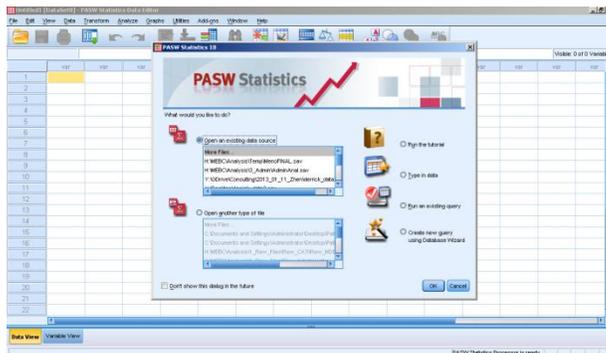


## Guideline 1\_SPSS: Opening and reading a data file

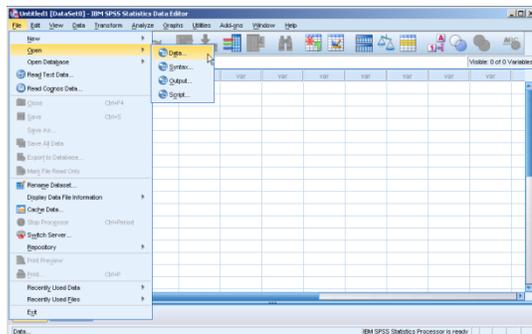
### How to open a document

This guide is intended to show how to open a data file. A data file might be in SPSS format or other formats. In the former case, follow these steps:

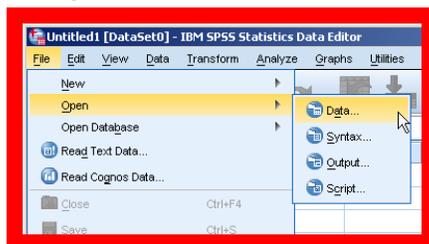
1. Click on the SPSS icon on your desktop  
You will see the default spreadsheet opens as below:



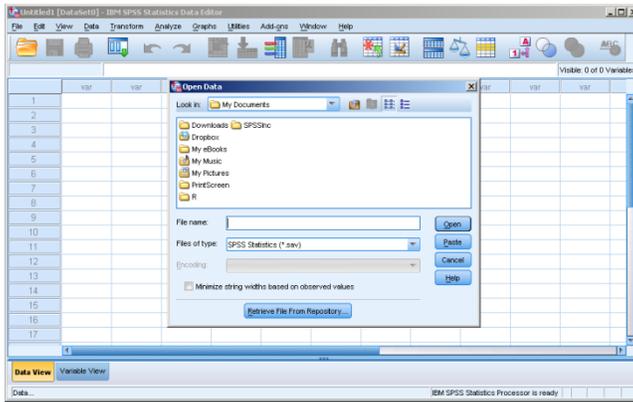
2. Click "cancel".
3. From the menu click [File] -> [Open] -> [Data...]



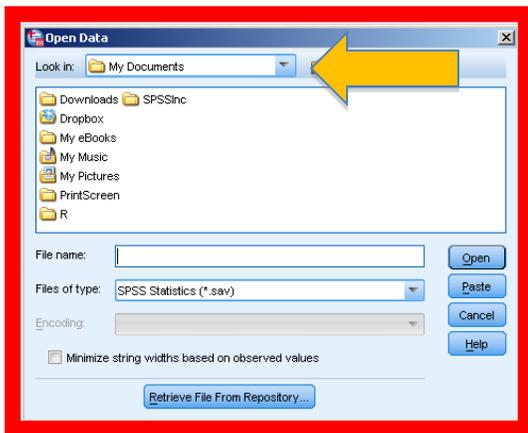
A magnified format is seen below



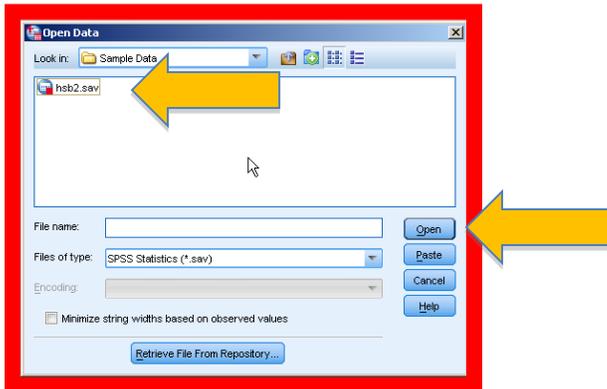
You will be taken to your computer space to find the file that you are interested to open



Click on “my document” drop box to see different folders and find your file.



Let's say you want to open a file entitled “hsb2.sav”. The extension “sav” indicates that this is a SPSS formatted file. I found the file under a folder called “sample data” on my computer.

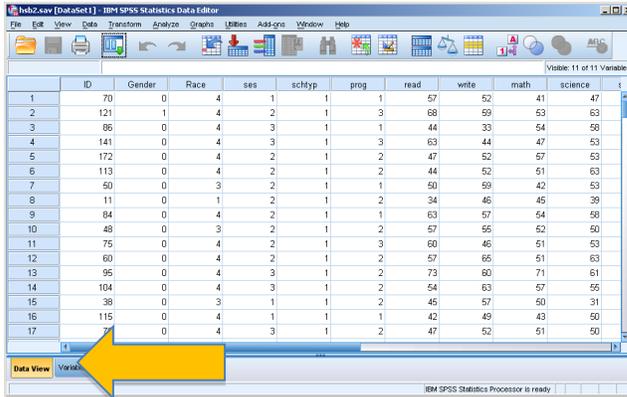


Click on the file and then click “open”.

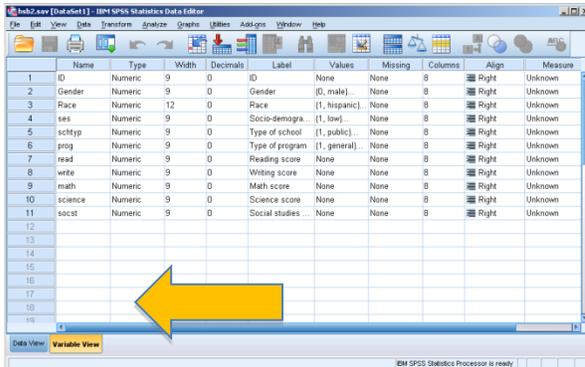
What to expect when you open a file

There are two windows/interfaces to see

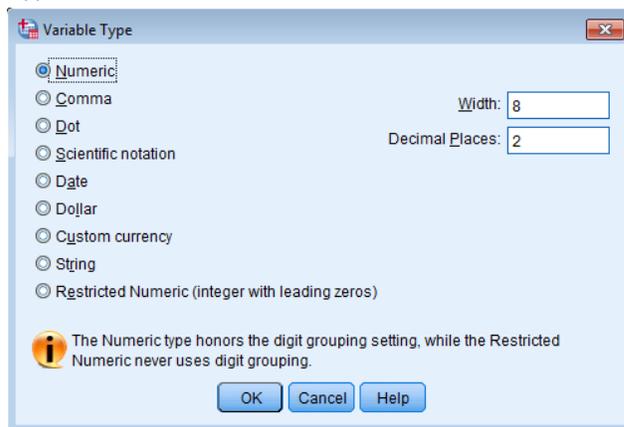
1. Data view: This view contains columns of data listed alongside each other. Each column represents one variable



2. Variable view: This is where the characteristics of variables are shown.

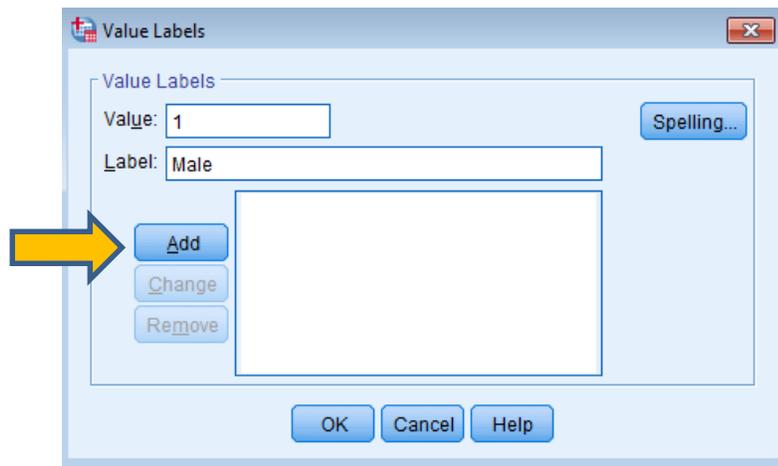


- If you create your own file, you should go to this interface first and define your variables one at a time.
- Each row represents one variable
- Pay attention to the variables characteristics. These are inclusive of
  - Name: should start with letters, no space, no funny character such as ., \* & ^ % \$ # @
  - Type: Numeric or otherwise

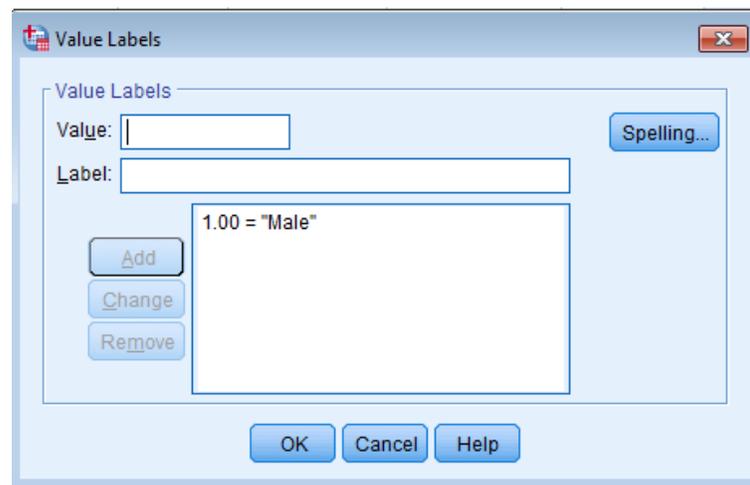


Choose numeric unless you are dealing with dates or text formatted data.

- Width
- Decimals
- Labels: appears on graphs and tables, can be a full phrase or sentence, no limitation in terms of length or type of character
- Values: If you have a continuous variable, ignore this cell. If, however, you have a categorical variable, you should define different levels. For instance, if your variable is “gender”, you will have two levels including “male” and “female”. Let’s say, male is coded as 1. On the value box, type:1 and on the label box, type “Male”, then click “Add”

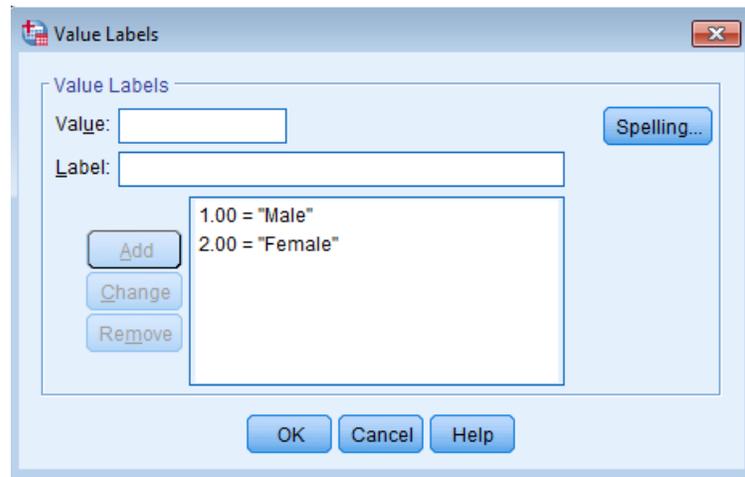


You should see that 1.00=“Male” appears on the box in front of “Add” Key.



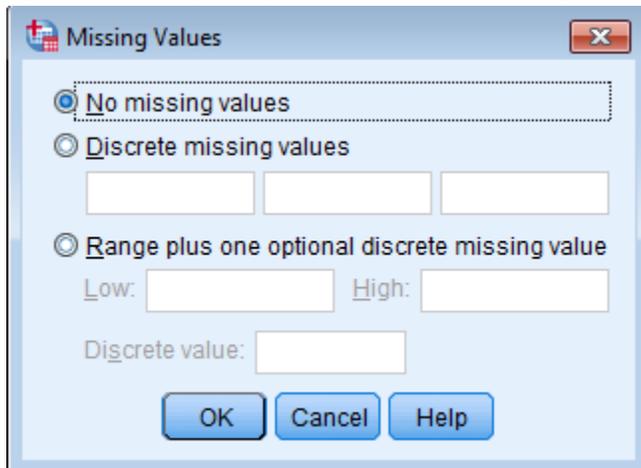
Do the same for female. This time type 2 for female.

You should see this:

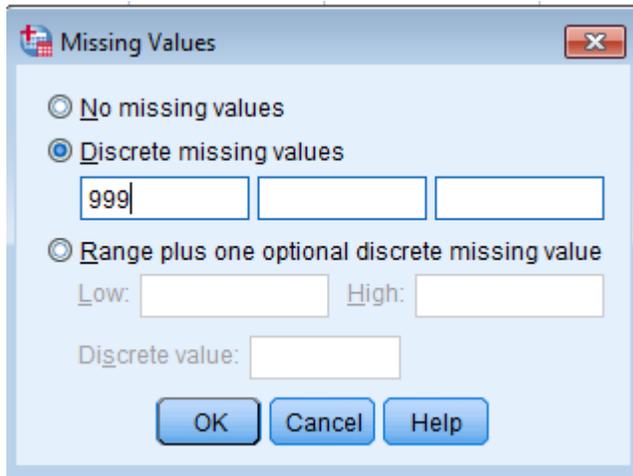


Click OK and close “value labels” box.

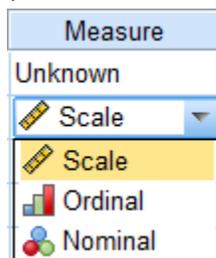
- Missing. Under this box, you can define the missing value if any. Choose a number that does not exist in your data. For instance, if the variable is age, use 999 as there is no one with that age. Consistency is important when considering a missing value.



To consider 999 as a missing value, just type 999 on the file's “Discrete missing values” box.



- Columns: Width of the columns containing data
- Align: choose, right, left of centre.
- Measure: This is important as it shows what sort of variable is introduced. There are three different type of measures:
  - Scale: continuous variable such as age, weight, height, blood pressure
  - Ordinal: a categorical variable where there is an order between levels such s educational level (where a person with diploma presumably knows less than a person in primary school)
  - Nominal: A categorical data where is no difference between levels such as gender (female and males are equal)



- Example file: In our example data file hsb2.sav, we have 11 variables including
- ID,
  - Gender (categorical with two levels: female/male),
  - Race (categorical with three levels: What are those?),
  - SES (categorical: find out what levels are defined for this variable?),
  - Sctype (categorical),
  - Prog (categorical),
  - And a few scores including read, write, math, science, scst. These are all continuous variables

	Name	Type	Width	Decimals	Label	Values	Missing	Columns	Align	Measure
1	ID	Numeric	9	0	ID	None	None	8	Right	Unknown
2	Gender	Numeric	9	0	Gender	{0, male}...	None	8	Right	Unknown
3	Race	Numeric	12	0	Race	{1, hispanic}...	None	8	Right	Unknown
4	ses	Numeric	9	0	Socio-demogra...	{1, low}...	None	8	Right	Unknown
5	schtyp	Numeric	9	0	Type of school	{1, public}...	None	8	Right	Unknown
6	prog	Numeric	9	0	Type of program	{1, general}...	None	8	Right	Unknown
7	read	Numeric	9	0	Reading score	None	None	8	Right	Unknown
8	write	Numeric	9	0	Writing score	None	None	8	Right	Unknown
9	math	Numeric	9	0	Math score	None	None	8	Right	Unknown
10	science	Numeric	9	0	Science score	None	None	8	Right	Unknown
11	socst	Numeric	9	0	Social studies ...	None	None	8	Right	Unknown
12										
13										
14										
15										
16										
17										
18										
19										

At the bottom, there are buttons for 'Data View' and 'Variable View', with 'Variable View' currently selected. The status bar at the bottom right indicates 'IBM SPSS Statistics Processor is ready'.

When you have discovered all the characteristics of the variables in the file, switch to data file to see the actual data.

	ID	Gender	Race	ses	schtyp	prog	read	write	math	science	ε
1	70	0	4	1	1	1	57	52	41	47	
2	121	1	4	2	1	3	68	59	53	63	
3	86	0	4	3	1	1	44	33	54	58	
4	141	0	4	3	1	3	63	44	47	53	
5	172	0	4	2	1	2	47	52	57	53	
6	113	0	4	2	1	2	44	52	51	63	
7	50	0	3	2	1	1	50	59	42	53	
8	11	0	1	2	1	2	34	46	45	39	
9	84	0	4	2	1	1	63	57	54	58	
10	48	0	3	2	1	2	57	55	52	50	
11	75	0	4	2	1	3	60	46	51	53	
12	60	0	4	2	1	2	57	65	51	63	
13	95	0	4	3	1	2	73	60	71	61	
14	104	0	4	3	1	2	54	63	57	55	
15	38	0	3	1	1	2	45	57	50	31	
16	115	0	4	1	1	1	42	49	43	50	
17	76	0	4	3	1	2	47	52	51	50	

At the bottom, there are buttons for 'Data View' and 'Variable View', with 'Data View' currently selected. The status bar at the bottom right indicates 'IBM SPSS Statistics Processor is ready'.

This is the end of guide 1-SPSS. To see information on data manipulation, see guideline 2.