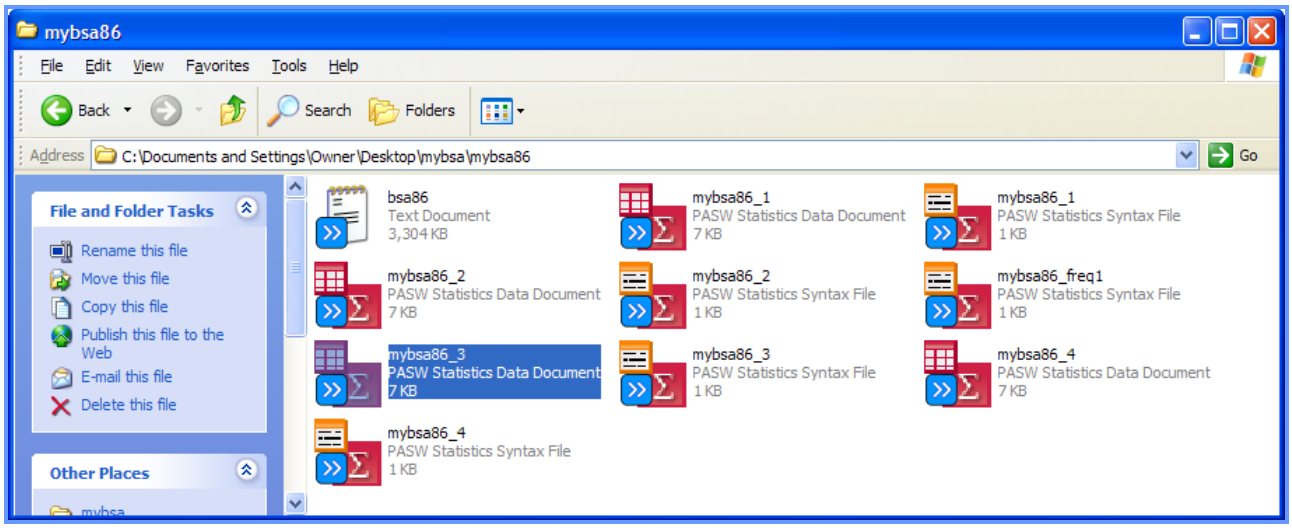
Navigate to folder **mybsa86** . . . and write **mybsa86_4** in the File name: box:



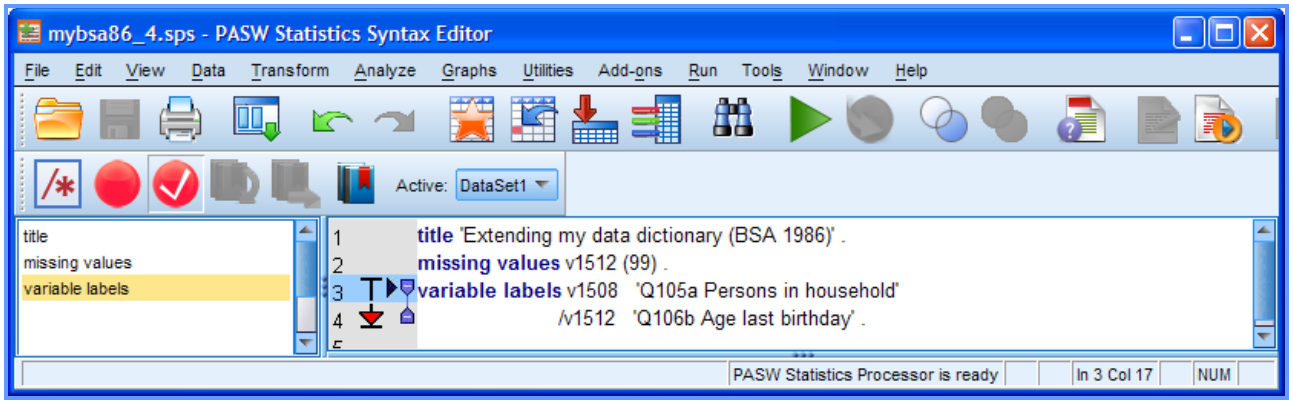


Make sure the Save as type: box displays Syntax (*.sps) and click on Save

Your **mybsa86** folder should now look like this:



The syntax editor header will change from ***Syntax1.sps** to **mybsa86_4.sps**.



Your SPSS data and syntax files are now safely stored for you to proceed to the next session.

You can save the output file as well if you like, but you don't really need to as you can always run the job again.

End of session:

Next session: 2.1.2.4 Frequencies for interval variables

[Back to Block 2 menu]