Survey Analysis Workshop

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Block 1: From questionnaire to SPSS saved file

1.5 Utilities

1.5.1 Tutorial: Checking SPSS (saved) data files

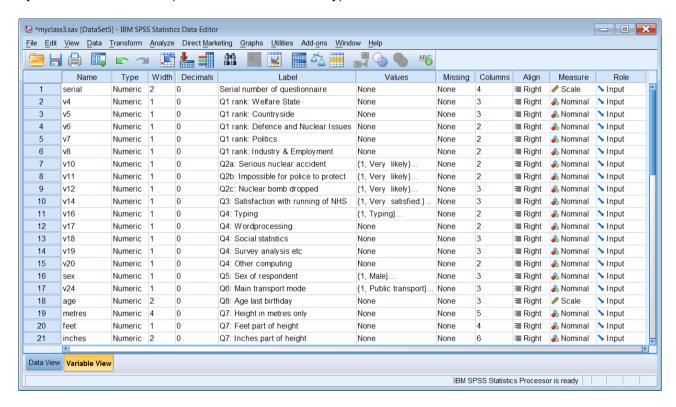
There are various ways of using SPSS to check the content and structure of your data files and the properties of variables. Some are available in both the GUI and syntax, some in syntax only, some in GUI only. Some produce output, some don't.

Exemplar: Pre-course questionnaire.

File: myclass3.sav

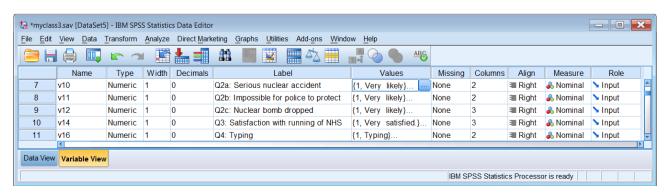
Basic checks: no output

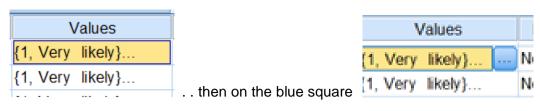
Eyeball the Data Editor (and edit/correct manually):

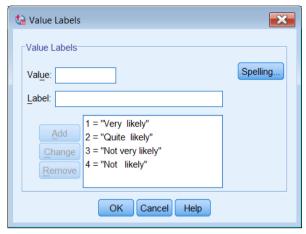


Most properties are clearly visible, but to check the value labels, select a variable and click on a cell in the Values column. For example, to see the value labels for V10:

Checking value labels







... and so on for other variables in the file:



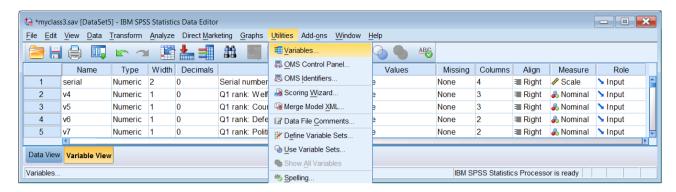


This display pane can also be used to add, change or remove value labels (as an alternative to the **VALUE LABELS** command in syntax).

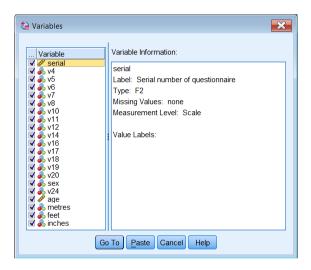
Display all properties

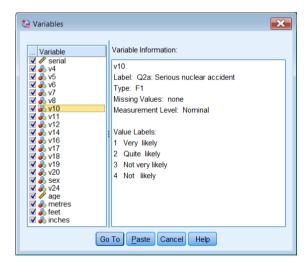
You can display summary information on all variable properties from:

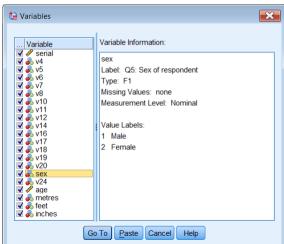
Utilities > Variables

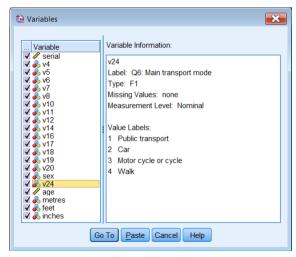


Click on any variable to display a summary of more properties (Name, Label, Type, Missing Values, Measurement Level, Value Labels):







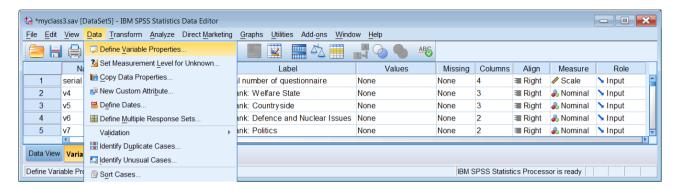


[NB Clicking on Paste does not produce syntax: it simply copies the variable name into the current *.sps file.]

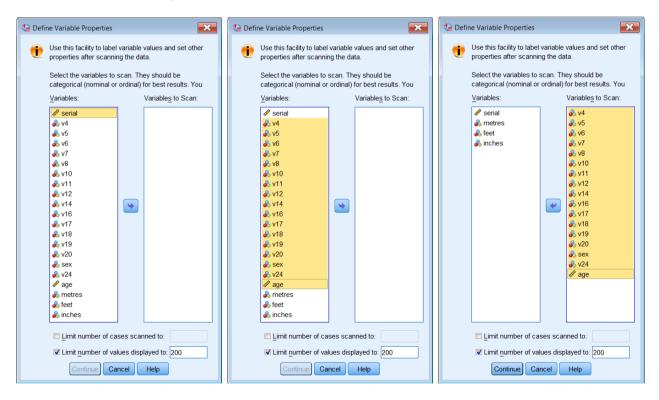
Display (and edit/change) properties

Utilities > Variables does not allow you to change any of the variable properties. However, the GUI provides a particularly useful and very quick way to check your variable labels, measurement levels, variable types, data values, value labels and raw counts.

Data > Define Variable Properties¹

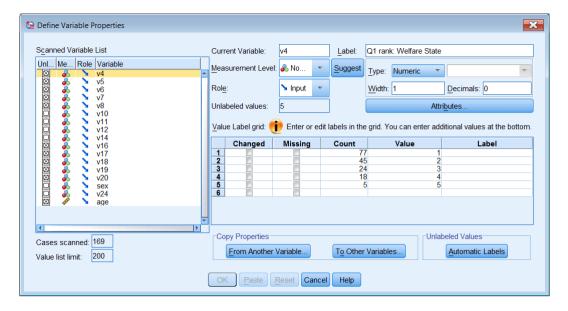


For a single variable click on it in the left pane and transfer it to the right pane by clicking on the blue arrow. For contiguous variables, click on the first one, then scroll down and [SHIFT] click on the last one. For non-contiguous variables click on the first variable, then [CTRL] click on the others. These are contiguous, so:

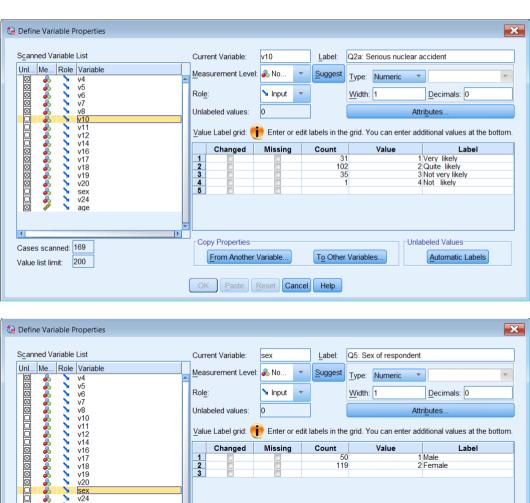


Click on Continue

Full explanation on: <u>Help > Core System > Data preparation > Defining Variable Properties</u>



In addition to all current properties of the highlighted variable, this display also contains raw counts of the number of times each value occurs for that variable:



OK Paste Reset Cancel Help

Unlabeled Values

Automatic Labels

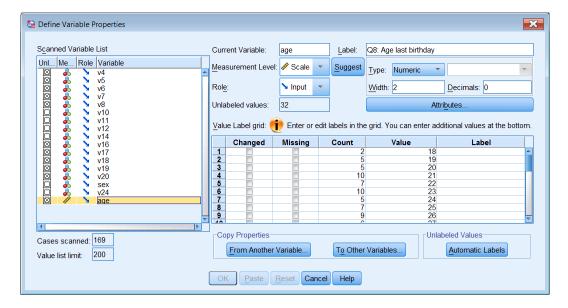
To Other Variables..

Copy Properties

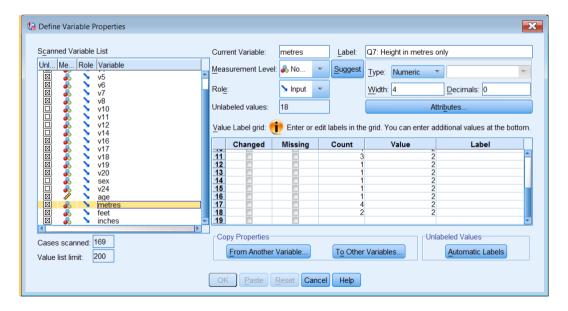
From Another Variable...

Cases scanned: 169

Value list limit: 200



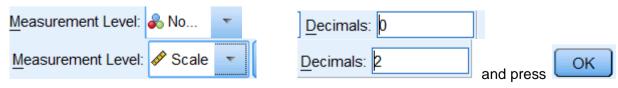
This facility, when used solely to inspect your data, produces no syntax and no output. However if you use it to change variable properties, it automatically produces syntax, executes commands and displays these in the Viewer file. For instance, Q.7 (Height in metres) was entered as numeric with 2 decimal places across four columns, but the variable **metres** is shown as integer (no decimal places). The measurement level is also displayed as Nominal when it is in fact Scale. [**NB**: This is due to the way SPSS automatically assigns levels to variables depending on how many values are detected.]



This could be corrected directly in the Data Editor by changing 0 to 2 in the Decimals column and Nominal to Scale in the Level column. In syntax it can be (in fact should have been) done using:

VARIABLE LEVEL metres (scale). **FORMATS metres** (f4.2).

The corrections can also be made manually in the above window



This produces syntax, executes the commands, displays output in the Viewer file and reverts to the Data Editor.

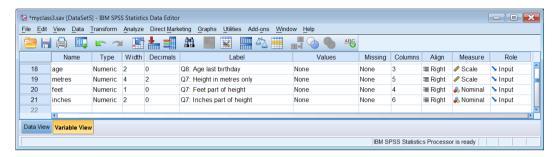
```
* Define Variable Properties.

*metres.

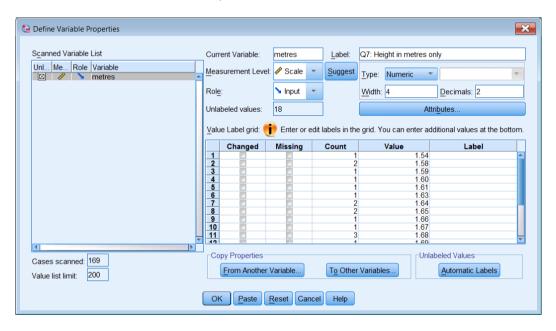
VARIABLE LEVEL metres(SCALE).

FORMATS metres(F4.2).

EXECUTE.
```



The variable **metres** now has 2 decimal places and is defined as Scale:



Clicking on Paste copies the syntax into the current Syntax Editor, but does not execute the command(s). In fact, the levels of other variables also need changing: v4 to v14 should all be Ordinal, feet and inches should be Scale, but this can more easily be done directly in the Data Editor or by syntax:

VARIABLE LEVEL v4 to v14 (ordinal) feet inches (scale).

End of tutorial

Now go to 1.5.2 Exercise - Checking your data file

[Back to Block 1 menu] or [Forward to Block 2 menu]