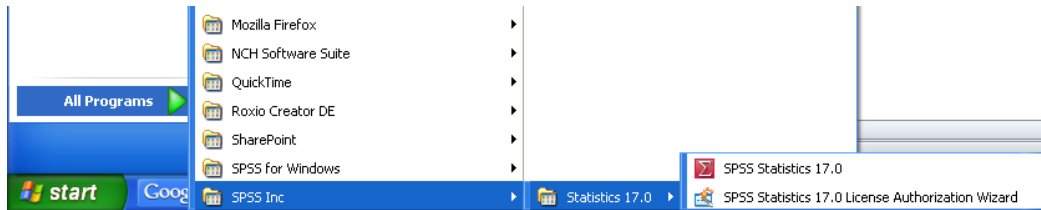


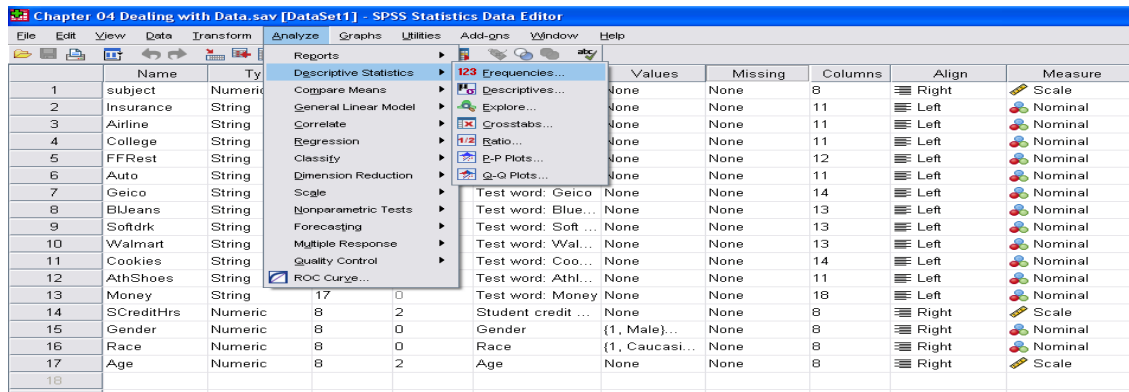
Chapter 4 Dealing with Data SPSS Tutorial

1. Visit the student website at for this textbook at www.clowjames.net/students.
2. Download the following file:
"Chapter 04 Dealing with Data.sav" (SPSS file)
3. Open SPSS 17.0.

The program may appear as an icon on your computer desktop, or you may need to use the START > ALL PROGRAMS command in Windows to find the "SPSS Inc." folder. Once you have located this folder, open it, then open the "Statistics 17.0" folder. Finally, launch the SPSS Statistics 17.0 program (designated by the red icon) by clicking on that item.



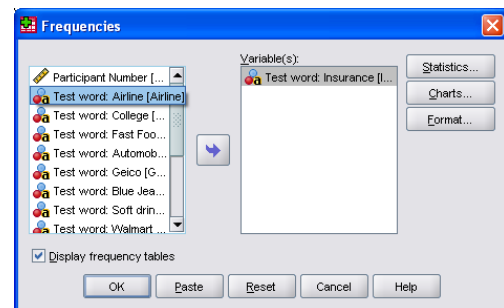
4. Use the "Open an existing file" command to open the "Chapter 04 Dealing with Data.sav" file.



5. RUNNING FREQUENCIES (See above)

From the ANALYZE menu (in the variable view), select DESCRIPTIVE STATISTICS, then FREQUENCIES. The Frequency Dialog box will appear.

6. Click on the variable for which you would like to run a frequency report from the left-hand window. Then click the arrow button that faces right to the variable window. Multiple variables can be selected at the same time. Make certain that the box next to the phrase, "Display Frequency Tables" is checked.



7. A sample output for one of the stimulus words is shown below.

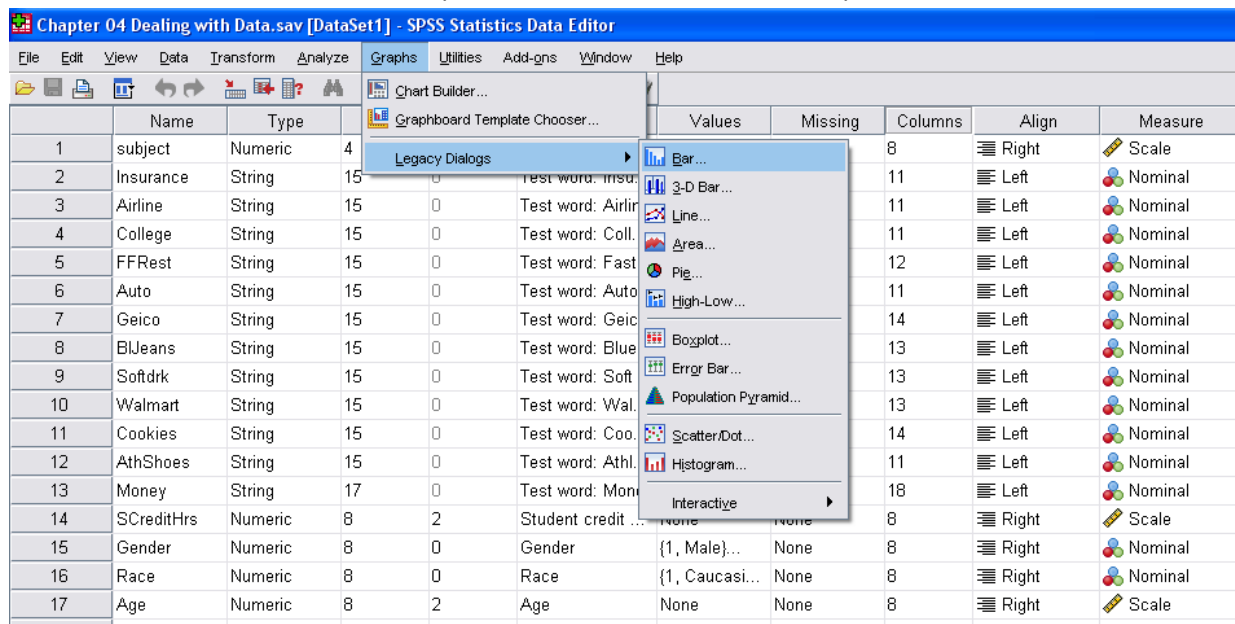
Test word: Insurance

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	4	4.7	4.7	4.7
accident	2	2.4	2.4	7.1
agent	5	5.9	5.9	12.9
Allstate	1	1.2	1.2	14.1
auto	1	1.2	1.2	15.3
awful	1	1.2	1.2	16.5
bill	3	3.5	3.5	20.0
broker	1	1.2	1.2	21.2
car	11	12.9	12.9	34.1
card	1	1.2	1.2	35.3
claim	1	1.2	1.2	36.5
cry	1	1.2	1.2	37.6
debt	1	1.2	1.2	38.8
expensive	3	3.5	3.5	42.4
farm	1	1.2	1.2	43.5
Farm Bureau	1	1.2	1.2	44.7
finance	1	1.2	1.2	45.9
flood	1	1.2	1.2	47.1
fraud	3	3.5	3.5	50.6
health	1	1.2	1.2	51.8
help	1	1.2	1.2	52.9
life	4	4.7	4.7	57.6
Met Life	1	1.2	1.2	58.8
money	8	9.4	9.4	68.2
policy	4	4.7	4.7	72.9
premium	3	3.5	3.5	76.5
red	1	1.2	1.2	77.6
rip-off	1	1.2	1.2	78.8
risk	1	1.2	1.2	80.0
safety	2	2.4	2.4	82.4
sale	2	2.4	2.4	84.7
salesman	4	4.7	4.7	89.4
scam	1	1.2	1.2	90.6
State Farm	8	9.4	9.4	100.0
Total	85	100.0	100.0	

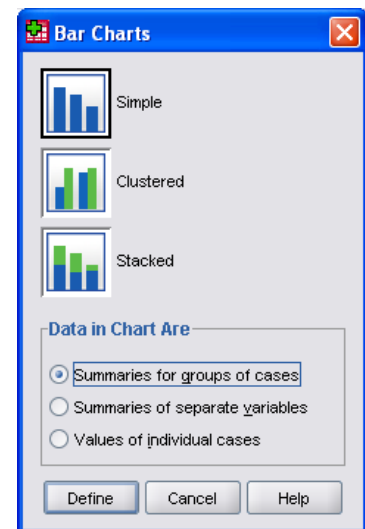
8. Complete questions 1 and 2 of the assignment, as described in the textbook, using the SPSS output from your frequency analysis. Question 3 can be answered by looking under the frequency columns for the mode (or value that occurs most frequently) for each test word. Question 4 asks that you identify the median for analyze variables. Use the cumulative percentage column to identify the median.

9. CREATING BAR CHARTS:

The following tutorial which illustrate how to create and edit a custom bar chart. From the GRAPHS menu, select the LEGACY DIALOGS option, then select the BAR chart option.

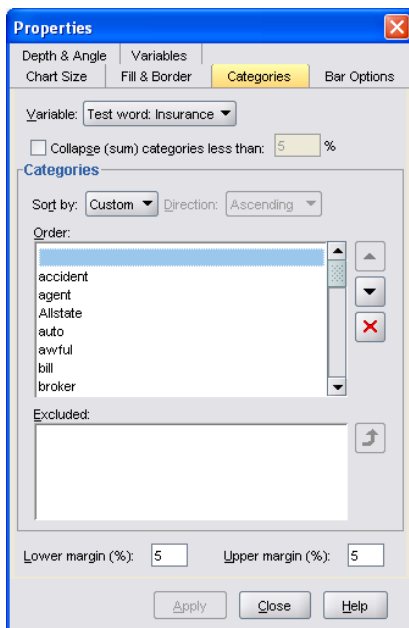


10. The BAR CHARTS dialog box will appear as shown at right. You will be responsible for creating three separate bar charts in response to question #5 of the Dealing with Data assignment. Each of these bar charts will summarize information pertaining to a single variable, though your assignment will differ from the variable that is being used in this example.



11. Make certain that the “Simple” bar chart is highlighted, then click the “Summaries for groups of cases” radio button found under the “Data in Chart Are” heading. Next, click the DEFINE button.
12. The “Define Simple Bar: Summaries of Group Cases” dialog box will appear, as shown on the next page.

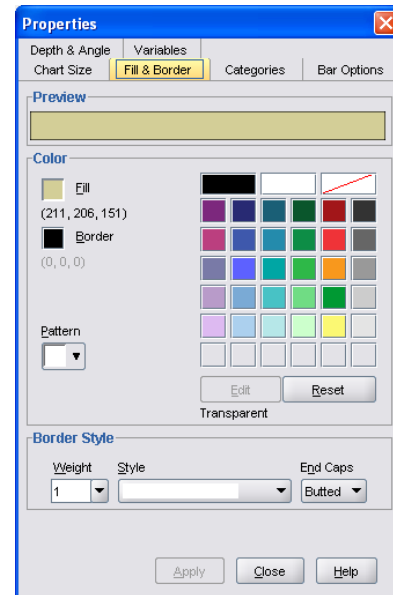
19. The instructions for question #5 in the Dealing with Data assignment instruct you to graph only the top seven responses. You can choose which categories are graphed and which ones aren't by adjusting the CATEGORIES in the PROPERTIES dialogue box.
20. With all of the graph bars selected (outlined in blue) in the CHART EDITOR window, go to the EDIT menu in the Chart Editor dialogue box, and select the PROPERTIES option. You must have all of the graph bars selected or the CATEGORIES tab will not be available.



21. Click on the CATEGORIES TAB.

The following window

will appear. You will use this box, in conjunction with your answers from question #1, to delete categories that you don't want to appear on your graph.

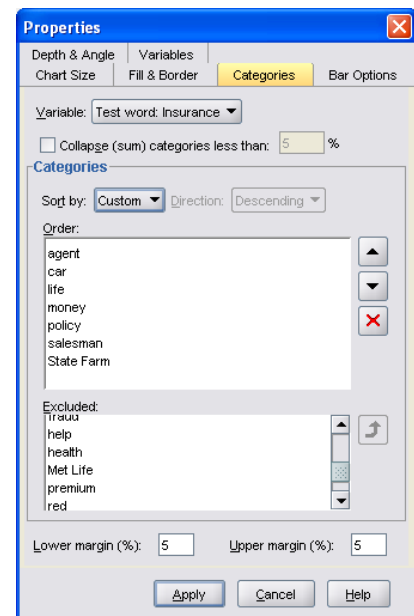


22. The first category to be eliminated is at the very top of the list and highlighted in blue. The empty space means that no response was given. Click once on the top line to select, then click the RED X button to delete this category, as non-answers are NOT part of the "valid responses".

23. Using your answers from question #1, eliminate all

but the top seven responses to your assigned test word. (Again, note that "Insurance" is being used as an example, and was not one of the words assigned to you.)

24. Deleted categories will appear under the "Excluded" window. If you accidentally exclude a category that should remain on the chart, simply highlight it, and click the arrow button that points up.
25. Once your top seven responses remain under the "Order" window, you can use the up and down facing arrows to the right of the "Order" window to arrange the order in which each word appears.
26. Click the APPLY button when finished.



27. Your edited graph will appear with a reduced number of categories.

28. Click again on a bar to select each of the remaining bars.

29. Use the EDIT > PROPERTIES command to return to the properties box. You can use the BAR OPTIONS tab to change the width of the bars, and the FILL & BORDER button to change the color of the bars or border.

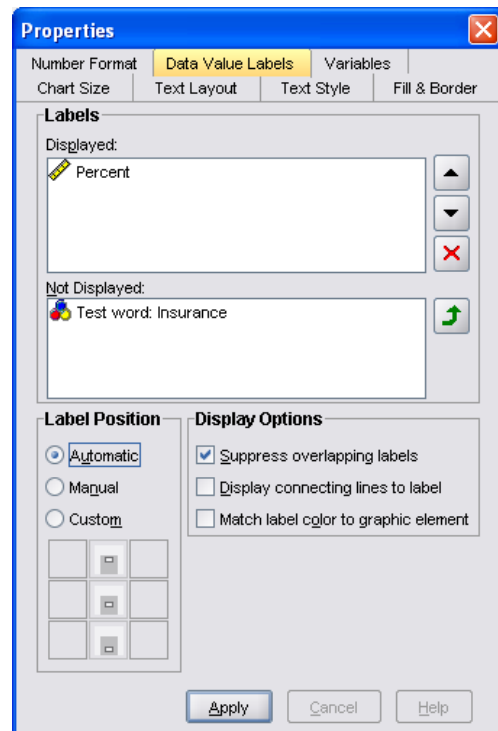
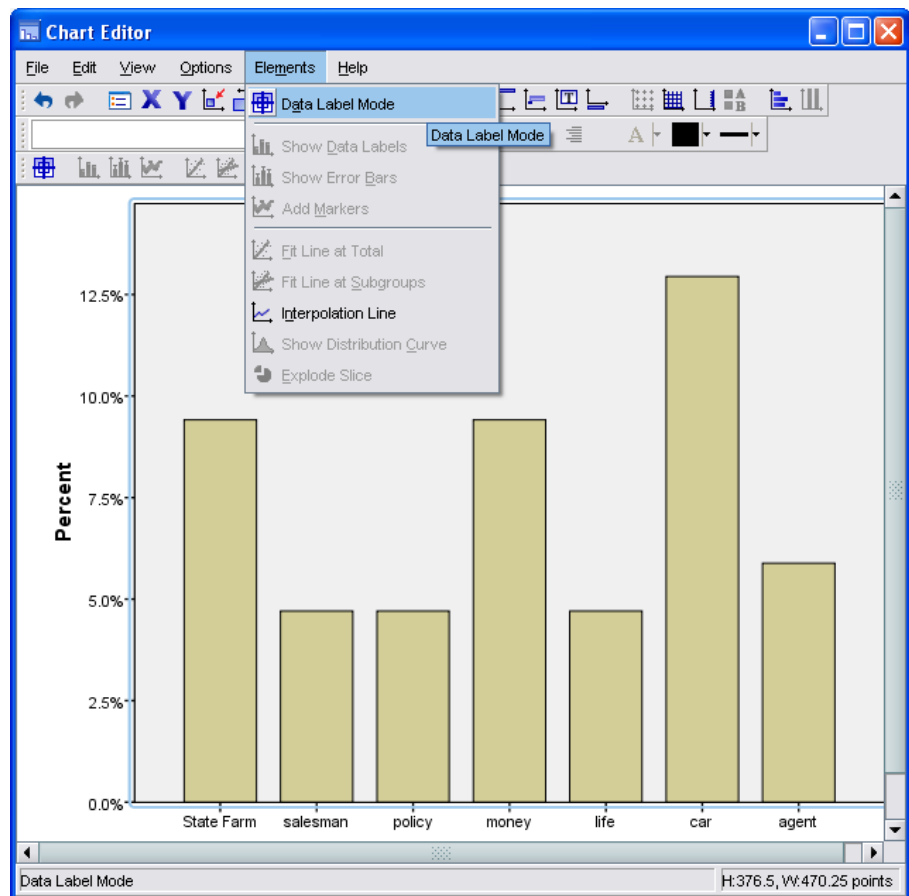
30. The next editing task is to add data labels to each of the bars so that readers don't need to guess what percentage each of the bars represent.

31. From the ELEMENTS menu of the chart editor, click the DATA LABEL MODE option.

32. Your cursor will appear to match the "Data Label Mode" symbol (seen to the left of the words on the drop down menu). Click on each of the bars to add percentages. The chart editor will probably default to "Automatic" mode, and will place the percentages inside of the bars, either centered, or near the top.

33. To edit the placement of the data labels, click ELEMENTS > HIDE DATA VALUES, then ELEMENTS > SHOW DATA VALUES. Doing so should launch the PROPERTIES box and default to the DATA VALUE LABELS TAB.

34. In all likelihood, the label position has defaulted to AUTOMATIC. Changing the label position to CUSTOM



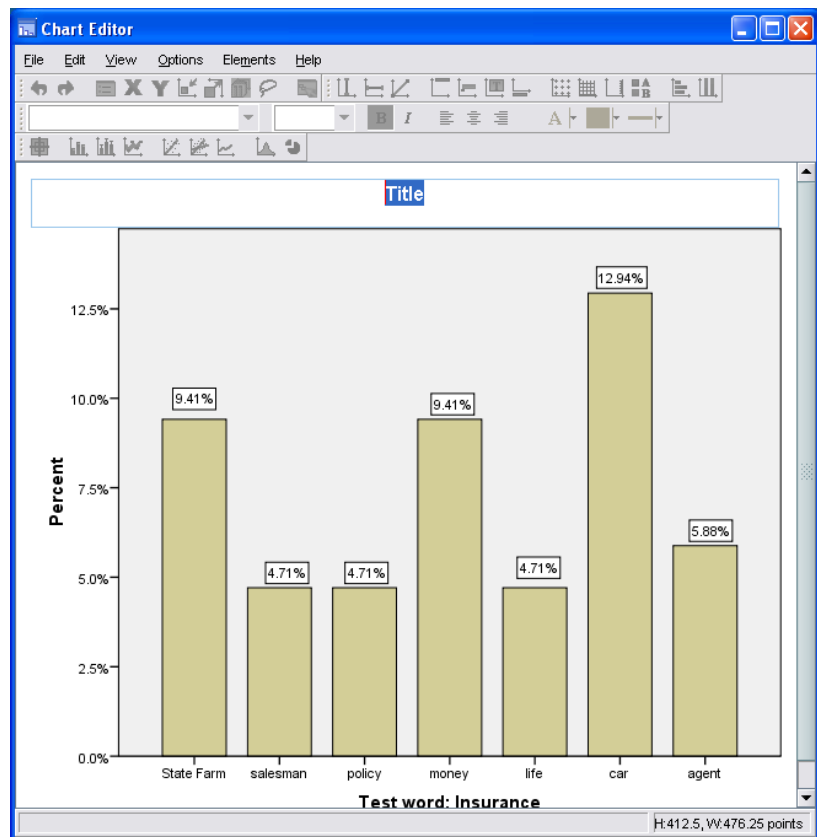
allows you to move the labels inside of each bar to either the upper, middle, or lower positions by clicking on the appropriate box. Clicking the MANUAL radio button in the “Label Position” section will allow you to position the data labels wherever you want – inside or outside of the bars. Click MANUAL now.

35. Notice that the DISPLAY OPTIONS setting defaults to “Suppress Overlapping Labels”. This can be a problem when labels are long, as it means that some bars won’t have any labels. Unselect this option. It is your choice whether or not you wish to activate either of the other two display options.

36. When you are finished, click APPLY. Then close the PROPERTIES dialog box.

37. To move a data label, left click on the label in the chart editor window and drag it above the bar. You may notice that a line appears between the label and its previous position. Reposition all of the data labels, then use the EDIT > PROPERTIES > DATA LABELS command, and unclick the “Display connecting lines to label” box, then click apply. Note that if you reposition any of the data labels, these lines will reappear and you will be forced to repeat this process if you don’t want them to show up on your graph.

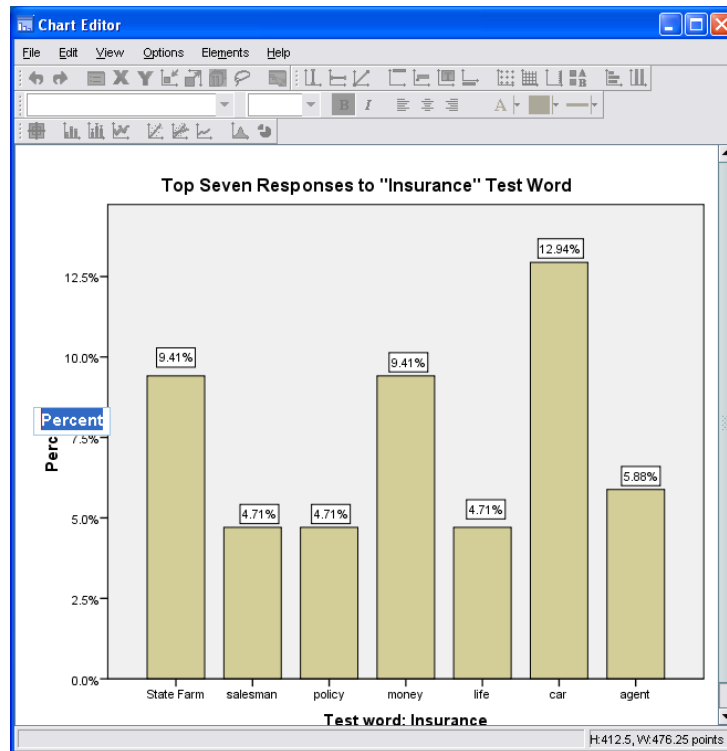
38. Next, in the Chart Editor window, use the OPTIONS > TITLE command to insert a title above the graph. The PROPERTIES box will option, but you can close it for now. Click once next to the word title – a blue bounding box should appear. Now place your cursor between two of the letters, then highlight the word. You are now ready to type in a new title by simply typing. The example chart title will be labeled, “Top Seven Responses to “Insurance” Test Word”. Alternately, the title might read, “Top Word Association Responses to “Insurance” Test Word”.



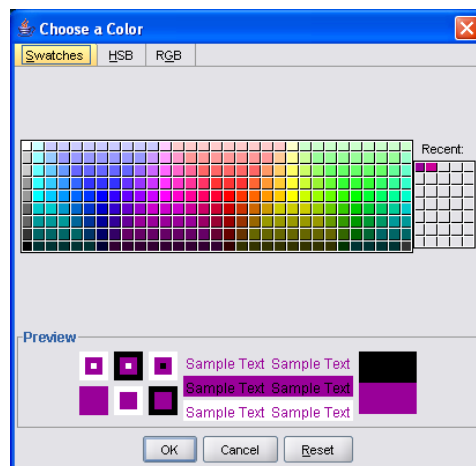
39. The final element to be edited is the vertical axis descriptor, “Percent”. It is important to define for the reader the nature of the percentage being shown. As this happens to be the valid percentage, the

proper descriptor would be “Percent of Question Respondents” rather than “Percent of Sample”. To edit this label, follow the process previous described for editing the title. You will notice that the label is ready to edit when it appears horizontal inside of a light blue outline box.

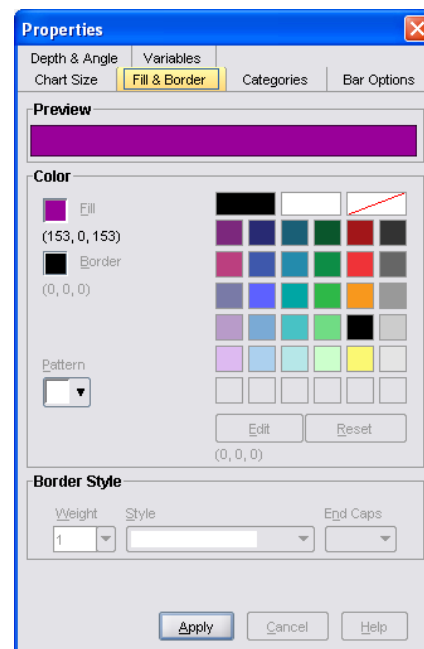
40. To change the color of the text or the bars, double-click the element that you would like to alter. This should open the “Fill & Border” tab within the PROPERTIES box. Double-click one of the colors – this will launch the “Choose a Color” dialogue box.



41. The chosen color will now appear in the PREVIEW window for fill (click the border box if you want to change this color instead).



42. Once you have selected the color you desire, click the apply button and close the PROPERTIES window.

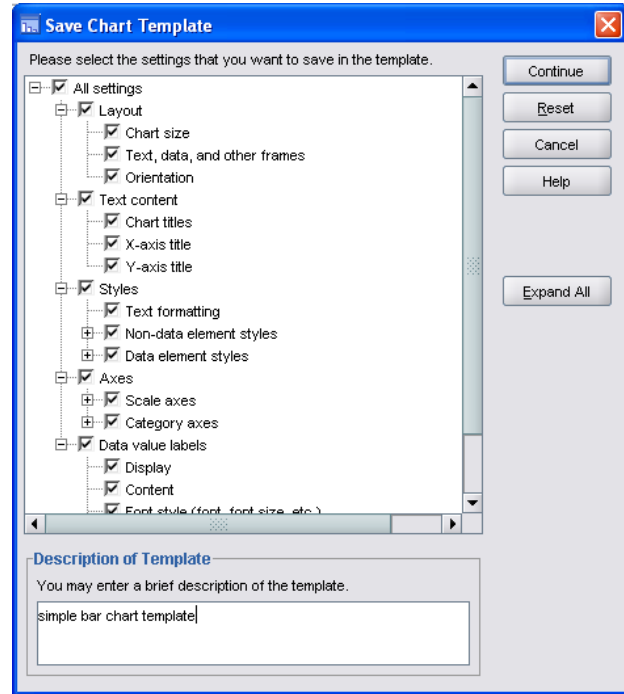


43. Finally, you can also edit the labels under each bar.

Insert your cursor between the first and second letter, and capitalize each word. The size, font, and style of the font can be controlled via the Properties window. The example shown on the next page uses large type for both the bar descriptions and percentages. Bar percentages are also shown in bold.

44. CREATING CHART TEMPLATES

Once you have your first bar graph created the way you would like, you can save a lot of time by creating a chart template. Before closing the CHART EDITOR, use the FILE > SAVE CHART TEMPLATE command. The SAVE CHART TEMPLATE window shown at right will appear.



45. Select any of the settings that you would like to save as part of your template. It would be a good idea to add a brief description of the template as well. Click CONTINUE.

46. The SAVE TEMPLATE window will appear.

Name the file "Bar Chart" then click the SAVE button. Close the CHART EDITOR when

finished. The OUTPUT window will now show your final graph (see below). The graph can be copied and pasted to WORD from the SPSS OUTPUT window right-clicking on the graph, selecting the COPY option, opening a WORD document, and pasting the graph.

