

[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**

**Exercise video answer 10 (4'48")**

**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](#)

[MacInnes 4.1.7 Guide to video tutorials 10 and 11](#)

[MacInnes 4.1.8 Guide to video tutorial 12](#)

[MacInnes 4.2.1 Exercise answer videos 1-6](#)

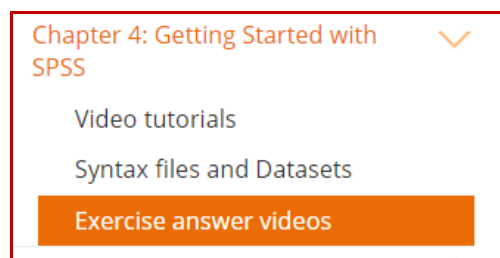
[MacInnes 4.2.2 Exercise answer video 7](#)

[MacInnes 4.2.3 Exercise video answer 8](#)

[MacInnes 4.2.4 Exercise video answer 9](#)

**Chapter.4:**    **[Exercise answer videos](#)**

[direct link to videos on companion site]



Extract from page 104:

10 Produce a chart of the mean size of households across the countries in the survey, ranking average household size from the smallest to the largest.

## Exercise question 10

Produce a chart of the mean size of households across the countries in the survey, ranking average household size from the smallest to the largest.

**Dependent variable:** hhmnb Number of people living regularly as member of household

**Independent variable:** cntry Country

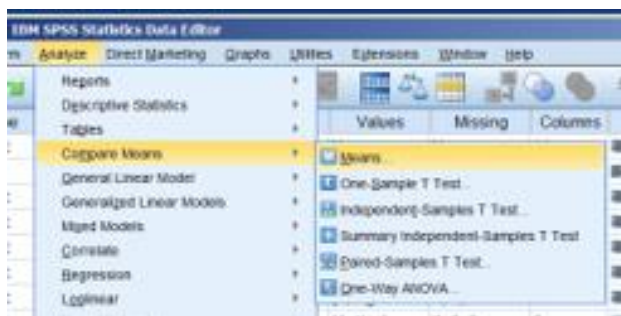
**SPSS command:** MEANS


[NB: JM leaves the previous **cntry** by **tvttot** table in view while specifying a new analysis.]

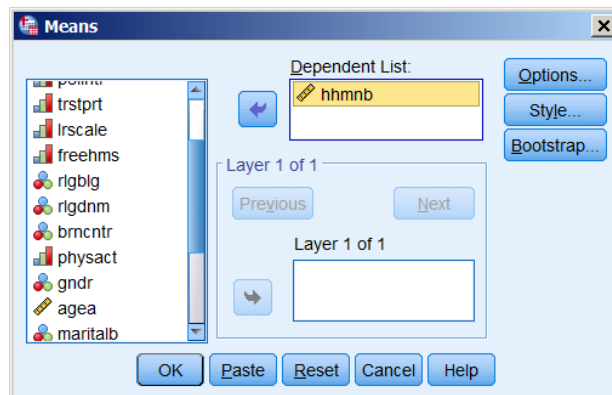
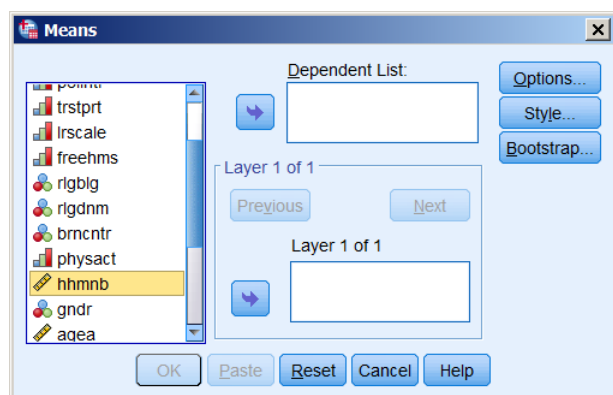
Checks that **pspwght** is in operation and that all cases are selected.

From the **Data Editor**:

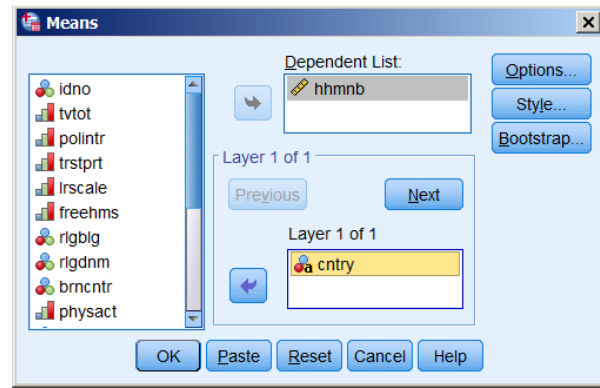
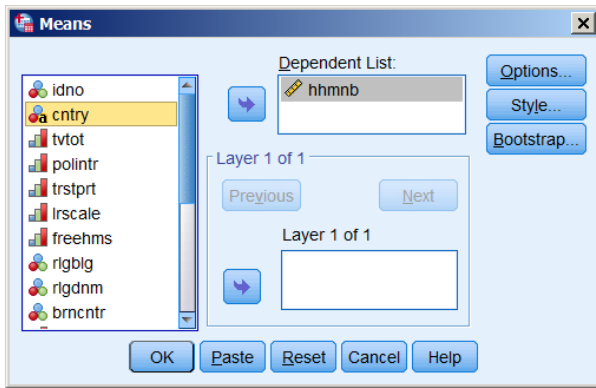
Analyze >> Compare Means >> Means




In the **Means** dialog box, scroll down to **hhmnb** and click on  to transfer it to **Dependent List**

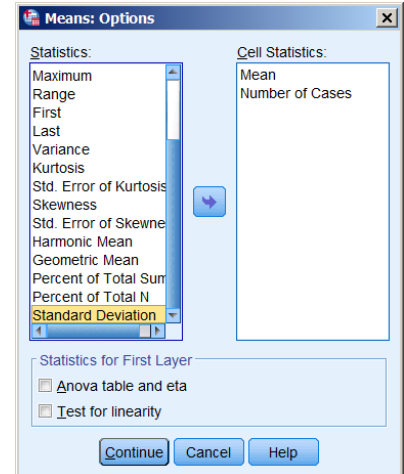
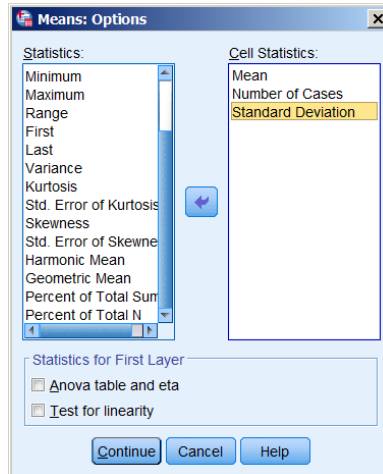
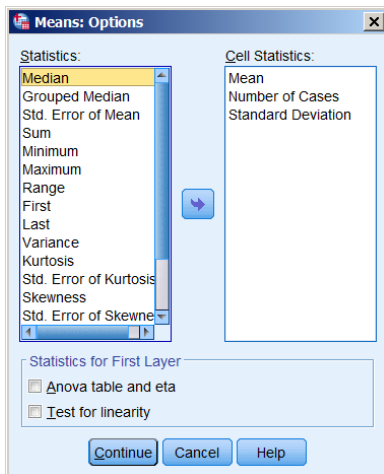


Scroll down to **hhmnb** and click on  to transfer it to **Independent List**

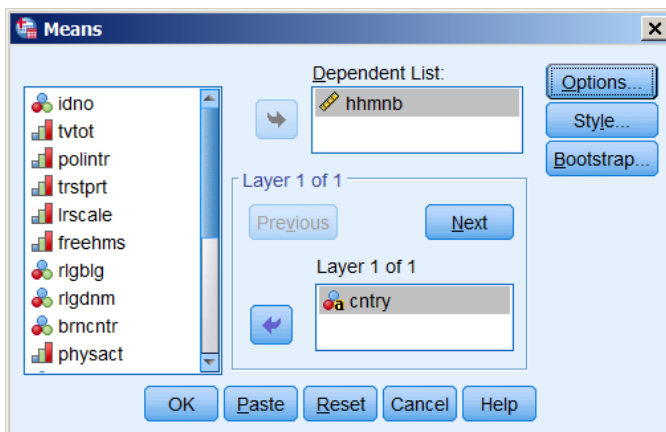


Click on **Options...**

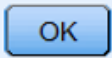
[NB: This brings up the **Means Options** dialog showing the default statistics **Mean**, **Number of Cases** and **Standard Deviation**, in the **Cell Statistics** pane, but in the video it shows only **Mean** and **Number of Cases**. To tally with the video, highlight **Standard Deviation** and click on  to return it to the **Statistics** pane.]



Click **Continue** to return to the **Means** dialog:



[NB: **hhmnb** and **ctry** are now both grayed out]

Click on  to get table.

Double click the table to enter Pivot mode:

**Report**

Number of people living regularly as member of household

Country	Mean	N
Albania	4.53	1189
Belgium	2.81	1869
Bulgaria	3.06	2260
Switzerland	2.75	1493
Cyprus	3.31	1116
Czech Republic	2.96	2009
Germany	2.64	2951
Denmark	2.59	1650
Estonia	2.64	2380
Spain	3.07	1886
Finland	2.44	2197
France	2.82	1968
United Kingdom	2.88	2285
Hungary	2.71	2014
Ireland	3.28	2628
Israel	3.86	2506
Iceland	3.10	749
Italy	2.96	960
Lithuania	2.80	2109
Netherlands	2.81	1845
Norway	2.72	1623
Poland	3.27	1893
Portugal	2.95	2151
Russian Federation	2.92	2484
Sweden	2.61	1847
Slovenia	3.21	1255
Slovakia	3.33	1847
Ukraine	3.26	2178
Kosovo	6.25	1295
Total	3.06	54637

Highlight all means in column (not the Total)

**Report**

Variables Number of people living regularly as member of household

Country	Mean	N
Albania	4.53	1189
Belgium	2.81	1869
Bulgaria	3.06	2260
Switzerland	2.75	1493
Cyprus	3.31	1116
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Edit >> Sort Means >> Ascending

or

Right click on highlighted means >> Sort Rows >> Ascending

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Total	3.06	54637

JM proceeds to copy the table to Excel and produce charts (not reproduced here).

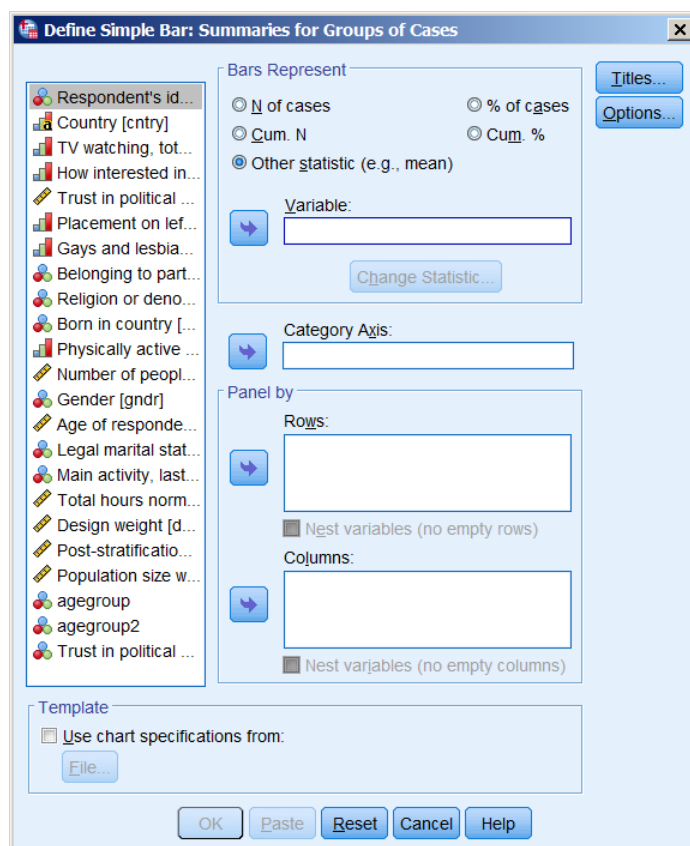
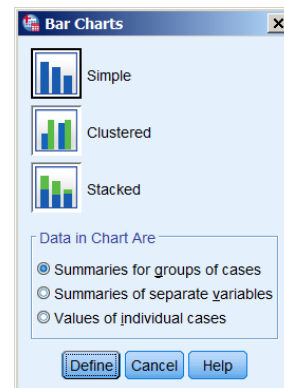
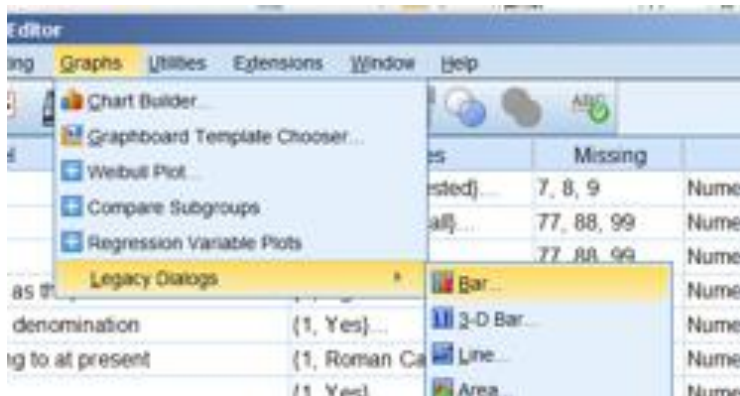
He also produces them using SPSS.

## Charts from SPSS

**Variables:** **hhmnbn** Number of people living regularly as member of household  
**cntry** Country

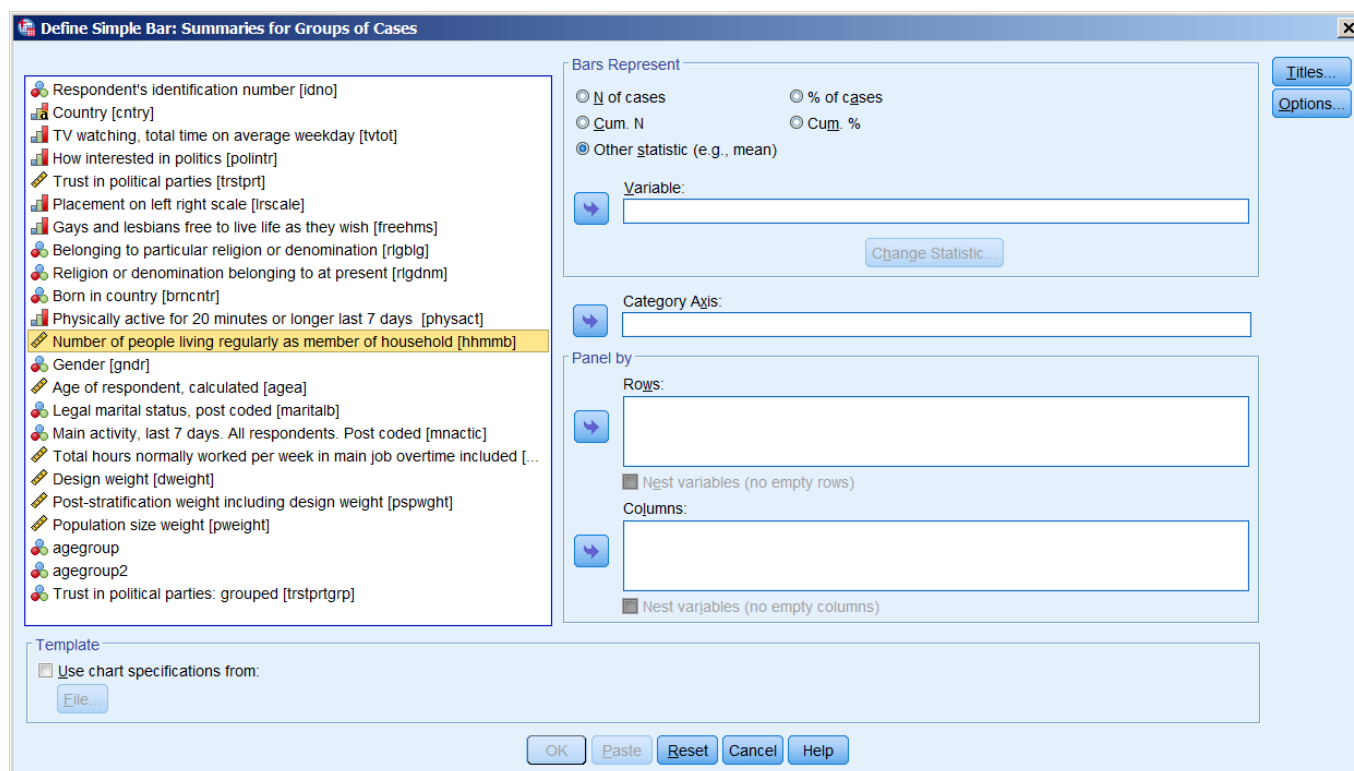
**SPSS command** **CHART**

Graphs >> Legacy Dialogs >> Bar



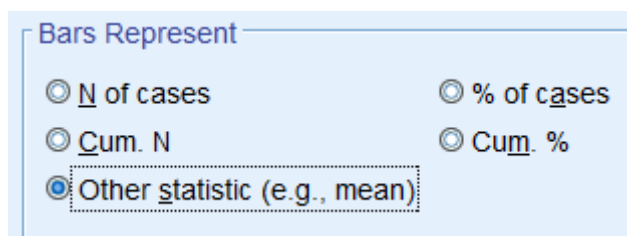
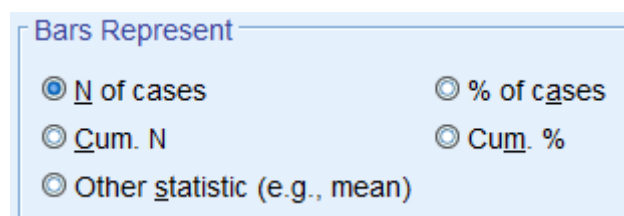
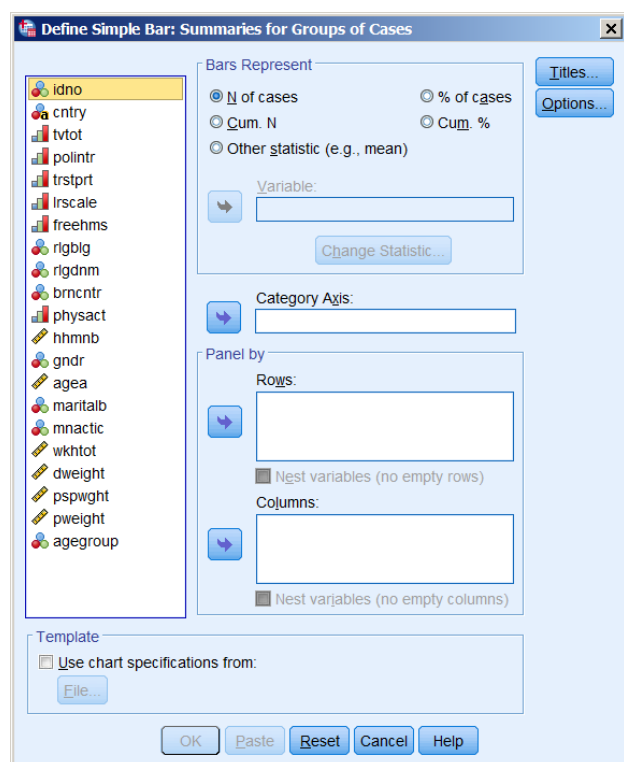
[NB: JM's SPSS settings use variable **labels** not variable **names**: in very large files this makes it difficult to find the variable(s) you want.]

Drag the right edge of the window out see the full labels:



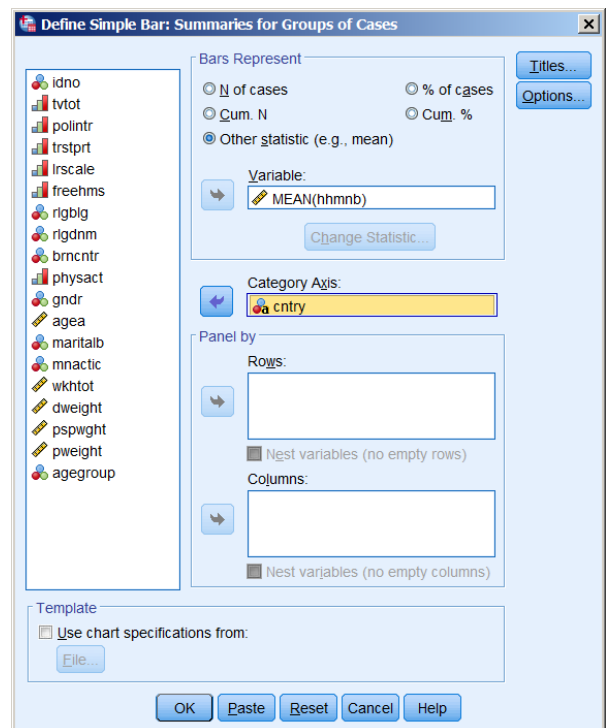
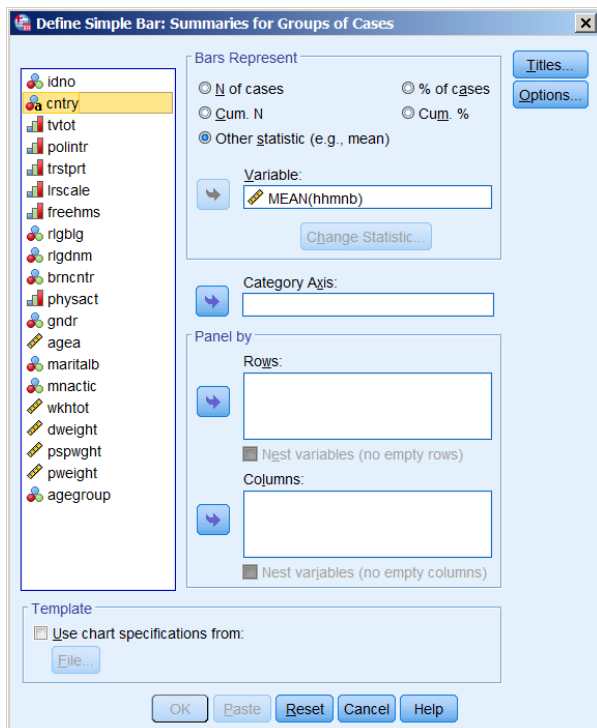
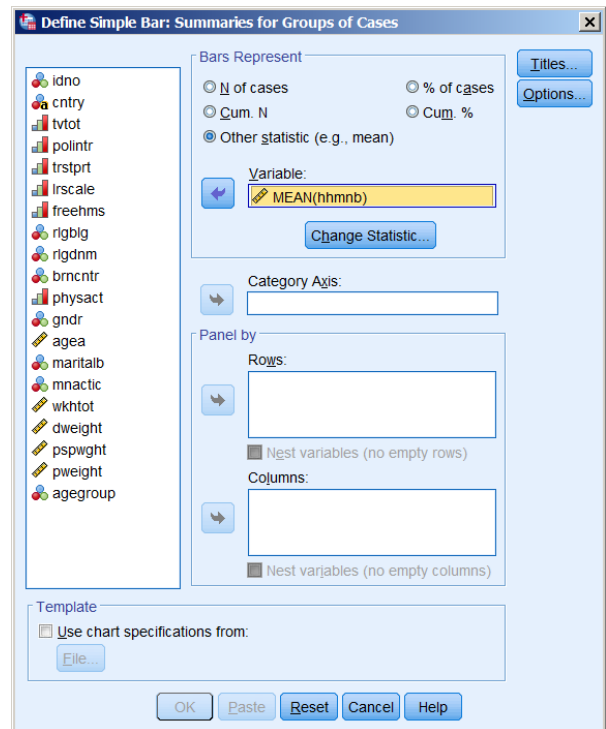
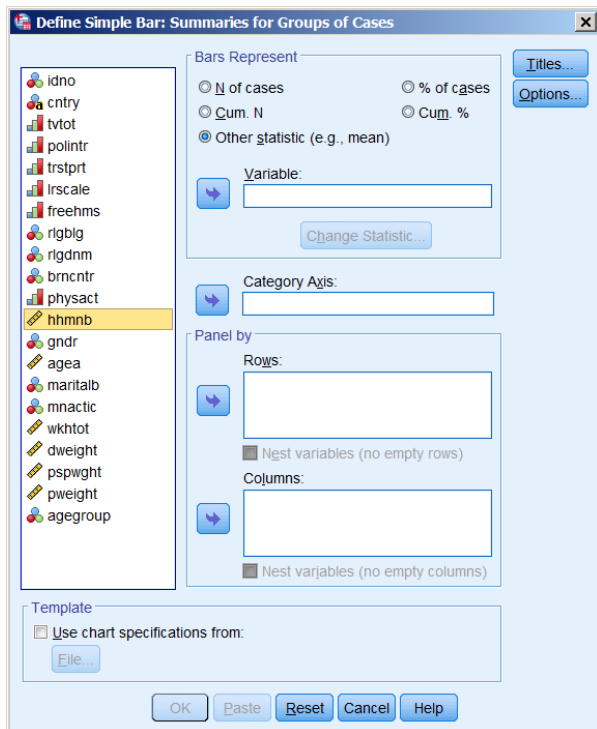
It's easier with variable **Labels** (but for this you need to change SPSS settings):

**Edit** >> **Options** >> **Output** then check **Names** under **Outline Labeling**





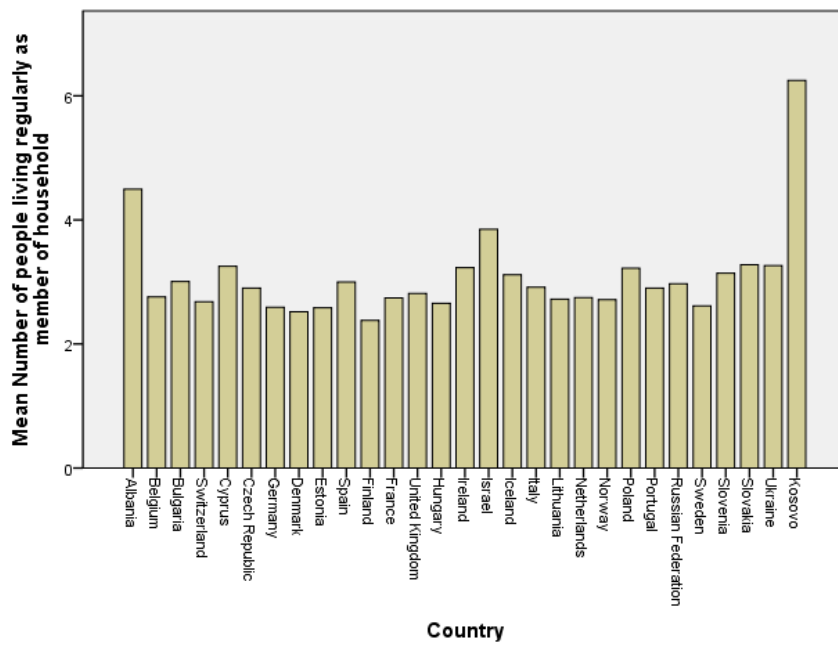
Highlight **hhmb** and click  next to the **Variable** box which will fill with **MEAN(hhmb)**



**Paste** generates the following syntax:

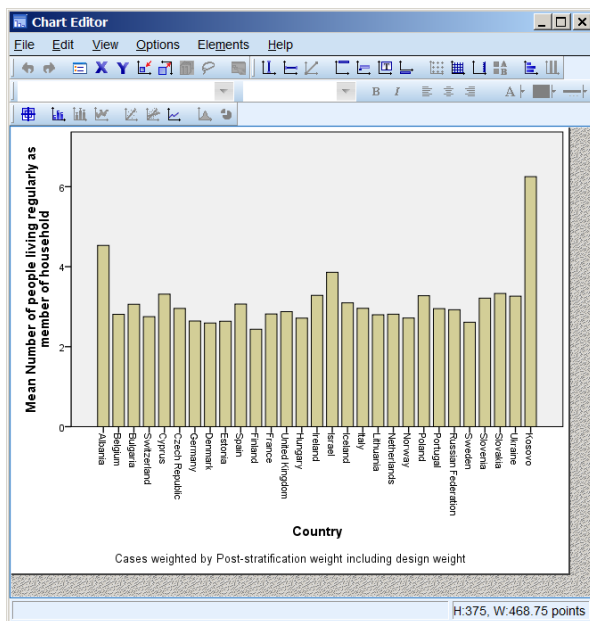
```
1 GRAPH
2 /BAR(SIMPLE)=MEAN(hhmb) BY cny.
```

which produces the following chart:

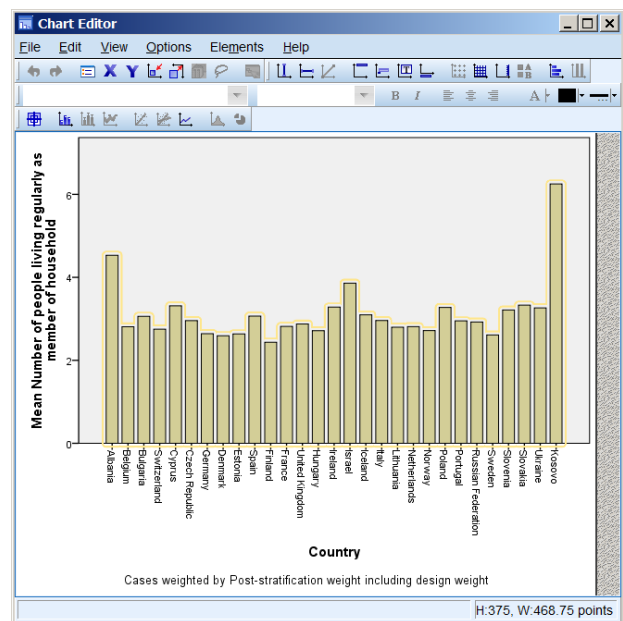


Cases weighted by Population size weight

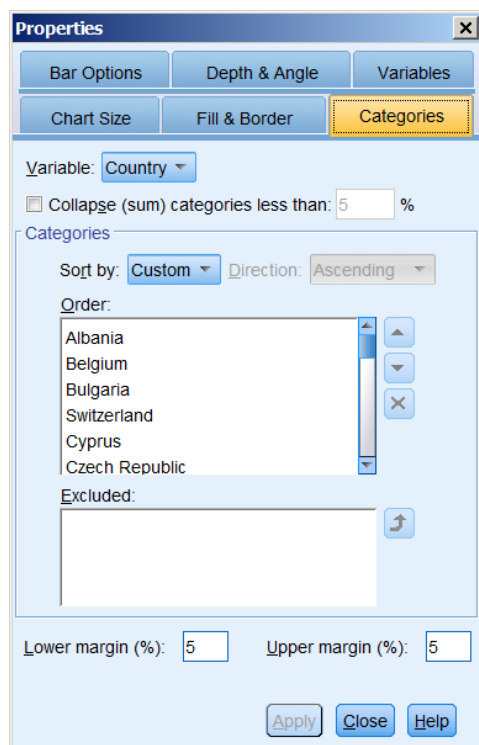
Double click the chart to open the **Chart Editor**:



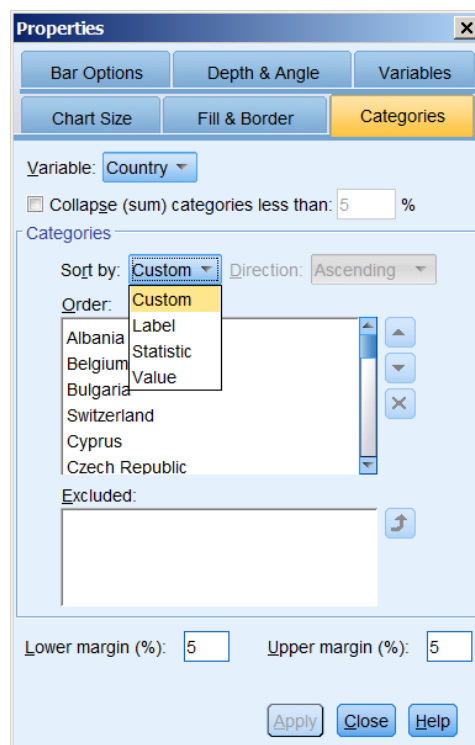
Double click anywhere in the bars: (they will be outlined in **yellow**.)



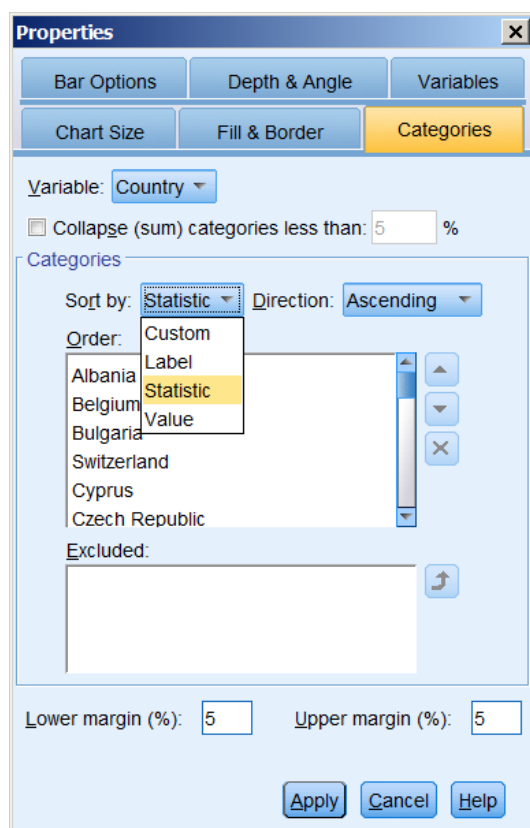
and the **Properties** dialog opens:



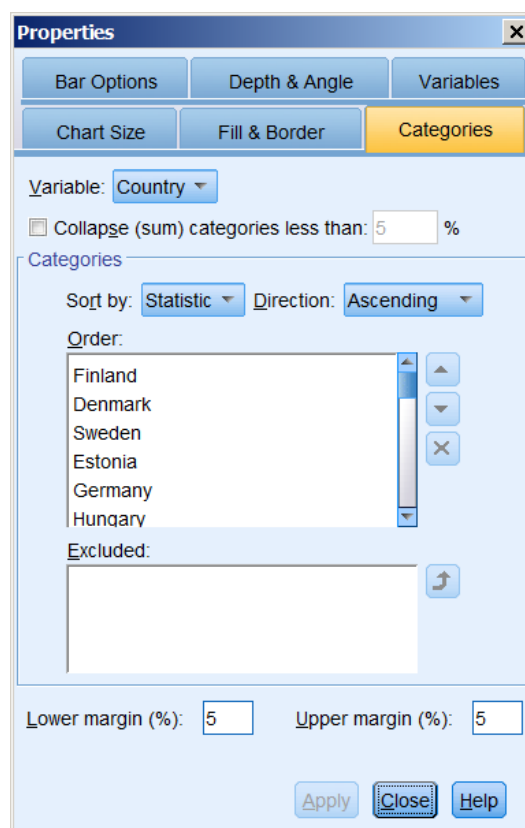
Change **Custom**



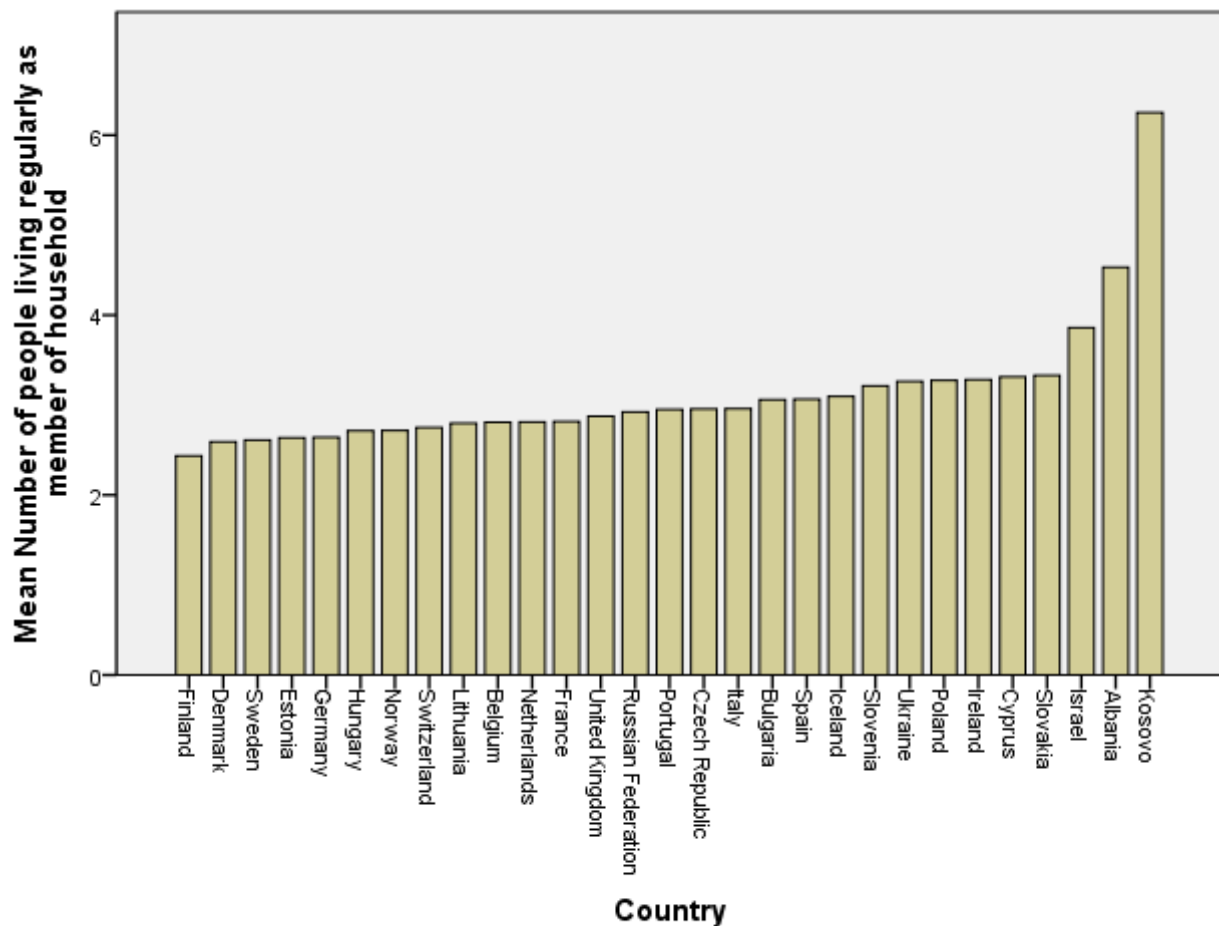
to **Statistic**



and click **Apply**



Click **Close** to get the chart with bars re-ordered in ascending order of means:



Cases weighted by Post-stratification weight including design weight

End of: **Exercise video answer 10**

Back to: **Exercise video answer 9**

Back to: **Exercise video answer 8**

Back to: [MacInnes Chapter 4: Getting Started with SPSS](#)

Back to: [MacInnes \(2017\)](#)