SPSS Practical (1)

Dr. Khalil Mohamed

Epidemiology & Medical Statistics Department

Lesson Objectives



- Open SPSS Data Documents
- Import Excel and text files using SPSS's import tools.

استیرار حلف Excel text

Opening SPSS Data Documents (.sav)

• Open <u>SPSS</u> if you haven't already, and open data. sav.

 \checkmark Browse for the file if prompted.



Name . SAV

✓ Otherwise, go to File > Open > Data and find the file.



- If an Output Window pops up, minimize it for now.
- You should now have your SPSS Data Document open.



Importing Excel Files (.xlsx) Names

• Before importing our Excel file, let's take a look at the file in MS Excel.

	А	В	C	D	F	G
			Marital		Income	Job
0	Age	Gender	Status	Address	Category	Category
2	55	f	1	12	3.00	3
3	56	m	0	29	4.00	3
4	28	f	no answer	9	2.00	1
5	24	m	1	4	2.00	1
6	25	m	no answer	2	1.00	2
7	45	m	0	9	4.00	2
8	44	m	1	17	4.00	3
9	46	m	no answer	20	4.00	3
10	41	m	no answer	10	2.00	2
11	29	f	no answer	4	1.00	2
12	34	m	0	0	4.00	2
13	55	f	0	17	3.00	1

Cont. هناده معض احت آن الله تعلم تم طفات الس ا • There are some common problems that may appear in data files. م مات ماریه وزایده ✓ Leading and trailing spaces ✓ Empty data cells مندي فرية متي حتي معتولة Data cells with invalid values SPSS provides tools to deal with these problems when importing دع الله المالية هذه المنائق عن الاستين data. المت الله عن الاستين data. ✓ Close your MS Excel window and go back to SPSS. ✓ Go to File > Import Data > Excel and find data.xlsx.

خلحات استيرات حلف اكس

🔄 der	no.sav [[DataSet2]	- IBM SF	SS Statistics I	Data Editor				
<u>F</u> ile	<u>E</u> dit	<u>V</u> iew	<u>D</u> ata	<u>T</u> ransform	<u>A</u> nalyze	<u>G</u> raphs	<u>U</u> tilities	E <u>x</u> tensio	ns <u>W</u> indov
	<u>N</u> ew				>	- <u>+</u> :	ч	14	
	<u>O</u> pen				>				
	Import	<u>D</u> ata		سټر ي	۰ ۰ >	Data <u>b</u> a:	se		> -
+	Genera	I Open				<u>E</u> xcel			
			Δ			<u>C</u> SV Da	ita		
-60	O <u>p</u> en R	lestore F	oint			<u>T</u> ext Da	ta	1.	- سخت
15	<u>C</u> lose			Ct	rl+F4	SAS		، على	_
	<u>S</u> ave			Ct	rl+S	Stata			
	S <u>a</u> ve A	s				dBasa			_
	Save A	I Data				u <u>D</u> ase	-		_
I	Save R	estore P	oint			<u>L</u> otus			
	- Export				>	S <u>Y</u> LK			
	Mark E	ila Daad	Only		-	Cognos	T <u>M</u> 1		_
	war <u>k</u> F	ne kead	Only			C <u>o</u> gnos	Business In	telligence.	
	Revert f	to Saved	File						

عنداستر، حلف محالا محوف بطهر ناخته اد وار محستراد محتار المنارات اعناسه للملف مل: جذف المحات • This will open up an import tool. You'll have a few options to choose from, such as whether to remove leading/trailing spaces, whether the first row contains variable names, and more.

	et: Sheet1 [/	A1:G201]					~
Range:							
Read	variable name	es from first r	ow of data 🔰	بت من لعما	اخراء بالمتقنير		
Perce	entage of value	es that deter	minę data type: 95				
	biddon rowc	and column	I as a linght	(1) (2)			
Ignore	maden rows	and columns	ره والصوف محتار				
	ve leading sp	aces from st	ring values		•		
Remo	ve trailing spa	aces from str	ing values		5	C. C.	5
				· · · · · · · · · · · · · · · · · · ·			
Preview							
Preview	A 400	- Condor		Addross		/ lobCate	
Previe <u>w</u> 1	Age	윩 Gender	MaritalStatus 1	Address	IncomeCategory 3.00	JobCate	eg _
Previe <u>w</u> 1 2	Age 55 56	Gender f	MaritalStatus	Address	IncomeCategory 3.00 4.00	JobCate	e S
Previe <u>w</u> 1 2 3	Age 55 56 28	Gender f m f	MaritalStatus	Address 12 29 9	IncomeCategory 3.00 4.00 2.00	JobCate 3 3	•g
Previe <u>w</u> 1 2 3 4	Age 55 56 28 24	Gender f m f m	MaritalStatus MaritalStatus 1 1 1	Address 12 29 9 4	IncomeCategory 3.00 4.00 2.00 2.00	JobCate 3 3 1	g
Previe <u>w</u> 1 2 3 4 5	Age 55 56 28 24 25	Gender f m f m m m	MaritalStatus 1 0 .	Address 12 29 9 4 2	IncomeCategory 3.00 4.00 2.00 2.00 1.00	JobCate 3 1 1 2	g
Previe <u>w</u> 1 2 3 4 5 6	Age 55 56 28 24 25 45	Gender f m f m m m	MaritalStatus 1 0 . 1 . 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Address 12 29 9 4 2 9	IncomeCategory 3.00 4.00 2.00 2.00 1.00 4.00	JobCate 3 1 1 2 2	e, g
Previe <u>w</u> 1 2 3 4 5 6 7	Age 55 56 28 24 24 25 45 44	Gender f m f m m m m	MaritalStatus 1 0 . 1 1 . 0 1 1 1 1 1 1 1 1 1 1 1 1 1	Address 12 29 9 4 2 9 17	IncomeCategory 3.00 4.00 2.00 2.00 1.00 4.00 4.00	JobCate 3 3 1 1 2 3	29
Previe <u>w</u> 1 2 3 4 5 6 7 8	Age 55 56 28 24 25 45 44 46	Gender f m m m m m m m m	MaritalStatus MaritalStatus	Address 12 29 9 4 2 9 17 20	IncomeCategory 3.00 4.00 2.00 2.00 1.00 4.00 4.00 4.00	JobCate 3 3 1 1 2 2 3 3 3	g

- ري كي سكون مكن مرى كي سكون مكن • A preview window is provided below to see how the data will look after the import finishes. The most important setting is <u>Percentage of</u> values that determine data type. This will automatically deal with
- blank and invalid values, replacing them with System Missing. Notice that, if you turn off this setting, Marital Status becomes a String type rather than a numeric type, which is not what we want.

• Once you're done, double-check your settings and click <u>OK</u>.

فيصد الخير سيتم التقاحل مع الخلايا دلفارية والخاطنة ستكل الوكالتيكي بحيث سيتبرلها حب النظام

Importing Text Files (.txt)

• Importing a text file with data is quite similar to importing an Excel file, but there are more options and settings to take care of. Just like last time, let's take a look at our text file before importing.

		demo		3	× +				_		×	
	File	Edit Vie	w			Т	ab 2	p			ණ	
حَبْل الاسبَرَد	Age 55 56 28 24 25 45 44 46 41 29 34 55 28 21 55 35 45 21	Gender f m f m m m f f f f f f m f m f m f m	Marita 1 0 no ans 1 no ans no ans no ans 0 0 0 1 0 0 1 0 0 0 0 0 0 0 0 0 0 0 0	al Status 12 29 Swer 4 Swer 17 Swer Swer 0 17 9 2 8 8 8 4 1	Address 72.00 153.00 9 26.00 2 76.00 144.00 20 10 4 89.00 72.00 55.00 20.00 283.00 70.00 48.00 37.00	Income 3.00 4.00 28.00 23.00 4.00 4.00 75.00 26.00 19.00 4.00 3.00 3.00 1.00 4.00 3.00 2.00 2.00	Income 3 2.00 1 1.00 2 3 4.00 2.00 1.00 2 1 1 1 2 2 1 1 1 2 2 1	Category 1 2 3 2 2	Job Ca	tegory		·+xt
	Ln 10	, Col 19			100%		Unix (LF)		UTF-	8		

- We can see some of the same problems we encountered in our Excel file. Leading and trailing spaces, as well as no answer values. In the text file, the data isn't aligned with their rows either.
- If you mess around with the data, you'll notice that it's <u>tab-delimited</u>. This'll help SPSS differentiate the difference between "Income.") Category" and "Income" + "Category".

vier Tab

ار خدیر میا ا -

- Close your text file and go back to SPSS.
- Go to File > Import Data > Text data... and find data.txt.

ta *Untitled2	[DataSet	3] - IBM	SPSS Statistics	Data Editor					
<u>E</u> dit	<u>V</u> iew	<u>D</u> ata	Transform	<u>A</u> nalyze	<u>G</u> raphs	<u>U</u> tilities	E <u>x</u> tensio	ons	Window
<u>N</u> ew				>	<u>. </u>	મ	<u>.</u>		
<u>O</u> pen				>					
Import	<u>D</u> ata			>	Data <u>b</u> as	e			>
+ General	l Open				Excel				
		\triangle			CSV Dat	ta			
C Open R	estore F	oint			Text Dat	a			
E lose			Ctr	1+F4	<u>s</u> as				-
<mark>≓</mark> <u>S</u> ave			Ctr	l+S	St <u>a</u> ta				
S <u>a</u> ve As	s				dBase)
🖷 Save Al	l Data				Lotus				-
📩 <u>S</u> ave Re	estore P	oint			SYLK				_
Export				>	Cognos	TM1			
Mar <u>k</u> Fi	le Read	Only			Cognes	Bucinoco Ir	tolligonco		-
R <u>e</u> vert t	o Saved	File			Cognos	Dusiness II	neingende		

Step 1

ta Text Import	t Wizard - S	Step 1 of 6						×
628 840 1 81 28. 630 2400 0 73 40 632 10200 0 83 3 633 870 0 93 31. 635 1740 83 4 1	5 33 31.08 17 11 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9		Velcome to his wizard specify info Does you O Yes O No	o the text will help r mation a r text file r	import wi you read o bout the v L	zard! lata from r ariables. موت redefined	your text format? - <u>B</u> row	file and صل عل
	P	10				40		
Name	Age	Gender	Marital	Status	Address	Income	Income	Ca ^
2	55	f	1	12	72.00	3.00	3	
3	56	m	0	29	153.00	4.00	3	
4	28	f	no answe	er	9	28.00	2.00	1
1 51	24	70	1	4	26.00	2 00	1	

Finish

Cancel

Help

>

28 24 く

< <u>B</u>ack <u>N</u>ext >

Step 2

• Our data is delimited by <u>tabs</u>, with the first line in the data being our variable names. We're also using a period (.) for our decimal symbol.

$\Delta 2$	Carola
H JC	GENCAR

🔚 Text Import Wizard - Step 2	of 6	×	
 How are your variables arra ● Delimited - Variables ○ Eixed width 	nged? הושל אין דער אין אין איז es are delimited by a specific character (i.e es are aligned in fixed width columns.	يت شربه (الفط) عن , comma, tab).	اعتعينات تم
Are variable names include Yes Line number that conta No What is the decimal symbol Period Comma	d at the top of your file? ains variable names: 1	ملاملتين ت موجود ۱۹۹۱ علف محدد الصعوف التمل محيت مهم	و تې
Text file: C:\Users\motorg 010 Name Age Geno < < Back	er\Downloads\demo.txt 20	50 Income Cat	



• The data starts on <u>line 2</u>, with each line representing one participant (or one case), and we want to import <u>all the cases</u>. You can also import the first X cases or a random percentage of the data.

(📄 Text Impor	t Wizard -	Delimited S	Step 3 of 6					×
دلحاله بلاوى تبدا من معا	The <u>f</u> irst case	of data l	begins on v	vhich line	number?	2	\$		
ليف تمثل الماله حب لصعوف	How are you Each <u>l</u> ine O A specifie	ur cases e represei c number	represente nts a case [,] of <u>v</u> ariable	d? s represer	nts a case	e: 7			
کمعید، لحالات، دمترزیر 'سیتو او حا	How many of <u>A</u> ll of the O <u>T</u> he first O A randon	cases do cases 1000 n percent	you want t cases age of the	to import? کل لی د حکالات cases (ap	۲ نوب proximate	رن کہ د 10	، م %	م الا رد	منبه مر
	Data previev	N							
		P	10			· · · · · · · · · · · · ·	40		
	Name	Age	Gender	Marital	Status	Address	Income	Income	Cat ^
	2	55	f	1	12	72.00	3.00	3	
	3	56	m	0	29	153.00	4.00	3	
	4	28 <	f	no answe	er	9	28.00	2.00	1 ~
		< [<u>B</u> ack <u>N</u> e	xt > F	inish	Cancel	Help		



S

في حذه الخطوة مستحتار العواق المنامية ويتحلف من الرا فاج

• This is where we can choose our delimiter and get rid of our extra

Iab Space None Comma Semicolon Single guote Other: Double quote Double quote Kemove leading spaces from string values Other: Other:	
□ Comma □ Semicolon ○ Single guote □ Other: ○ Double quote □ Cher: ○ Other: □ Remove leading spaces from string values ○ Other:	
□ Other: □ Double quote □ Other: □ Double quote □ Other: □ Other: □ Prove leading spaces from string values □ Other:	
Other: ○ Double quote Leading and Trailing Spaces ○ Other: Remove leading spaces from string values ○ Other:	
لعران المعالية Leading and Trailing Spaces O Other:	
Remove leading spaces from string values	
Remove leading spaces from string values	
Y I Remove leading spaces norm string values	
Remove trailing spaces from string values	
Data preview	
Data preview	
Age Gender Marital St Address Income Income C Job Cate	
EE E 1 10 70.00 2.00 2	4
55 I I IZ IZ.00 5.00 5	
56 m 0 29 153.00 4.00 3	_
55 1 1 12 72.00 5.00 5 56 m 0 29 153.00 4.00 3 28 f no answer 9 28.00 2.00 1	
55 1 12 12.00 5.00 5 56 m 0 29 153.00 4.00 3 28 f no answer 9 28.00 2.00 1 24 m 1 4 26.00 2.00 1	
55 1 12 12.00 5.00 5 56 m 0 29 153.00 4.00 3 28 f no answer 9 28.00 2.00 1 24 m 1 4 26.00 2.00 1 25 m no answer 2 23.00 1.00 2	
55 1 12 12.00 5.00 5 56 m 0 29 153.00 4.00 3 28 f no answer 9 28.00 2.00 1 24 m 1 4 26.00 2.00 1 25 m no answer 2 23.00 1.00 2 45 m 0 9 76.00 4.00 2	
55 1 12 12.00 5.00 5.00 5 56 m 0 29 153.00 4.00 3 28 f no answer 9 28.00 2.00 1 24 m 1 4 26.00 2.00 1 25 m no answer 2 23.00 1.00 2 45 m 0 9 76.00 4.00 2 44 m 1 17 144.00 4.00 3	
55 1 1 12 72.00 5.00 5 56 m 0 29 153.00 4.00 3 28 f no answer 9 28.00 2.00 1 24 m 1 4 26.00 2.00 1 25 m no answer 2 23.00 1.00 2 45 m 0 9 76.00 4.00 2 44 m 1 17 144.00 4.00 3 46 m no answer 20 75.00 4.00 3	
55 1 1 12 72.00 5.00 5 56 m 0 29 153.00 4.00 3 28 f no answer 9 28.00 2.00 1 24 m 1 4 26.00 2.00 1 25 m no answer 2 23.00 1.00 2 45 m 0 9 76.00 4.00 2 44 m 1 17 144.00 4.00 3 46 m no answer 20 75.00 4.00 3 41 m no answer 10 26.00 2.00 2	
55 1 1 12 72.00 5.00 5 56 m 0 29 153.00 4.00 3 28 f no answer 9 28.00 2.00 1 24 m 1 4 26.00 2.00 1 25 m no answer 2 23.00 1.00 2 45 m 0 9 76.00 4.00 2 44 m 1 17 144.00 4.00 3 46 m no answer 20 75.00 4.00 3 41 m no answer 10 26.00 2.00 2	
55 1 1 12 72.00 5.00 5 56 m 0 29 153.00 4.00 3 28 f no answer 9 28.00 2.00 1 24 m 1 4 26.00 2.00 1 25 m no answer 2 23.00 1.00 2 45 m 0 9 76.00 4.00 2 44 m 1 17 144.00 4.00 3 46 m no answer 20 75.00 4.00 3 41 m no answer 10 26.00 2.00 2 29 f no answer 10 26.00 2.00 2 34 m 0 0 89.00 4.00 2	
55 1 1 12 72.00 5.00 5 56 m 0 29 153.00 4.00 3 28 f no answer 9 28.00 2.00 1 24 m 1 4 26.00 2.00 1 25 m no answer 2 23.00 1.00 2 45 m 0 9 76.00 4.00 3 46 m no answer 20 75.00 4.00 3 41 m no answer 10 26.00 2.00 2 29 f no answer 10 26.00 2.00 2 29 f no answer 4 19.00 1.00 2 34 m 0 89.00 4.00 2 2 55 f 0 17 72.00 3.00 1	

Step 5

عكنان تظهر رساله حول خطائن احماء اعتفزار

- You might have received a warning message regarding invalid variable names. It's important to note that there are some limitations to variable names.
- Variable names can be up to 32 characters long. مرف 32 حرف 32
- Variable names can only include <u>alphanumer</u>ic characters (letters and numbers), non-punctuation characters (like a dash - or an underscore _), and a period (.). مروف و ارفاع
- No spaces are allowed in variable names.
- Variable names cannot end with a period (.) or an underscore (_).
- There are some reserved keywords you can't use as variables, such as <u>AND</u>, <u>NOT</u>, <u>QR</u>, etc. به بوتدندن د مقطه او _
- Variable names must be unique.

الاسماء عدم ان تكون عمزه

ariable (name:				Original nar	ne:		
Age]			Age			
ata form	iat:	-						
Automati	ic	~						
	Tevt Wizard	4						×
ercent	Text Wizard عم دغنه Inva	alid variable nam	۔ مسک مسر es for this :	المستعمر ا	ve been four	الم من	0 7	×
ercent ata pr	Text Wizard عم حضر Inva	alid variable nam	۔ میں صرح es for this :	متعمر ۱ application ha	ve been four	d and changed.	0 7	×
ercent ata pr Age	Inva	alid variable nam	es for this a	application ha	ve been four	d and changed.	~ 7	×
ata pr Age	Text Wizard الله البناء البناء Gender f m	alid variable nam	Address	application ha	ve been four incomec 3.00 4.00	id and changed.)))	×
ata pr Age	Inva	alid variable nam	Address	application ha	ve been four 3.00 4.00 2.00	id and changed.)))	×
ata pr Age 55 56 28 24	Gender f f m f m	alid variable nam	Address Address 12 29 9 4	application ha	ve been four 3.00 4.00 2.00 2.00	id and changed.	0 7	×
ata pr Age 55 56 28 24 25	Inva	alid variable nam	Address PAddress 12 29 9 4 2	application ha	ve been four 3.00 4.00 2.00 2.00 1.00	ad and changed.	0 7	×
ata pr Age 55 56 28 24 25 45	Inva	alid variable nam	Address 12 29 9 4 2 9	application ha	ve been four 3.00 4.00 2.00 2.00 1.00 4.00	ad and changed.	0 7	×
24 25 44	Inva	alid variable nam	Address 12 29 9 4 2 9 17	application ha	ve been four 3.00 4.00 2.00 1.00 4.00 4.00 4.00	ad and changed.	0 7	×
oata pr Age 55 56 28 24 25 45 44 46	Ext Wizard Inva Genuer f m f m m m m m m m	alid variable nam	Address 12 29 9 4 2 9 17 20	application ha	ve been four 3.00 4.00 2.00 1.00 4.00 4.00 4.00 4.00	ad and changed.)))	×



• Finally, your data is imported. You're given the option to save the file format as a TextWizard Predefined Format file. This is particularly useful if you have multiple files to import with the same formatting.

		You have	e successful	ly defined th	e format of you	r text file.	-			2
		Would	you like to s	ave this file	format for futur	e use?				ھو ہ
Ter 1	uar2 uar3	. O Yes								
1 62	28 840 1								ve //s	
2 63	18 2400 0	• N <u>o</u>								
3 63	10200 0	- Would	vou like to r	acto the cur	tav2		Cacha	data local		1
4 63	33 870 0	vvouid	you like to p	aste the syl	ltax			data locali	y	J
-	,	O Y <u>e</u> s								_
		• <u>N</u> o								
										2010
		Press th	e Finish but	ton to compl	ete the text in	port wiza	ırd.			-iety
ata previ	iew	Press th	ie Finish but	ton to compl	ete the text in	port wiza	rd.			- Celly
ata previ	iew	Press th	ie Finish but	ton to compl	ete the text im	port wiza	ırd.			- Ciely
ata previ Age	iew Gender	Press th MaritalSt	Address	Income	ete the text im	port wiza	eg			こしん
ata previ \ge 5	iew Gender f	Press th MaritalSt	Address	Income	ete the text in IncomeC 3.00	port wiza JobCate	eg		^	ر لمعات د تست
ata previ Age 5 6	iew Gender f m	Press th MaritalSt	Address	Income 72.00 153.00	IncomeC 3.00 4.00	JobCate	ırd. eg		^	ت نفلم التسبق
ata previ Age 5 6 8	iew Gender f f f	Press th MaritalSt 1 0 no answer	Address 12 29 9	Income 72.00 153.00 28.00 26.00	ete the text im IncomeC 3.00 4.00 2.00 2.00	JobCate	eg		^	تانعلم المستسق
ata previ Age 5 6 8 4 5	iew Gender f m f m m	Press th MaritalSt 1 0 no answer 1 no answer	Address 12 29 9 4 2	Income 72.00 153.00 28.00 26.00 23.00	ete the text im IncomeC 3.00 4.00 2.00 2.00 1.00	JobCate 3 3 1 1 2	eg		^	ت نعلم المستسبي
ata previ Age 15 16 18 4 5 5	iew Gender f m f m m m	Press th MaritalSt 1 0 no answer 1 no answer 0	Address 12 29 9 4 2 9	Income 72.00 153.00 28.00 26.00 23.00 76.00	ete the text im IncomeC 3.00 4.00 2.00 2.00 1.00 4.00	JobCate 3 3 1 1 2	eg		^	تانعلم الستسبق
ata previ Age 5 6 8 4 5 5 4	iew Gender f m f m m m m	Press th MaritalSt 1 0 no answer 1 no answer 0	Address 12 29 9 4 2 9	Income 72.00 153.00 28.00 26.00 23.00 76.00 144.00	ete the text im IncomeC 3.00 4.00 2.00 2.00 1.00 4.00 4.00	JobCate 3 3 1 1 2 2 3	eg	1	^	تانعات دستسق
ata previ Age 5 6 8 4 5 5 4 6	iew Gender f m f m m m m m	Press the MaritalSt 1 0 no answer 1 no answer 0 1	Address 12 29 4 2 9 4 2 9 4 2 9 20	Income 72.00 153.00 28.00 26.00 23.00 76.00 144.00 75.00	ete the text im IncomeC 3.00 4.00 2.00 2.00 1.00 4.00 4.00 4.00 4.00	JobCate 3 3 1 1 2 2 3 3	eg	\checkmark	^	تانعک الت ش ر
ata previ Age 15 16 18 14 15 5 4 5 4 6 1	iew Gender f m f m m m m m m m	Press the MaritalSt 1 0 no answer 1 no answer 0 1 no answer	Address 12 29 9 4 2 9 17 20 10	Income 72.00 153.00 28.00 26.00 23.00 76.00 144.00 75.00 26.00	ete the text im IncomeC 3.00 4.00 2.00 1.00 4.00 4.00 4.00 4.00 4.00 2.00	JobCate 3 3 1 1 2 2 3 3 3 2	eg	\checkmark	^	ت نفلم بقسق
ata previ Age 5 6 8 4 5 5 4 6 1 9	iew Gender f m f m m m m m m f	Press the MaritalSt 1 0 no answer 1 no answer 0 1 no answer no answer	Address Address 12 29 9 4 2 9 17 20 10 4	Income 72.00 153.00 28.00 26.00 23.00 76.00 144.00 75.00 26.00 19.00	ete the text im IncomeC 3.00 4.00 2.00 1.00 4.00 4.00 4.00 4.00 1.00 1.00	JobCate 3 3 1 1 2 2 3 3 2 2	eg	\checkmark	~	ت نفل ب ست ب

< Back Next > Finish Cancel Help