

## Block 2: Analysing one variable

## Nominal and ordinal variables

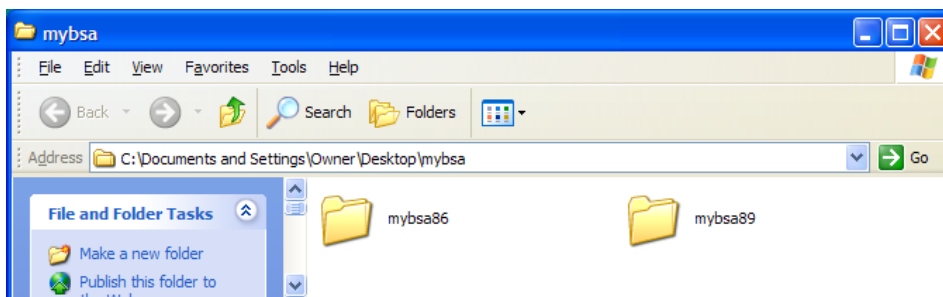
2.1.2.11 Checking the contents of **mybsa89\_1.sav**

[24 November 2010]

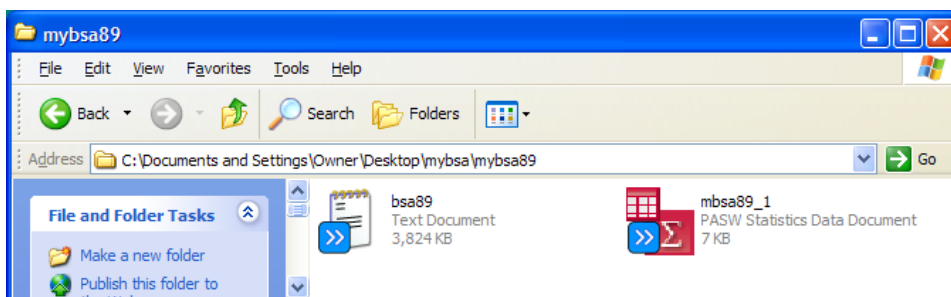
Previous session: 2.1.2.10 Specimen answer for homework exercise 1

Exemplar: [British Social Attitudes](#) (1989 survey)SPSS syntax used: **LIST** **DISPLAY**

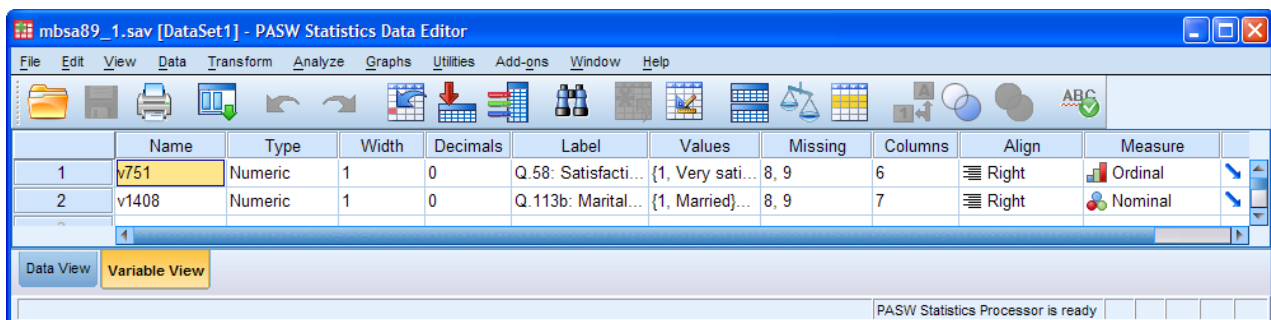
SPSS drop-down menus: Utilities > Variables  
 Data > Define Variable Properties  
 Analyze > Reports > Codebook

Go to your folder **mybsa** and double click on folder **mybsa89**

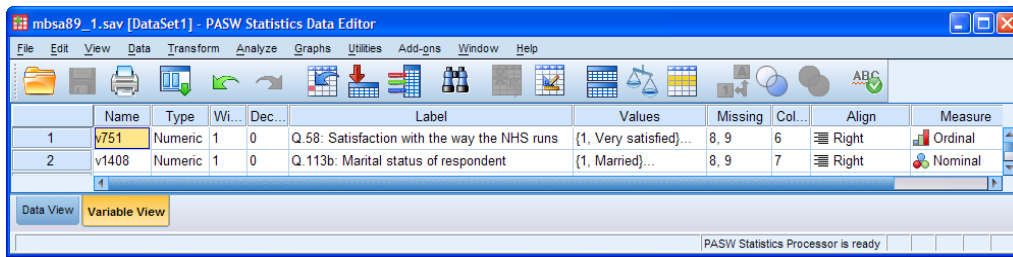
[If you don't have folders **mybsa** or **mybsa89**, go back to the [Block 2 menu](#), do the housekeeping in 2.1.2.8 and then exercises 2.1.2.9 and 2.1.2.10]



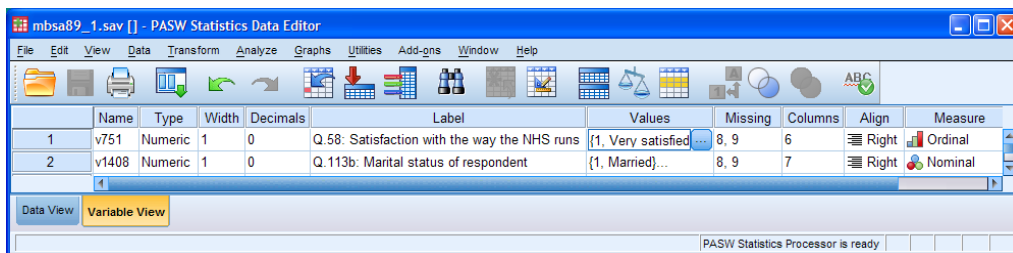
Double-click on **mybsa89\_1**. [If you don't have file **mybsa89\_1**, go back to the [Block 2 menu](#) and do exercise 2.1.2.10]



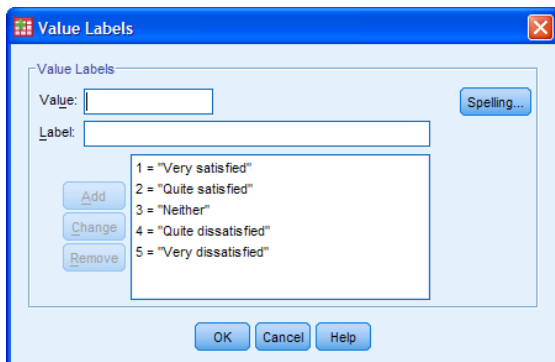
. . and adjust the column widths so you can see everything you need:



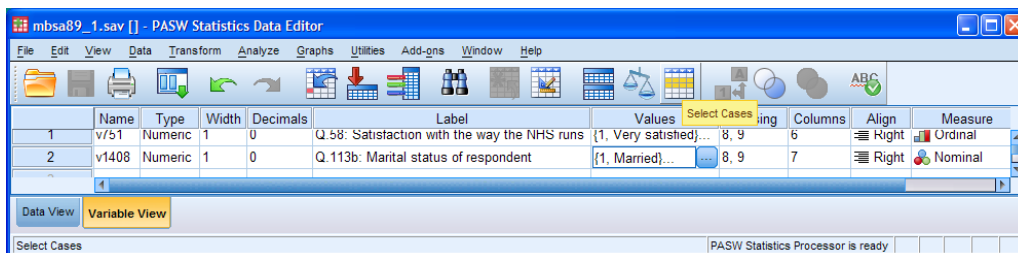
You can run a simple check on the value labels by clicking on the **Values** cell for v751:



... and then on the blue box:

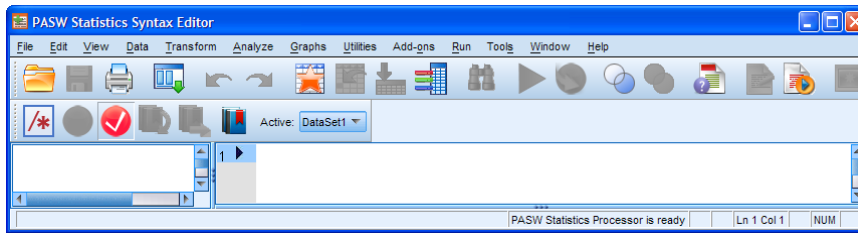


Repeat for v1408:



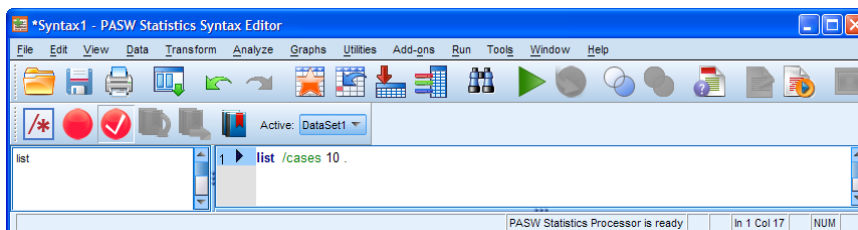
For more complex checks to make sure everything is as it should be, you can use the **LIST** and **DISPLAY** commands *[not available via the drop-down menus]*.

Click on **File** > **New** > **Syntax** to open a new syntax editor:



Use the **LIST** command *[not available via the drop-down menus]* to check the contents of the first 10 cases. (**Don't use LIST by itself** or you'll get a listing of all 3,100 cases!)

**list /cases 10 .**

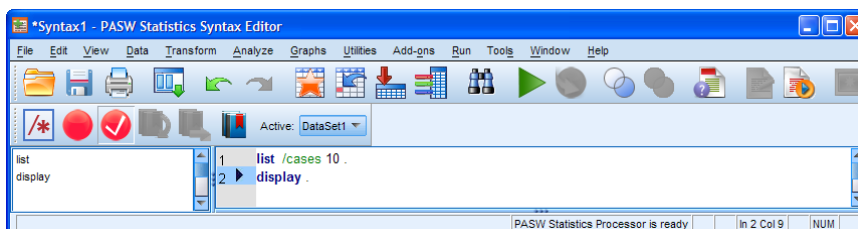


Click on the green ►. The following will be displayed in the output viewer:

```
v751 v1408
.      4
2      1
3      5
4      1
3      5
5      1
3      5
3      1
3      1
2      1

Number of cases read: 10    Number of cases listed: 10
```

You can check the data dictionary contents with a **DISPLAY** command *[not available via the drop-down menus]*. The simplest form is **display .**



Click on the green ►. The following will be displayed in the output viewer:

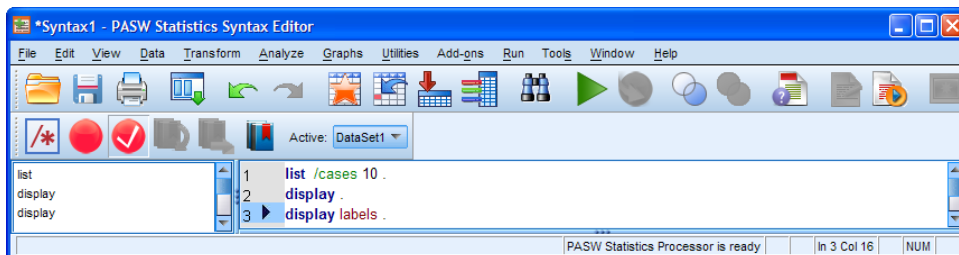
#### Variable Names

```
v751
v1408
```

Currently defined  
variables

You can check the variable labels with:

**display labels .**



Click on the green ►. The following squashed up table will be displayed in the output viewer:

**Variable Labels**

Variable	Position	Label
v751	1	Q.58: Satisfaction with the way the NHS runs
v1408	2	Q.113b: Marital status of respondent

Variables in the working file

. . . which you can improve by dragging the right edge of the table outwards:

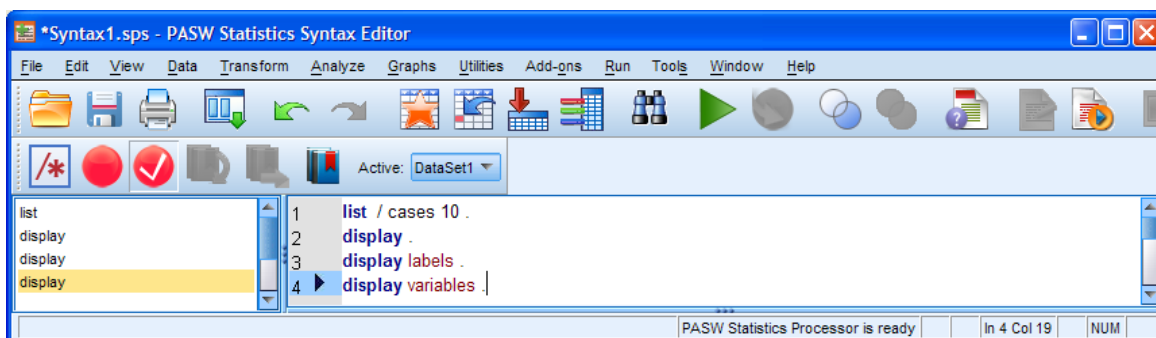
**Variable Labels**

Variable	Position	Label
v751	1	Q.58: Satisfaction with the way the NHS runs
v1408	2	Q.113b: Marital status of respondent

Variables in the working file

As a final check use the **DISPLAY** command with the keyword **VARIABLES**.

**display variables .**



Click on the green ►

Again a slightly messy table:

Variable Information							
Variable	Position	Label	Measurement Level	Role	Print Format	Write Format	Missing Values
v751	1	Q.58: Satisfaction with the way the NHS runs	Ordinal	Input	F1	F1	8, 9
v1408	2	Q.113b: Marital status of respondent	Nominal	Input	F1	F1	8, 9

Variables in the working file

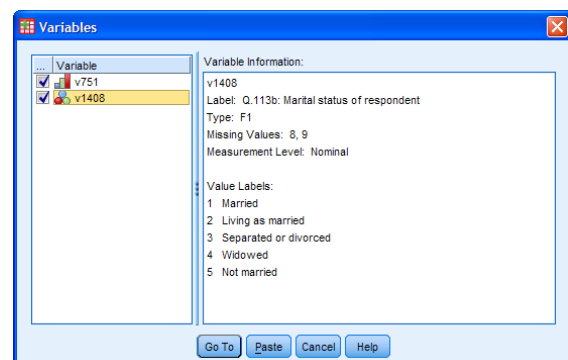
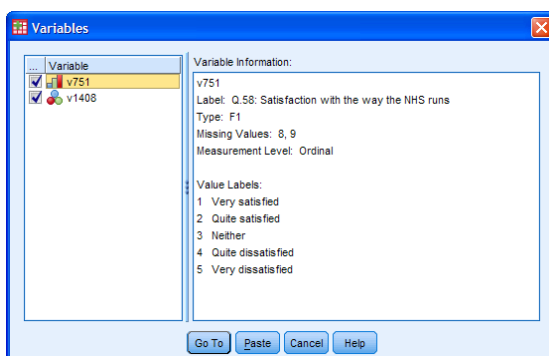
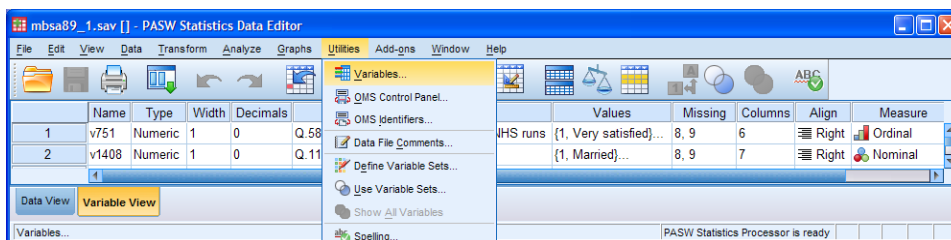
.. but with judicious dragging of column separators (working from right to left) you can get something reasonably presentable.

Variable Information							
Variable	Position	Label	Measurement Level	Role	Print Format	Write Format	Missing Values
v751	1	Q.58: Satisfaction with the way the NHS runs	Ordinal	Input	F1	F1	8, 9
v1408	2	Q.113b: Marital status of respondent	Nominal	Input	F1	F1	8, 9

Variables in the working file

You can also get file information from the drop-down menus, but only one variable at a time:

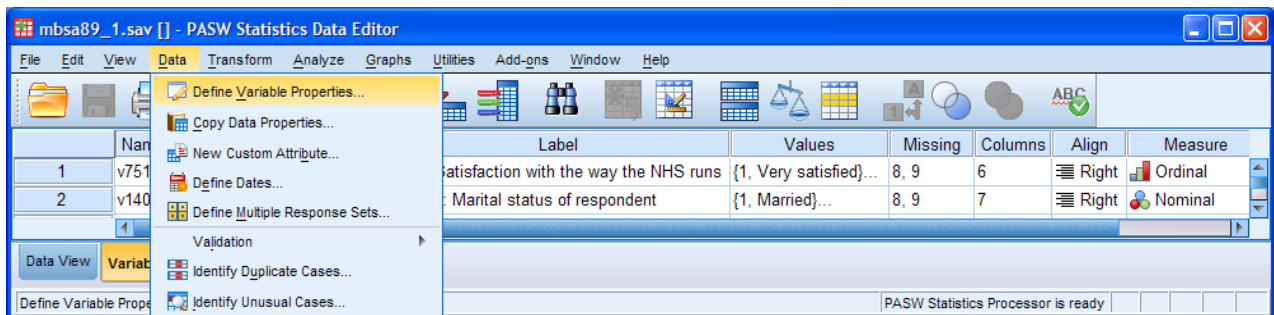
**Utilities > Variables**



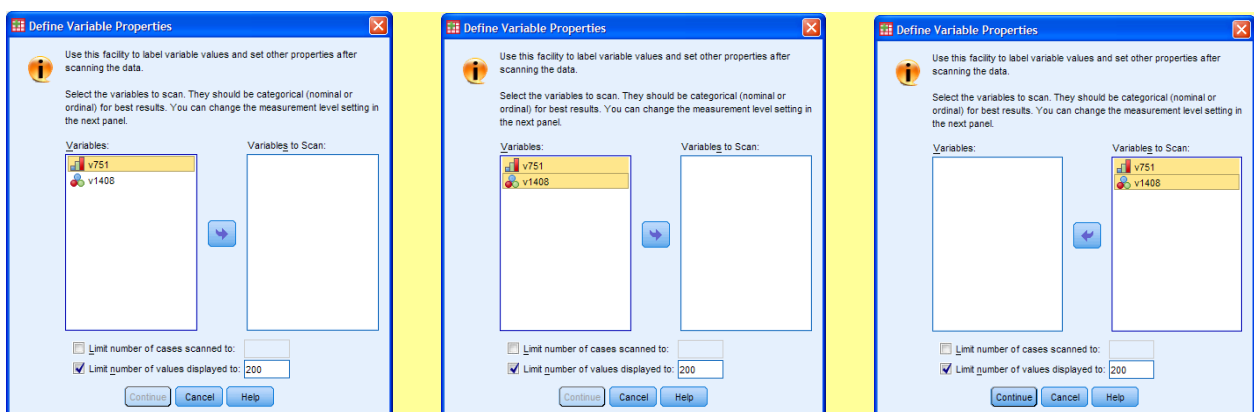
I know I rant on about it being quicker and easier to do most basic file-building operations in syntax, and it is, but, for checking variables and associated dictionary information at a glance, try **Data > Define Variable Properties**. It's a beaut, even if it only works for one variable at a time!

This particularly useful *menu [not intended as a data check, but as a means of entering properties, labels and other information]* is available from the GUI. It doesn't produce syntax, but it does display frequency counts for each value.

Click on **Data > Define Variable Properties**

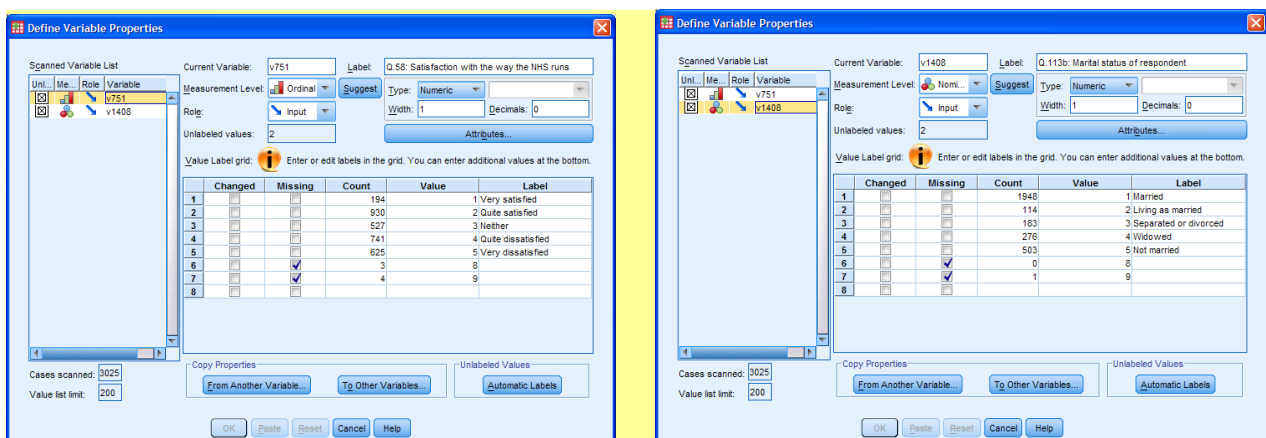


Highlight both variables, click on the **blue arrow** to drag them across and click on **Continue**



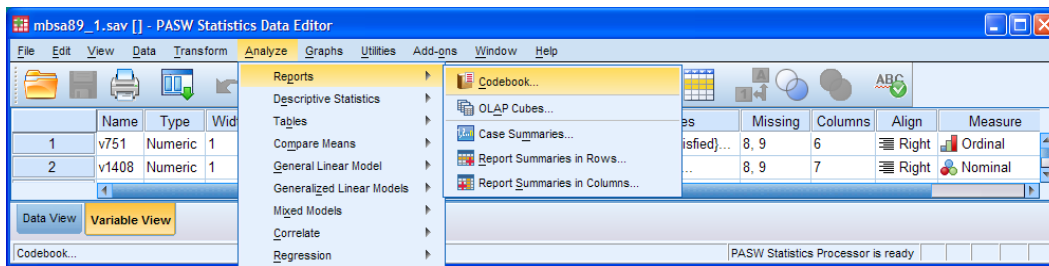
**v751**

**v1408**



The drop-down menus offer another very useful check via the **CODEBOOK** (for once it's quicker and simpler than syntax). This has the added advantage of showing the distribution of responses as both counts and percentages, but it's not something I would recommend for really large files as the output would be enormous.

## Analyze > Reports > Codebook



. . . produces the following tables (columns and linespacing already adjusted)

v751				
		Value	Count	Percent
Standard Attributes	Position	1		
	Label	Q.58: Satisfaction with the way the NHS runs		
	Type	Numeric		
	Format	F1		
	Measurement	Ordinal		
	Role	Input		
Valid Values	1	Very satisfied	194	6.4%
	2	Quite satisfied	930	30.7%
	3	Neither	527	17.4%
	4	Quite dissatisfied	741	24.5%
	5	Very dissatisfied	625	20.7%
Missing Values	8		3	.1%
	9		4	.1%
	System		1	.0%

v1408				
		Value	Count	Percent
Standard Attributes	Position	2		
	Label	Q.113b: Marital status of respondent		
	Type	Numeric		
	Format	F1		
	Measurement	Nominal		
	Role	Input		
Valid Values	1	Married	1948	64.4%
	2	Living as married	114	3.8%
	3	Separated or divorced	183	6.0%
	4	Widowed	276	9.1%
	5	Not married	503	16.6%
Missing Values	9		1	.0%

See what I mean about it being quicker and simpler this time with the menus? Here's the syntax generated by SPSS!

```
CODEBOOK v751 [o] v1408 [n]
/VARINFO POSITION LABEL TYPE FORMAT MEASURE ROLE VALUELABELS MISSING
ATTRIBUTES
/OPTIONS VARORDER=VARLIST SORT=ASCENDING MAXCATS=200
/STATISTICS COUNT PERCENT MEAN STDDEV QUANTILES.
```

End of session

Next session: **2.1.2.12 Specimen answer for homework exercise 2**

[\[Back to Block 2 menu\]](#)