[Commentary by **John F Hall**]   [New page 9 July 2018]

John MacInnes
An Introduction to Secondary Data Analysis with IBM SPSS Statistics
(Sage, Dec. 2017)

Chapter 4: Getting Started with SPSS

Previous guides:

Macinnes 2017 Aide-mémoire for easier navigation of companion website
MacInnes 4.1.1 Overview of video tutorials 1 to 6
MacInnes 4.1.2 Downloading the European Social Survey Practice File
MacInnes 4.1.3 Downloading the SPSS syntax
MacInnes 4.1.4_Checking_the_SPSS_files
MacInnes 4.1.5 Guide to video tutorials 7 and 8
MacInnes 4.1.6 Guide to video tutorial 9
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MacInnes 4.1.8 Guide to video tutorial 12
Macinnes_4.2.1_Exercise_answer_videos_1-6
MacInnes 4.2.2_Exercise answer video 7
MacInnes 4.2.3 Exercise video answer 8

Chapter.4:   Exercise answer videos   [direct link to videos on companion site]
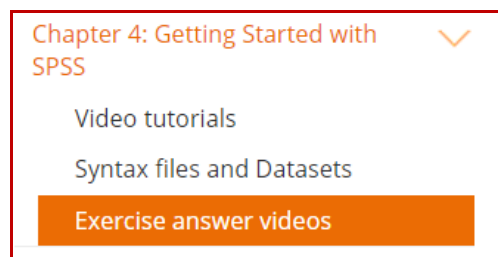

Extract from page 104:

> 9   In which country is the proportion of people who say they never watch television the highest?

Exercise video answer 9 (3'17")

Exercise question 9

In which country is the proportion of people who say they never watch television the highest?

(Which country has the highest proportion of people who say they never watch television?)

Dependent variable: tvtot
Independent variable: cntry
Weighting variable: pspwght

SPSS commands: **weight**
                     crosstabs

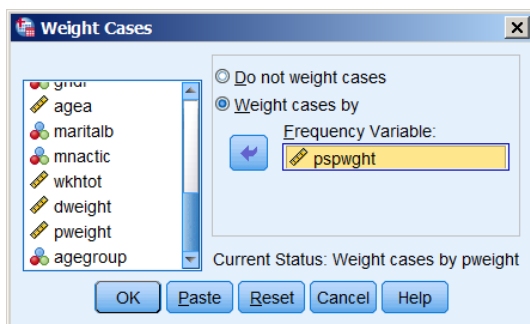Changes weighting to **[pspwght]** (post-stratification weight) because he is now comparing individual countries, not individual people. From the **Data Editor**:

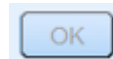Weight Cases >> to get the Weight Cases dialog, then scrolls down to pspweght
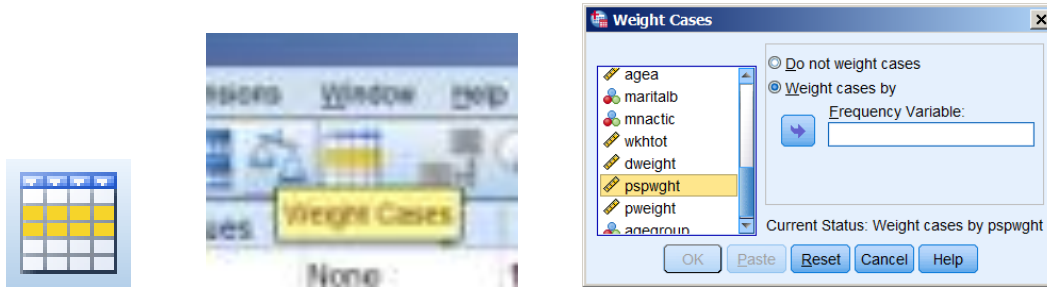
Clicks on → to transfer pspweght to the Frequency Variable box:

[**NB:** slightly confusing box name: should it be renamed Weighting Variable ?]

                     Clicks on OK

Uses the GUI again to get the table in what I call the "sociological" convention (independent variable in the rows, dependent variable in the columns).

Analyze >> Descriptive Statistics >> Crosstabs :
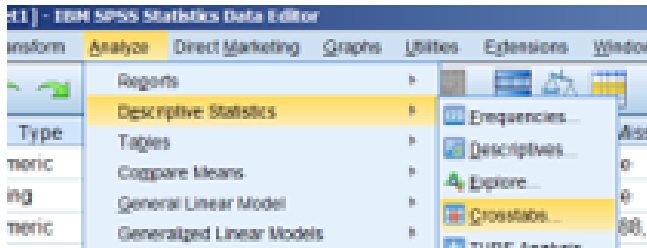
The previous Crosstabs dialog box is still open, so he presses Reset   to clear it for the next analysis:
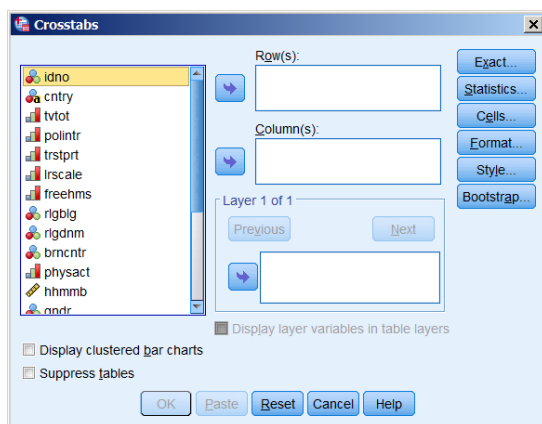
"Let's get **cntry** in the rows and **tvtot** in the columns"
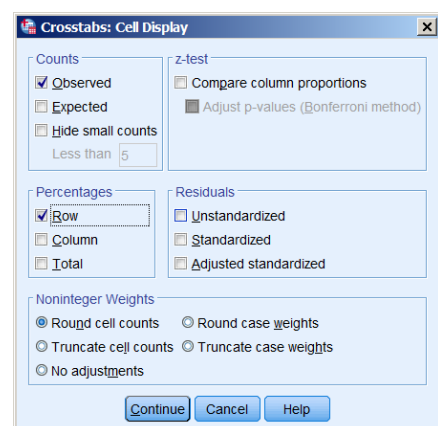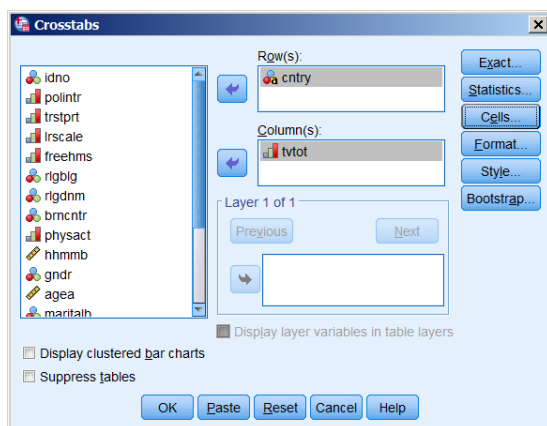
Checks Row ". . because we've got what we might call our independent variable, country, in the rows."

[**NB:** This is the first time he has mentioned **independent variable** in this context and in connection with Row %]

Clicks on Continue to go back to the Crosstabs dialog box
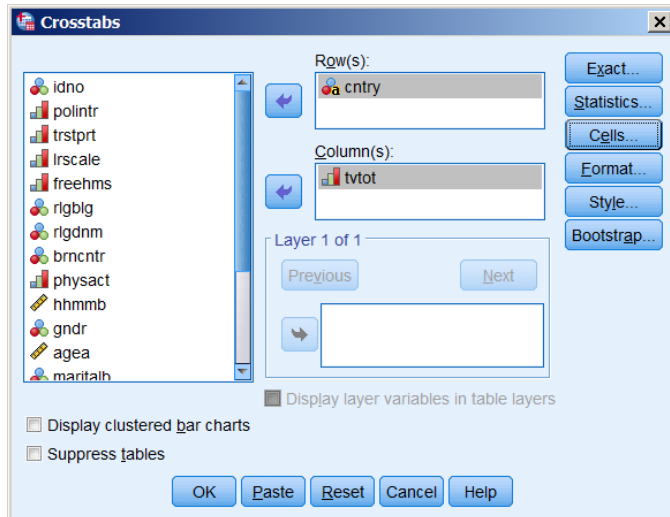
then on " . . . or we could use **PASTE**." [but he doesn't] to get the following table:

Country * TV watching, total time on average weekday Crosstabulation

			TV watching, total time on average weekday								Total
			No time at all	Less than 0,5 hour	0,5 hour to 1 hour	More than 1 hour, up to 1,5 hours	More than 1,5 hours, up to 2 hours	More than 2 hours, up to 2,5 hours	More than 2,5 hours, up to 3 hours	More than 3 hours	
Country	Albania	Count	32	52	161	167	196	143	142	309	1202
		% within Country	2.7%	4.3%	13.4%	13.9%	16.3%	11.9%	11.8%	25.7%	100.0%
	Belgium	Count	71	105	269	293	293	286	177	376	1870
		% within Country	3.8%	5.6%	14.4%	15.7%	15.7%	15.3%	9.5%	20.1%	100.0%
	Bulgaria	Count	83	36	127	184	291	265	358	901	2245
		% within Country	3.7%	1.6%	5.7%	8.2%	13.0%	11.8%	15.9%	40.1%	100.0%
	Switzerland	Count	121	186	315	293	218	165	105	88	1491
		% within Country	8.1%	12.5%	21.1%	19.7%	14.6%	11.1%	7.0%	5.9%	100.0%
	Cyprus	Count	27	52	121	111	195	137	144	328	1115
		% within Country	2.4%	4.7%	10.9%	10.0%	17.5%	12.3%	12.9%	29.4%	100.0%
	Czech Republic	Count	43	55	115	187	314	313	358	594	1979
		% within Country	2.2%	2.8%	5.8%	9.4%	15.9%	15.8%	18.1%	30.0%	100.0%
	Germany	Count	136	221	441	396	522	383	434	424	2957
		% within Country	4.6%	7.5%	14.9%	13.4%	17.7%	13.0%	14.7%	14.3%	100.0%
	Denmark	Count	43	99	228	261	252	264	203	298	1648
		% within Country	2.6%	6.0%	13.8%	15.8%	15.3%	16.0%	12.3%	18.1%	100.0%
	Estonia	Count	120	151	308	294	395	338	290	482	2378
		% within Country	5.0%	6.3%	13.0%	12.4%	16.6%	14.2%	12.2%	20.3%	100.0%
	Spain	Count	82	161	336	327	249	255	156	323	1889
		% within Country	4.3%	8.5%	17.8%	17.3%	13.2%	13.5%	8.3%	17.1%	100.0%
	Finland	Count	130	145	423	393	359	278	191	278	2197
		% within Country	5.9%	6.6%	19.3%	17.9%	16.3%	12.7%	8.7%	12.7%	100.0%
	France	Count	70	95	203	298	316	281	253	452	1968
		% within Country	3.6%	4.8%	10.3%	15.1%	16.1%	14.3%	12.9%	23.0%	100.0%
	United Kingdom	Count	96	80	216	254	287	306	351	696	2286
		% within Country	4.2%	3.5%	9.4%	11.1%	12.6%	13.4%	15.4%	30.4%	100.0%
	Hungary	Count	78	66	233	239	454	202	318	421	2011
		% within Country	3.9%	3.3%	11.6%	11.9%	22.6%	10.0%	15.8%	20.9%	100.0%
	Ireland	Count	79	68	260	361	403	353	358	741	2623
		% within Country	3.0%	2.6%	9.9%	13.8%	15.4%	13.5%	13.6%	28.3%	100.0%
	Israel	Count	381	120	257	403	336	361	163	476	2497
		% within Country	15.3%	4.8%	10.3%	16.1%	13.5%	14.5%	6.5%	19.1%	100.0%
	Iceland	Count	32	85	162	122	113	94	66	72	746
		% within Country	4.3%	11.4%	21.7%	16.4%	15.1%	12.6%	8.8%	9.7%	100.0%
	Italy	Count	33	76	182	160	148	154	71	135	959
		% within Country	3.4%	7.9%	19.0%	16.7%	15.4%	16.1%	7.4%	14.1%	100.0%
	Lithuania	Count	90	81	166	225	380	353	285	503	2083
		% within Country	4.3%	3.9%	8.0%	10.8%	18.2%	16.9%	13.7%	24.1%	100.0%
	Netherlands	Count	61	119	264	282	272	253	212	381	1844
		% within Country	3.3%	6.5%	14.3%	15.3%	14.8%	13.7%	11.5%	20.7%	100.0%
	Norway	Count	47	116	276	263	283	259	168	213	1625
		% within Country	2.9%	7.1%	17.0%	16.2%	17.4%	15.9%	10.3%	13.1%	100.0%
	Poland	Count	88	125	365	254	367	151	251	286	1887
		% within Country	4.7%	6.6%	19.3%	13.5%	19.4%	8.0%	13.3%	15.2%	100.0%
	Portugal	Count	33	74	196	312	345	330	271	586	2147
		% within Country	1.5%	3.4%	9.1%	14.5%	16.1%	15.4%	12.6%	27.3%	100.0%
	Russian Federation	Count	172	138	210	322	357	309	279	617	2404
		% within Country	7.2%	5.7%	8.7%	13.4%	14.9%	12.9%	11.6%	25.7%	100.0%
	Sweden	Count	61	174	324	339	344	266	155	183	1846
		% within Country	3.3%	9.4%	17.6%	18.4%	18.6%	14.4%	8.4%	9.9%	100.0%
	Slovenia	Count	74	153	273	165	207	120	130	136	1258
		% within Country	5.9%	12.2%	21.7%	13.1%	16.5%	9.5%	10.3%	10.8%	100.0%
	Slovakia	Count	33	65	167	223	258	286	311	493	1836
		% within Country	1.8%	3.5%	9.1%	12.1%	14.1%	15.6%	16.9%	26.9%	100.0%
	Ukraine	Count	108	176	295	297	375	282	283	328	2144
		% within Country	5.0%	8.2%	13.8%	13.9%	17.5%	13.2%	13.2%	15.3%	100.0%
	Kosovo	Count	17	64	179	188	246	100	206	294	1294
		% within Country	1.3%	4.9%	13.8%	14.5%	19.0%	7.7%	15.9%	22.7%	100.0%
Total		Count	2441	3138	7072	7613	8775	7287	6689	11414	54429
		% within Country	4.5%	5.8%	13.0%	14.0%	16.1%	13.4%	12.3%	21.0%	100.0%

Remarks that the table is unwieldy and that "the percentage who never watch TV is pretty low everywhere, with the exception of Israel which is a bit of an outlier." He makes the table a bit easier to interpret by going back to Crosstabs and getting rid of the raw counts:

Country * TV watching, total time on average weekday Crosstabulation

% within Country

		TV watching, total time on average weekday								Total
		No time at all	Less than 0,5 hour	0,5 hour to 1 hour	More than 1 hour, up to 1,5 hours	More than 1,5 hours, up to 2 hours	More than 2 hours, up to 2,5 hours	More than 2,5 hours, up to 3 hours	More than 3 hours	
Country	Albania	2.7%	4.3%	13.4%	13.9%	16.3%	11.9%	11.8%	25.7%	100.0%
	Belgium	3.8%	5.6%	14.4%	15.7%	15.7%	15.3%	9.5%	20.1%	100.0%
	Bulgaria	3.7%	1.6%	5.7%	8.2%	13.0%	11.8%	15.9%	40.1%	100.0%
	Switzerland	8.1%	12.5%	21.1%	19.7%	14.6%	11.1%	7.0%	5.9%	100.0%
	Cyprus	2.4%	4.7%	10.9%	10.0%	17.5%	12.3%	12.9%	29.4%	100.0%
	Czech Republic	2.2%	2.8%	5.8%	9.4%	15.9%	15.8%	18.1%	30.0%	100.0%
	Germany	4.6%	7.5%	14.9%	13.4%	17.7%	13.0%	14.7%	14.3%	100.0%
	Denmark	2.6%	6.0%	13.8%	15.8%	15.3%	16.0%	12.3%	18.1%	100.0%
	Estonia	5.0%	6.3%	13.0%	12.4%	16.6%	14.2%	12.2%	20.3%	100.0%
	Spain	4.3%	8.5%	17.8%	17.3%	13.2%	13.5%	8.3%	17.1%	100.0%
	Finland	5.9%	6.6%	19.3%	17.9%	16.3%	12.7%	8.7%	12.7%	100.0%
	France	3.6%	4.8%	10.3%	15.1%	16.1%	14.3%	12.9%	23.0%	100.0%
	United Kingdom	4.2%	3.5%	9.4%	11.1%	12.6%	13.4%	15.4%	30.4%	100.0%
	Hungary	3.9%	3.3%	11.6%	11.9%	22.6%	10.0%	15.8%	20.9%	100.0%
	Ireland	3.0%	2.6%	9.9%	13.8%	15.4%	13.5%	13.6%	28.3%	100.0%
	Israel	15.3%	4.8%	10.3%	16.1%	13.5%	14.5%	6.5%	19.1%	100.0%
	Iceland	4.3%	11.4%	21.7%	16.4%	15.1%	12.6%	8.8%	9.7%	100.0%
	Italy	3.4%	7.9%	19.0%	16.7%	15.4%	16.1%	7.4%	14.1%	100.0%
	Lithuania	4.3%	3.9%	8.0%	10.8%	18.2%	16.9%	13.7%	24.1%	100.0%
	Netherlands	3.3%	6.5%	14.3%	15.3%	14.8%	13.7%	11.5%	20.7%	100.0%
	Norway	2.9%	7.1%	17.0%	16.2%	17.4%	15.9%	10.3%	13.1%	100.0%
	Poland	4.7%	6.6%	19.3%	13.5%	19.4%	8.0%	13.3%	15.2%	100.0%
	Portugal	1.5%	3.4%	9.1%	14.5%	16.1%	15.4%	12.6%	27.3%	100.0%
	Russian Federation	7.2%	5.7%	8.7%	13.4%	14.9%	12.9%	11.6%	25.7%	100.0%
	Sweden	3.3%	9.4%	17.6%	18.4%	18.6%	14.4%	8.4%	9.9%	100.0%
	Slovenia	5.9%	12.2%	21.7%	13.1%	16.5%	9.5%	10.3%	10.8%	100.0%
	Slovakia	1.8%	3.5%	9.1%	12.1%	14.1%	15.6%	16.9%	26.9%	100.0%
	Ukraine	5.0%	8.2%	13.8%	13.9%	17.5%	13.2%	13.2%	15.3%	100.0%
	Kosovo	1.3%	4.9%	13.8%	14.5%	19.0%	7.7%	15.9%	22.7%	100.0%
Total		4.5%	5.8%	13.0%	14.0%	16.1%	13.4%	12.3%	21.0%	100.0%

Paste would have produced the following syntax:

```
WEIGHT BY pspwght.
CROSSTABS
 /TABLES=cntry BY tvtot
 /FORMAT=AVALUE TABLES
 /CELLS=ROW
 /COUNT ROUND CELL.
```

. . but it's much quicker and easier to use direct syntax.

```
crosstabs cntry by tvtot / cel row .
```

He then double clicks the table to "activate" it in Pivot Tables and proceeds to re-order the rows in ascending order of the percentage stating that they never watch TV. In the Pivot Table he highlights the percentages under "No time at all" (but not the Total)

Pivot Table Country * TV watching, total time on average weekday Crosstabulation

File   Edit   View   Insert   Pivot   Format   Help

Country * TV watching, total time on average weekday Crosstabulation

Statistics % within Country

| | | | | | | TV watching, total time on average weekday | | | | |
		No time at all	Less than 0,5 hour	0,5 hour to 1 hour	More than 1 hour, up to 1,5 hours	More than 1,5 hours, up to 2 hours	More than 2 hours, up to 2,5 hours	More than 2,5 hours, up to 3 hours	More than 3 hours	Total
Country	Albania	2.7%	4.3%	13.4%	13.9%	16.3%	11.9%	11.8%	25.7%	100.0%
	Belgium	3.8%	5.6%	14.4%	15.7%	15.7%	15.3%	9.5%	20.1%	100.0%
	Bulgaria	3.7%	1.6%	5.7%	8.2%	13.0%	11.8%	15.9%	40.1%	100.0%
	Switzerland	8.1%	12.5%	21.1%	19.7%	14.6%	11.1%	7.0%	5.9%	100.0%
	Cyprus	2.4%	4.7%	10.9%	10.0%	17.5%	12.3%	12.9%	29.4%	100.0%
	Czech Republic	2.2%	2.8%	5.8%	9.4%	15.9%	15.8%	18.1%	30.0%	100.0%
	Germany	4.6%	7.5%	14.9%	13.4%	17.7%	13.0%	14.7%	14.3%	100.0%
	Denmark	2.6%	6.0%	13.8%	15.8%	15.3%	16.0%	12.3%	18.1%	100.0%
	Estonia	5.0%	6.3%	13.0%	12.4%	16.6%	14.2%	12.2%	20.3%	100.0%
	Spain	4.3%	8.5%	17.8%	17.3%	13.2%	13.5%	8.3%	17.1%	100.0%
	Finland	5.9%	6.6%	19.3%	17.9%	16.3%	12.7%	8.7%	12.7%	100.0%
	France	3.6%	4.8%	10.3%	15.1%	16.1%	14.3%	12.9%	23.0%	100.0%
	United Kingdom	4.2%	3.5%	9.4%	11.1%	12.6%	13.4%	15.4%	30.4%	100.0%
	Hungary	3.9%	3.3%	11.6%	11.9%	22.6%	10.0%	15.8%	20.9%	100.0%
	Ireland	3.0%	2.6%	9.9%	13.8%	15.4%	13.5%	13.6%	28.3%	100.0%
	Israel	15.3%	4.8%	10.3%	16.1%	13.5%	14.5%	6.5%	19.1%	100.0%
	Iceland	4.3%	11.4%	21.7%	16.4%	15.1%	12.6%	8.8%	9.7%	100.0%
	Italy	3.4%	7.9%	19.0%	16.7%	15.4%	16.1%	7.4%	14.1%	100.0%
	Lithuania	4.3%	3.9%	8.0%	10.8%	18.2%	16.9%	13.7%	24.1%	100.0%
	Netherlands	3.3%	6.5%	14.3%	15.3%	14.8%	13.7%	11.5%	20.7%	100.0%
	Norway	2.9%	7.1%	17.0%	16.2%	17.4%	15.9%	10.3%	13.1%	100.0%
	Poland	4.7%	6.6%	19.3%	13.5%	19.4%	8.0%	13.3%	15.2%	100.0%
	Portugal	1.5%	3.4%	9.1%	14.5%	16.1%	15.4%	12.6%	27.3%	100.0%
	Russian Federation	7.2%	5.7%	8.7%	13.4%	14.9%	12.9%	11.6%	25.7%	100.0%
	Sweden	3.3%	9.4%	17.6%	18.4%	18.6%	14.4%	8.4%	9.9%	100.0%
	Slovenia	5.9%	12.2%	21.7%	13.1%	16.5%	9.5%	10.3%	10.8%	100.0%
	Slovakia	1.8%	3.5%	9.1%	12.1%	14.1%	15.6%	16.9%	26.9%	100.0%
	Ukraine	5.0%	8.2%	13.8%	13.9%	17.5%	13.2%	13.2%	15.3%	100.0%
	Kosovo	1.3%	4.9%	13.8%	14.5%	19.0%	7.7%	15.9%	22.7%	100.0%
Total		4.5%	5.8%	13.0%	14.0%	16.1%	13.4%	12.3%	21.0%	100.0%

Edit >> Sort Rows >> Ascending

7

Pivot Table Country * TV watching, total time on average weekday Crosstabulation

File Edit View Insert Pivot Format Help

Country * TV watching, total time on average weekday Crosstabulation

Statistics % within Country

		No time at all	Less than 0,5 hour	0,5 hour to 1 hour	More than 1 hour, up to 1,5 hours	More than 1,5 hours, up to 2 hours	More than 2 hours, up to 2,5 hours	More than 2,5 hours, up to 3 hours	More than 3 hours	Total
Country	Kosovo	1.3%	4.9%	13.8%	14.5%	19.0%	7.7%	15.9%	22.7%	100.0%
	Portugal	1.5%	3.4%	9.1%	14.5%	16.1%	15.4%	12.6%	27.3%	100.0%
	Slovakia	1.8%	3.5%	9.1%	12.1%	14.1%	15.6%	16.9%	26.9%	100.0%
	Czech Republic	2.2%	2.8%	5.8%	9.4%	15.9%	15.8%	18.1%	30.0%	100.0%
	Cyprus	2.4%	4.7%	10.9%	10.0%	17.5%	12.3%	12.9%	29.4%	100.0%
	Denmark	2.6%	6.0%	13.8%	15.8%	15.3%	16.0%	12.3%	18.1%	100.0%
	Albania	2.7%	4.3%	13.4%	13.9%	16.3%	11.9%	11.8%	25.7%	100.0%
	Norway	2.9%	7.1%	17.0%	16.2%	17.4%	15.9%	10.3%	13.1%	100.0%
	Ireland	3.0%	2.6%	9.9%	13.8%	15.4%	13.5%	13.6%	28.3%	100.0%
	Sweden	3.3%	9.4%	17.6%	18.4%	18.6%	14.4%	8.4%	9.9%	100.0%
	Netherlands	3.3%	6.5%	14.3%	15.3%	14.8%	13.7%	11.5%	20.7%	100.0%
	Italy	3.4%	7.9%	19.0%	16.7%	15.4%	16.1%	7.4%	14.1%	100.0%
	France	3.6%	4.8%	10.3%	15.1%	16.1%	14.3%	12.9%	23.0%	100.0%
	Bulgaria	3.7%	1.6%	5.7%	8.2%	13.0%	11.8%	15.9%	40.1%	100.0%
	Belgium	3.8%	5.6%	14.4%	15.7%	15.7%	15.3%	9.5%	20.1%	100.0%
	Hungary	3.9%	3.3%	11.6%	11.9%	22.6%	10.0%	15.8%	20.9%	100.0%
	United Kingdom	4.2%	3.5%	9.4%	11.1%	12.6%	13.4%	15.4%	30.4%	100.0%
	Iceland	4.3%	11.4%	21.7%	16.4%	15.1%	12.6%	8.8%	9.7%	100.0%
	Lithuania	4.3%	3.9%	8.0%	10.8%	18.2%	16.9%	13.7%	24.1%	100.0%
	Spain	4.3%	8.5%	17.8%	17.3%	13.2%	13.5%	8.3%	17.1%	100.0%
	Germany	4.6%	7.5%	14.9%	13.4%	17.7%	13.0%	14.7%	14.3%	100.0%
	Poland	4.7%	6.6%	19.3%	13.5%	19.4%	8.0%	13.3%	15.2%	100.0%
	Ukraine	5.0%	8.2%	13.8%	13.9%	17.5%	13.2%	13.2%	15.3%	100.0%
	Estonia	5.0%	6.3%	13.0%	12.4%	16.6%	14.2%	12.2%	20.3%	100.0%
	Slovenia	5.9%	12.2%	21.7%	13.1%	16.5%	9.5%	10.3%	10.8%	100.0%
	Finland	5.9%	6.6%	19.3%	17.9%	16.3%	12.7%	8.7%	12.7%	100.0%
	Russian Federation	7.2%	5.7%	8.7%	13.4%	14.9%	12.9%	11.6%	25.7%	100.0%
	Switzerland	8.1%	12.5%	21.1%	19.7%	14.6%	11.1%	7.0%	5.9%	100.0%
	Israel	15.3%	4.8%	10.3%	16.1%	13.5%	14.5%	6.5%	19.1%	100.0%
Total		4.5%	5.8%	13.0%	14.0%	16.1%	13.4%	12.3%	21.0%	100.0%

Country * TV watching, total time on average weekday Crosstabulation

% within Country

		TV watching, total time on average weekday								Total
		No time at all	Less than 0,5 hour	0,5 hour to 1 hour	More than 1 hour, up to 1,5 hours	More than 1,5 hours, up to 2 hours	More than 2 hours, up to 2,5 hours	More than 2,5 hours, up to 3 hours	More than 3 hours	
Country	Kosovo	1.3%	4.9%	13.8%	14.5%	19.0%	7.7%	15.9%	22.7%	100.0%
	Portugal	1.5%	3.4%	9.1%	14.5%	16.1%	15.4%	12.6%	27.3%	100.0%
	Slovakia	1.8%	3.5%	9.1%	12.1%	14.1%	15.6%	16.9%	26.9%	100.0%
	Czech Republic	2.2%	2.8%	5.8%	9.4%	15.9%	15.8%	18.1%	30.0%	100.0%
	Cyprus	2.4%	4.7%	10.9%	10.0%	17.5%	12.3%	12.9%	29.4%	100.0%
	Denmark	2.6%	6.0%	13.8%	15.8%	15.3%	16.0%	12.3%	18.1%	100.0%
	Albania	2.7%	4.3%	13.4%	13.9%	16.3%	11.9%	11.8%	25.7%	100.0%
	Norway	2.9%	7.1%	17.0%	16.2%	17.4%	15.9%	10.3%	13.1%	100.0%
	Ireland	3.0%	2.6%	9.9%	13.8%	15.4%	13.5%	13.6%	28.3%	100.0%
	Sweden	3.3%	9.4%	17.6%	18.4%	18.6%	14.4%	8.4%	9.9%	100.0%
	Netherlands	3.3%	6.5%	14.3%	15.3%	14.8%	13.7%	11.5%	20.7%	100.0%
	Italy	3.4%	7.9%	19.0%	16.7%	15.4%	16.1%	7.4%	14.1%	100.0%
	France	3.6%	4.8%	10.3%	15.1%	16.1%	14.3%	12.9%	23.0%	100.0%
	Bulgaria	3.7%	1.6%	5.7%	8.2%	13.0%	11.8%	15.9%	40.1%	100.0%
	Belgium	3.8%	5.6%	14.4%	15.7%	15.7%	15.3%	9.5%	20.1%	100.0%
	Hungary	3.9%	3.3%	11.6%	11.9%	22.6%	10.0%	15.8%	20.9%	100.0%
	United Kingdom	4.2%	3.5%	9.4%	11.1%	12.6%	13.4%	15.4%	30.4%	100.0%
	Iceland	4.3%	11.4%	21.7%	16.4%	15.1%	12.6%	8.8%	9.7%	100.0%
	Lithuania	4.3%	3.9%	8.0%	10.8%	18.2%	16.9%	13.7%	24.1%	100.0%
	Spain	4.3%	8.5%	17.8%	17.3%	13.2%	13.5%	8.3%	17.1%	100.0%
	Germany	4.6%	7.5%	14.9%	13.4%	17.7%	13.0%	14.7%	14.3%	100.0%
	Poland	4.7%	6.6%	19.3%	13.5%	19.4%	8.0%	13.3%	15.2%	100.0%
	Ukraine	5.0%	8.2%	13.8%	13.9%	17.5%	13.2%	13.2%	15.3%	100.0%
	Estonia	5.0%	6.3%	13.0%	12.4%	16.6%	14.2%	12.2%	20.3%	100.0%
	Slovenia	5.9%	12.2%	21.7%	13.1%	16.5%	9.5%	10.3%	10.8%	100.0%
	Finland	5.9%	6.6%	19.3%	17.9%	16.3%	12.7%	8.7%	12.7%	100.0%
	Russian Federation	7.2%	5.7%	8.7%	13.4%	14.9%	12.9%	11.6%	25.7%	100.0%
	Switzerland	8.1%	12.5%	21.1%	19.7%	14.6%	11.1%	7.0%	5.9%	100.0%
	Israel	15.3%	4.8%	10.3%	16.1%	13.5%	14.5%	6.5%	19.1%	100.0%
Total		4.5%	5.8%	13.0%	14.0%	16.1%	13.4%	12.3%	21.0%	100.0%

Notes that, "The only real exceptions . . . are some of these Eastern European countries. Israel stands out from all the rest."

He does not pursue the interesting follow-up research question as to why this should be the case.

End of: **Exercise video answer 9**

Forward to: **Exercise video answer 10**

Back to: **Exercise video answer 8**

Back to: **MacInnes Chapter 4: Getting Started with SPSS**

Back to: **MacInnes (2017)**