محاضرات في مادة تحليل قواعد المعطيات I التسويقية I

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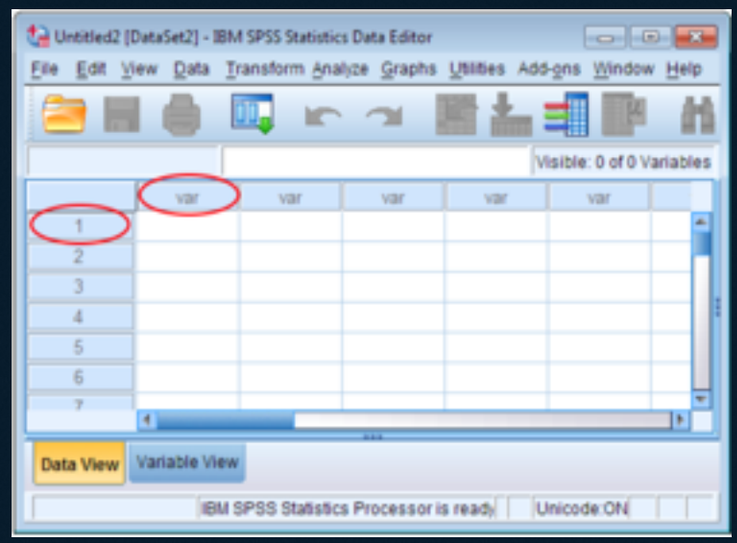
إدخال البيانات (Data input)

- استحداث البيانات في (SPSS) • Data Creation in SPSS

When you open the SPSS program, **click File > New > Data to open a blank spreadsheet.**



1. You will notice that each of the columns is labeled “var.” The column names will represent the variables that you enter in your dataset. You will also notice that each row is labeled with a number (“1,” “2,” and so on). The rows will represent cases that will be a part of your dataset. When you enter values for your data in the spreadsheet cells, each value will correspond to a specific variable (column) and a specific case (row).

إدخال البيانات (Data input)

- استحداث البيانات في (SPSS) • Data Creation in SPSS

In order to discuss the different items which are important during the input of data, the following simple example is used here. Suppose the user would like to input the following table into SPSS:

Table 1.1

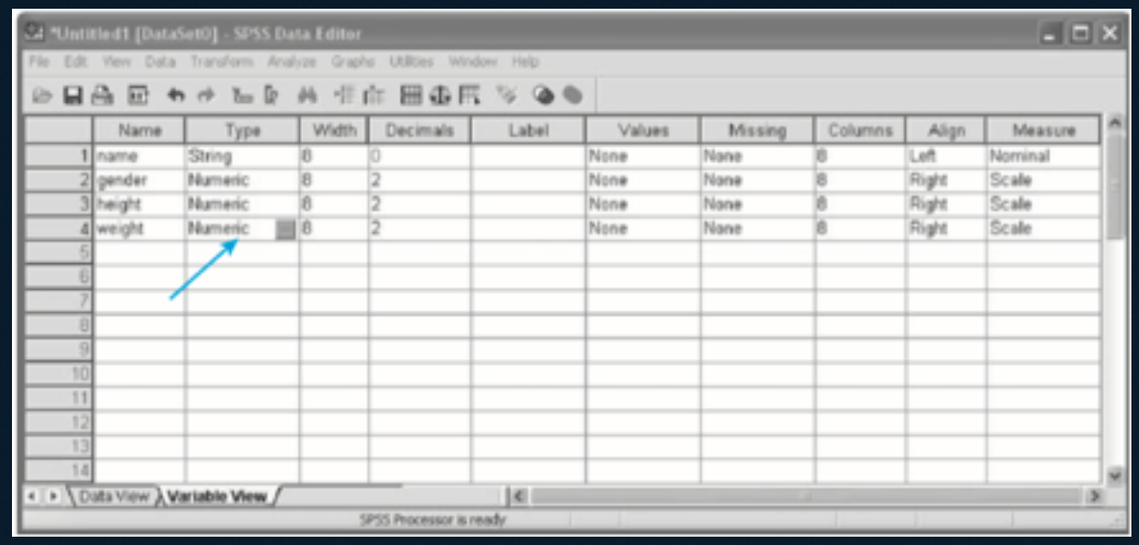
Name	*Gender*	*Height (cm)*	*Weight (kg)*
Joseph	1	180	75
Caitlin	0	165	67
Charles	1	175	80
Catherine	0	170	70
Peter	1	185	75

There are two methods which may be used to input this data into SPSS: they may be either typed in directly or imported from another application program.

إدخال البيانات (Data input)

- تعريف المتغيرات في شاشة عرض المتغير • Defining Variables in the Variable View

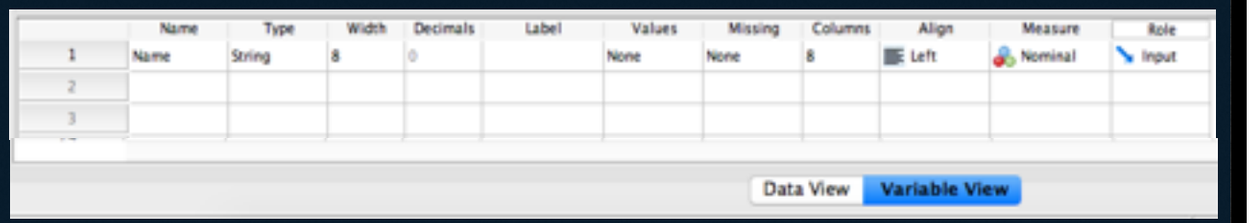
Typing data directly into SPSS *A first step is to go to the 'Variable View' tab*



إدخال البيانات (Data input)

- تعريف المتغيرات في شاشة عرض المتغير • Defining Variables in the Variable View

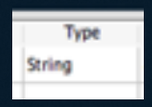
1. In the first column (Name), you may type the relevant variable name

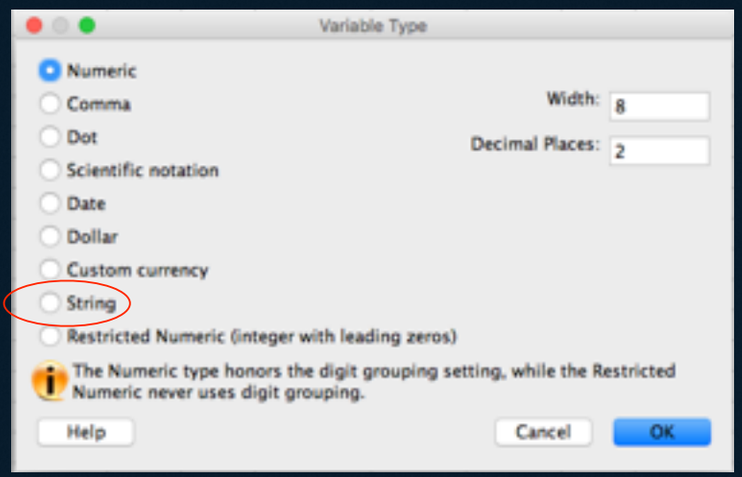


إدخال البيانات (Data input)

- تعريف المتغيرات في شاشة عرض المتغير • Defining Variables in the Variable View

2. the format in the second column (Type)





1. In the example, a string format (text format) has been chosen for ‘name’, and a numerical format has been chosen for the other variables (this allows the software to perform calculations).
2. The number in the ‘Columns’ column indicates the maximum number of characters which will be shown. If this number is ‘8’ such as in the example, this means that a number containing 8 digits will be displayed in its entirety.
3. ‘Decimals’ refers to the number of decimals which will be shown. default is 2 but Researchers may choose to set these at zero in cases where numbers containing points are not relevant (e.g., gender: 0/1). SPSS automatically (default setting) indicates two decimals after the point.

إدخال البيانات (Data input)

- تعريف المتغيرات في شاشة عرض المتغير • Defining Variables in the Variable View

3. In the column 'Label', a description of the variable may be given if necessary.

إدخال البيانات (Data input)

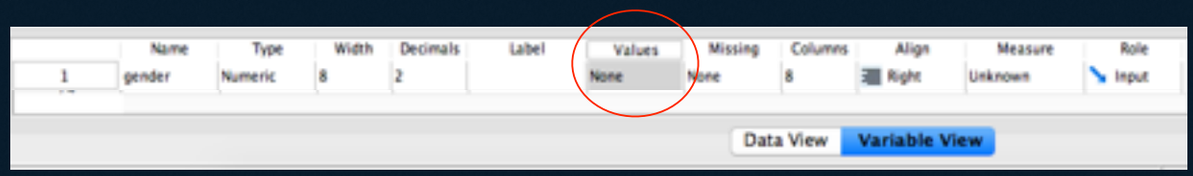
- تعريف المتغيرات في شاشة عرض المتغير • Defining Variables in the Variable View

Creating labels:

In the example, 'gender' is still defined as a 0/1 variable. Let's say that instead of the '0/1', the researcher would prefer to see the 'female/male' coding appear in the Data View screen.

This would also allow the labels 'male' and 'female' to appear in the out- put, which is easier to interpret than '0' and '1'.

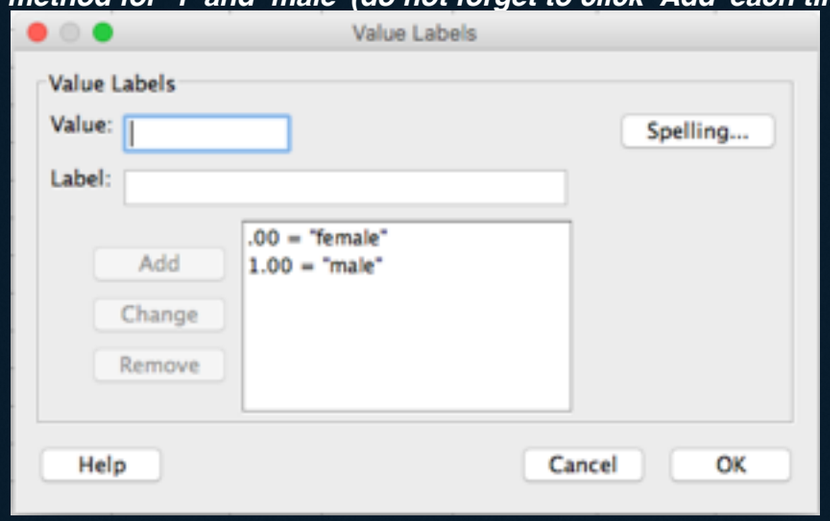
This is certainly the case when the researcher is working with many different variables. (Example Gender)



إدخال البيانات (Data input)

- تعريف المتغيرات في شاشة عرض المتغير • Defining Variables in the Variable View

4. VALUS: ***For 'Value' type in '0' and 'female' for 'Value Label' and then click 'Add'. Use the same method for '1' and 'male' (do not forget to click 'Add' each time).***

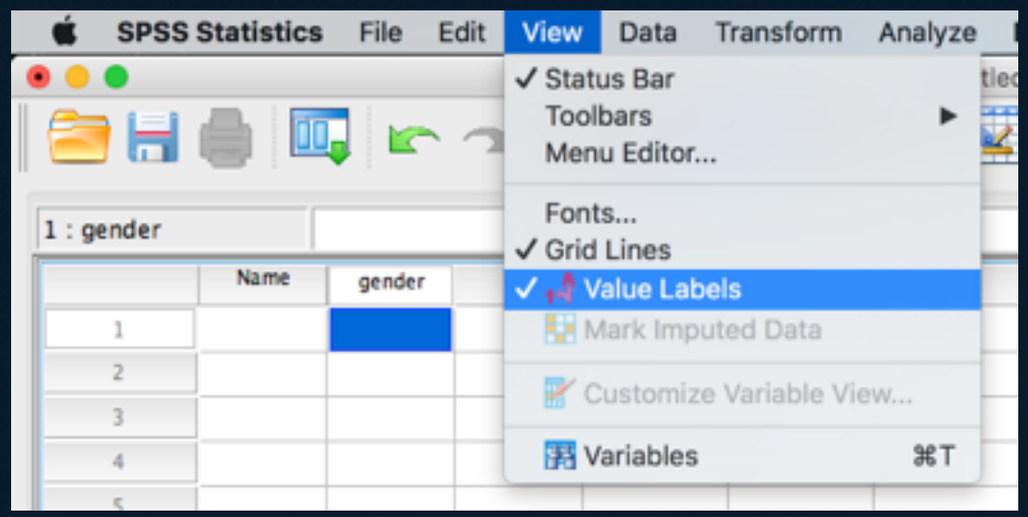


1. **For coded categorical variables:** the value label(s) that should be associated with each category abbreviation. Value labels are useful primarily for categorical (i.e., nominal or ordinal) variables, especially if they have been recorded as codes (e.g., 1, 2, 3). It is strongly suggested that you give each value a label so that you (and anyone looking at your data or results) understands what each value represents.
2. Instead of entering this for every variable separately, this may be typed in once and then copied and pasted for all of the other variables.

إدخال البيانات (Data input)

- تعريف المتغيرات في شاشة عرض المتغير • Defining Variables in the Variable View

- *In order to be able to view the changes made to the data set, first go back to the 'Data View' tab, then choose View/Value Labels from the top*



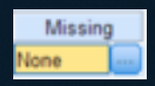
إدخال البيانات (Data input)

- تعريف المتغيرات في شاشة عرض المتغير • Defining Variables in the Variable View

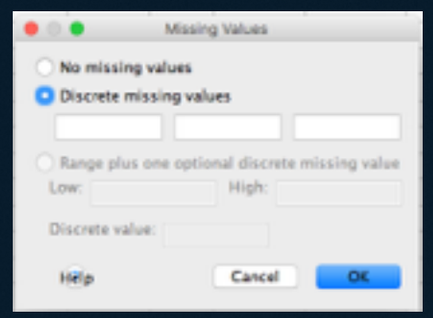
5. Working with missing values

The user-defined values that indicate data are missing for a variable (e.g., -99). Note that this does not affect or eliminate SPSS's default missing value code ("."). This column merely allows the user to specify alternative codes for missing values.

To set user-defined missing value codes, click inside the cell corresponding to the "Missing" column for that variable. A square button will appear; click on it.



The Missing Values window appears.



1. Click the option that best matches how you wish to define missing data and enter any associated values, then click OK at the bottom of the window.
2. This setting may be copied to the other variables if desired using a simple Copy-Paste command (in the Variable View tab).

إدخال البيانات (Data input)

- تعريف المتغيرات في شاشة عرض المتغير • Defining Variables in the Variable View

6. COLUMNS

The width of each column in the Data View spreadsheet. Note that this is not the same as the number of digits displayed for each value. This simply refers to the width of the actual column in the spreadsheet.

To set a variable's column width, click inside the cell corresponding to the "Columns" column for that variable. Then click the "up" or "down" arrow icons to increase or decrease the column width.

	Name	Type	Width	Decimals	Label	Values	Missing	Columns	Align	Measure	Role
1	gender	Numeric	8	2		{.00, femal...	-99.00	8	Right	Unknown	Input
2											

إدخال البيانات (Data input)

- تعريف المتغيرات في شاشة عرض المتغير • Defining Variables in the Variable View

7. ALIGN

The alignment of content in the cells of the SPSS Data View spreadsheet. Options include left-justified, right-justified, or center-justified.

To set the alignment for a variable, click inside the cell corresponding to the "Align" column for that variable. Then use the drop-down menu to select your preferred alignment: Left, Right, or Center.

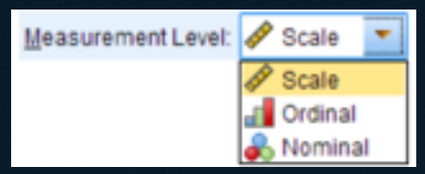
	Name	Type	Width	Decimals	Label	Values	Missing	Columns	Align	Measure	Role
1	gender	Numeric	8	2		{.00, femal...	-99.00	8	Right	Unknown	Input
2											

إدخال البيانات (Data input)

- تعريف المتغيرات في شاشة عرض المتغير • Defining Variables in the Variable View

8. MEASURE: The level of measurement for the variable (e.g., nominal, ordinal, or scale).

To define a variable's measurement level, click inside the cell corresponding to the "Measure" column for that variable. Then click the drop-down arrow to select the level of measurement for that variable: Scale, Ordinal, or Nominal.



- **It is vital that you correctly define each variable's measurement level.**
- **Incorrectly specifying measurement level can have unintended and potentially disastrous effects on your results.**
- **By default, variables with numeric responses are automatically detected as "Scale" variables.**

All the scales that we use in marketing research can be described in terms of four basic characteristics. These characteristics are description, order, distance, and origin, and together they define the level of measurement of a scale. The level of measurement denotes what properties of an object the scale is measuring or not measuring. An understanding of the scale characteristics is fundamental to understanding the primary type of scales.

description

The unique labels or descriptors that are used to designate each value of the scale. All scales possess description.

order

The relative sizes or positions of the descriptors. Order is denoted by descriptors such as greater than, less than,and equal to.

distance

The characteristic of distance means that absolute differences between the scale descriptors are known and may be expressed in units.

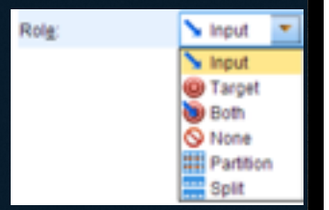
origin

The origin characteristic means that the scale has a unique or fixed beginning or true zero point.

إدخال البيانات (Data input)

- تعريف المتغيرات في شاشة عرض المتغير • Defining Variables in the Variable View

9. ROLE: The role that a variable will play in your analyses (i.e., independent variable, dependent variable, both independent and dependent). Some options in SPSS allow you to pre-select variables for particular analyses based on their defined roles. Click



Input: The variable will be used as a predictor (independent variable). This is the default assignment for variables.

Target: The variable will be used as an outcome (dependent variable).

Both: The variable will be used as both a predictor and an outcome (independent and dependent variable).

None: The variable has no role assignment.

Partition: The variable will partition the data into separate samples.

Split: Used with the IBM® SPSS® Modeler (not IBM® SPSS® Statistics).

1. To define a variable's role in your analysis, click inside the cell corresponding to the “Role” column for that variable. Then use the drop-down menu to select the role that variable will take: Input, Target, Both, None, Partition, or Split.

إدخال البيانات (Data input)

- إدخال البيانات من برامج أخرى • Inputting data from other application programs

Importing data into SPSS

If you already have data that are in an SPSS file format (file extension ".sav"), you can simply open that file to begin working with your data in SPSS. However, if you have data stored in other types of files, such as an Excel spreadsheet or a text file.

you will need to instruct SPSS how to read the file and then save it in the SPSS file format (".sav").

Below, we will cover how to import data from the common type of file: Excel files.

إدخال البيانات (Data input)

- إدخال البيانات من برامج أخرى Inputting data from other application programs

Import data from an Excel file

To import data from an Excel spreadsheet into SPSS, first make sure your Excel spreadsheet is formatted according to these criteria:

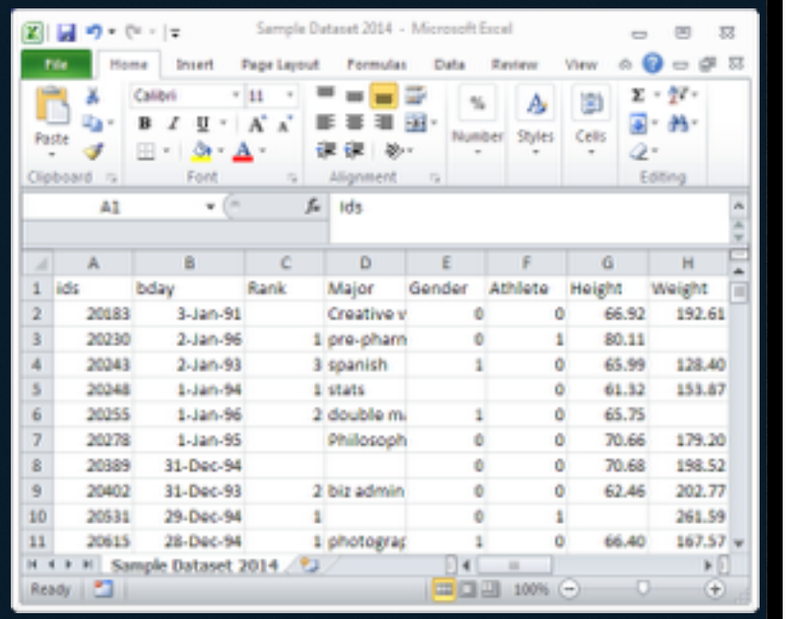
- The spreadsheet should have a single row of variable names across the top of the spreadsheet in the first row.
- Variable names should include ordinary letters, numbers, and underscores (e.g., Gender, Grad_Date, Test_1) and not include special characters (e.g., "Graduation Date" would not be a valid variable name because it contains a space).
- The data should begin in the first column, second row (beneath the variable names row) of the spreadsheet.
- Anything that is not part of the data itself (e.g., extra text, labels, graphs, Pivot Tables) should be removed.
- Missing values for string or numeric variables have blank (empty) cells, or an appropriate predetermined missing value code (such as -99).

إدخال البيانات (Data input)

- إدخال البيانات من برامج أخرى • Inputting data from other application programs

Import data from an Excel file

Here is an example of what properly formatted data looks like in Excel 2010:



	A	B	C	D	E	F	G	H
1	ids	bday	Rank	Major	Gender	Athlete	Height	Weight
2	20183	3-Jan-91		Creative v	0	0	66.92	192.61
3	20230	2-Jan-96	1	pre-pharn	0	1	80.11	
4	20243	2-Jan-93	3	spanish	1	0	65.99	128.40
5	20248	1-Jan-94	1	stats		0	61.32	153.87
6	20255	1-Jan-96	2	double m	1	0	65.75	
7	20278	1-Jan-95		Philosoph	0	0	70.66	179.20
8	20389	31-Dec-94			0	0	70.68	198.52
9	20402	31-Dec-93	2	biz admin	0	0	62.46	202.77
10	20531	29-Dec-94	1		0	1		261.59
11	20615	28-Dec-94	1	photograp	1	0	66.40	167.57

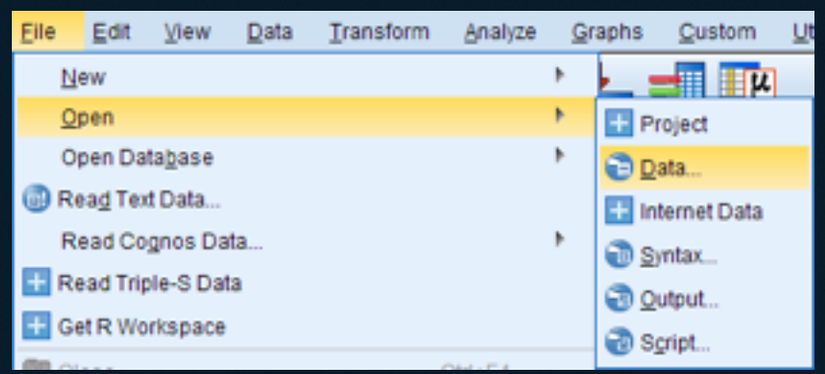
إدخال البيانات (Data input)

- إدخال البيانات من برامج أخرى • Inputting data from other application programs

Import data from an Excel file

Once the data in your Excel file is formatted properly it can be imported into SPSS by following these steps:

1. Click File > Open > Data. The Open Data window will appear.

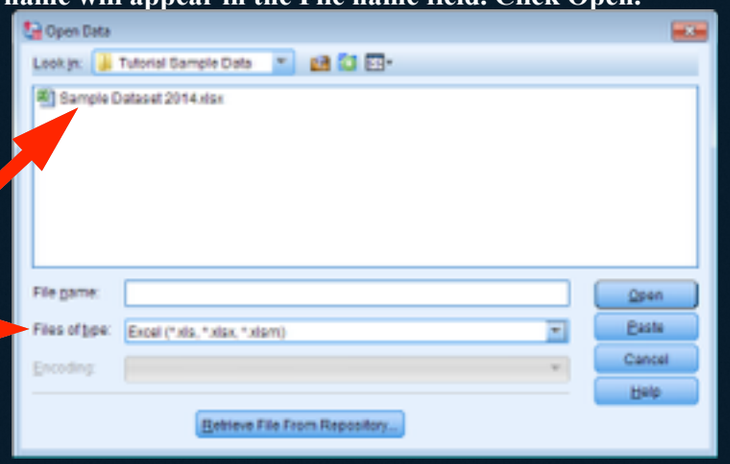


إدخال البيانات (Data input)

- إدخال البيانات من برامج أخرى • Inputting data from other application programs

Import data from an Excel file

2. In the Files of type list select Excel (*.xls, *.xlsx, *.xlsm) to specify that your data are in an Excel file. Locate and click on your file. The file name will appear in the File name field. Click Open.

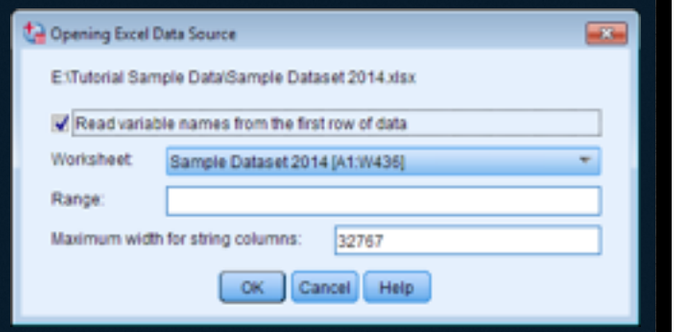


إدخال البيانات (Data input)

- إدخال البيانات من برامج أخرى • Inputting data from other application programs

Import data from an Excel file

3. The Opening Excel Data Source window will appear.



- If your variable names are in the first row of data, select the Read variable names from the first row of data check box.
- In the Worksheet list, select the sheet (from your Excel workbook) that contains your data.
- You may also specify the range and maximum width for string columns if you wish. It is suggested to keep the default value unless you have a reason for altering it.
- Click OK when you are finished.
- Now the data will appear in SPSS.

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