

Creating a Clustered Bar Chart in SPSS

Some of my colleagues out at the medical school gathered survey data from practitioners who employ [electroconvulsive therapy](#) (ECT) in their practice. Among other things, they wanted to compare practices that had a psychiatry residency program with those who did not. One of the comparison variables was the dosing schedule employed. You can see the four schedules below. The percentages show that the two types of programs differed little, $\chi^2(3, N = 87) = .304, p = .96$.

Q7_Dosing_Schedule * Q16_Psychiatry_Residency_Program Crosstabulation

			Q16_Psychiatry_Residency_Program		Total
			Yes	No	
Q7_Dosing_Schedule	Stimulus titration	Count	48	20	68
		% within Q16	78.7%	76.9%	78.2%
	Age-based	Count	8	3	11
		% within Q16	13.1%	11.5%	12.6%
	Fixed dose (formula-based)	Count	2	1	3
		% within Q16	3.3%	3.8%	3.4%
	Trial and error	Count	3	2	5
		% within Q16	4.9%	7.7%	5.7%
	Total	Count	61	26	87
		% within Q16	100.0%	100.0%	100.0%

Practitioners are not, in my experience, very impressed with the sorts of statistics that excite academic psychologists. They would rather see a chart, so I prepared a clustered bar chart for them. Here is a brief tutorial on how to do so.

With the data in SPSS, click Graphs, Chart Builder. See a screen-shot of the Chart Builder window on [Page 2](#). From the Gallery, select the basic type of chart you desire – in this case, Bar. Select the type of bar chart you desire – in this case, Clustered Bar. In the upper right pane an example of this type of chart will appear. In that pane there are three rectangles with dotted borders. You need set values for each of these. Into the one by the abscissa, drag, from the pane to the left, the variable whose values are to be plotted on the abscissa. Into the rectangle in the upper right corner drag the grouping variable for the groups you wish to compare.

By default, the rectangle along the ordinate will have “Count” in it. You may, however, want to change that. What I wanted on the ordinate was percentages, with the percentages computed within groups. To get that, I used the Element Properties window (see the screen-shot on [Page 3](#)). I selected Bar1, Statistic = Percentages, Parameter (Denominator for Computing Percentage) = “Total for each Legend Variable Category.”

Chart Builder

Chart Builder

Variables: *Chart preview uses example data*

Cluster on X: set color

Q16_Psychiatry_Residency_Program

Percentage

Stimulus titration Age-based [More...]

Q7_Dosing_Schedule

Category 1

Category 2

Gallery Basic Elements Groups/Point ID Titles/Footnotes

Choose from:

Favorites

Bar

Line

Area

Pie/Polar

Scatter/Dot

Histogram

High-Low

Boxplot

Dual Axes

Element Properties...

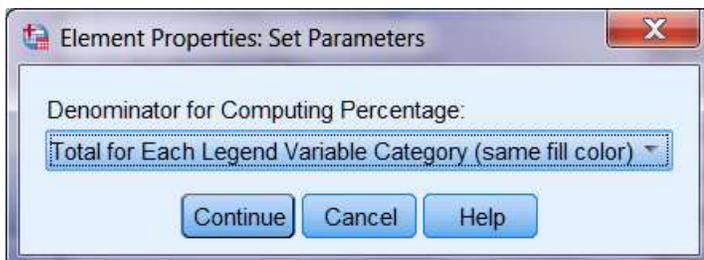
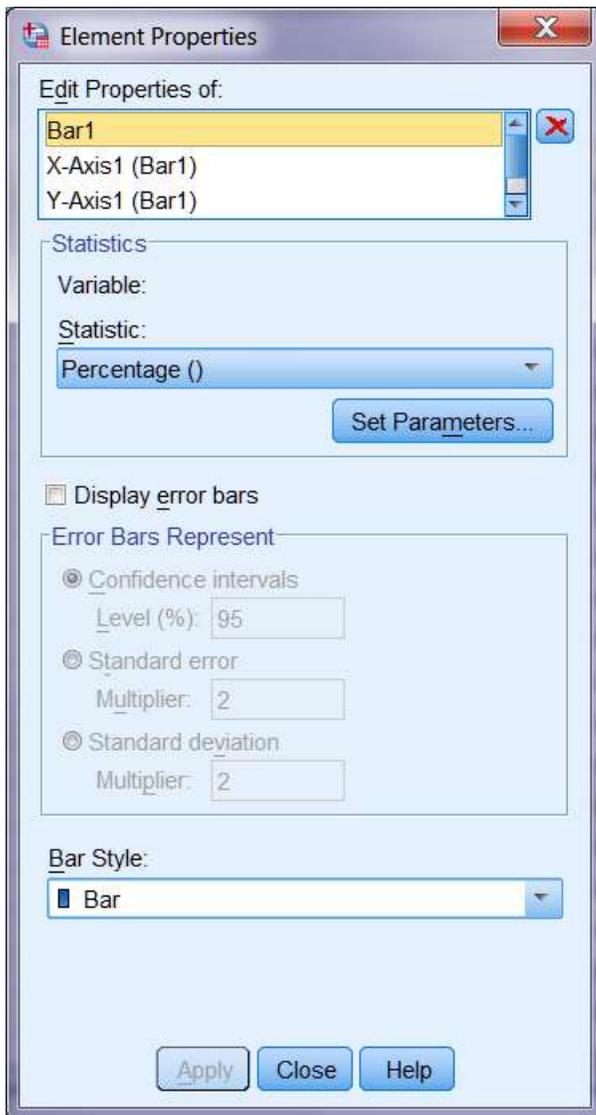
Options...

OK Paste Reset Cancel Help

Category	Stimulus titration	Age-based	[More...]
Q7_Dosing_Schedule (Blue)	~25%	~15%	~35%
Q16_Psychiatry_Residency_Program (Green)	~65%	~35%	~25%

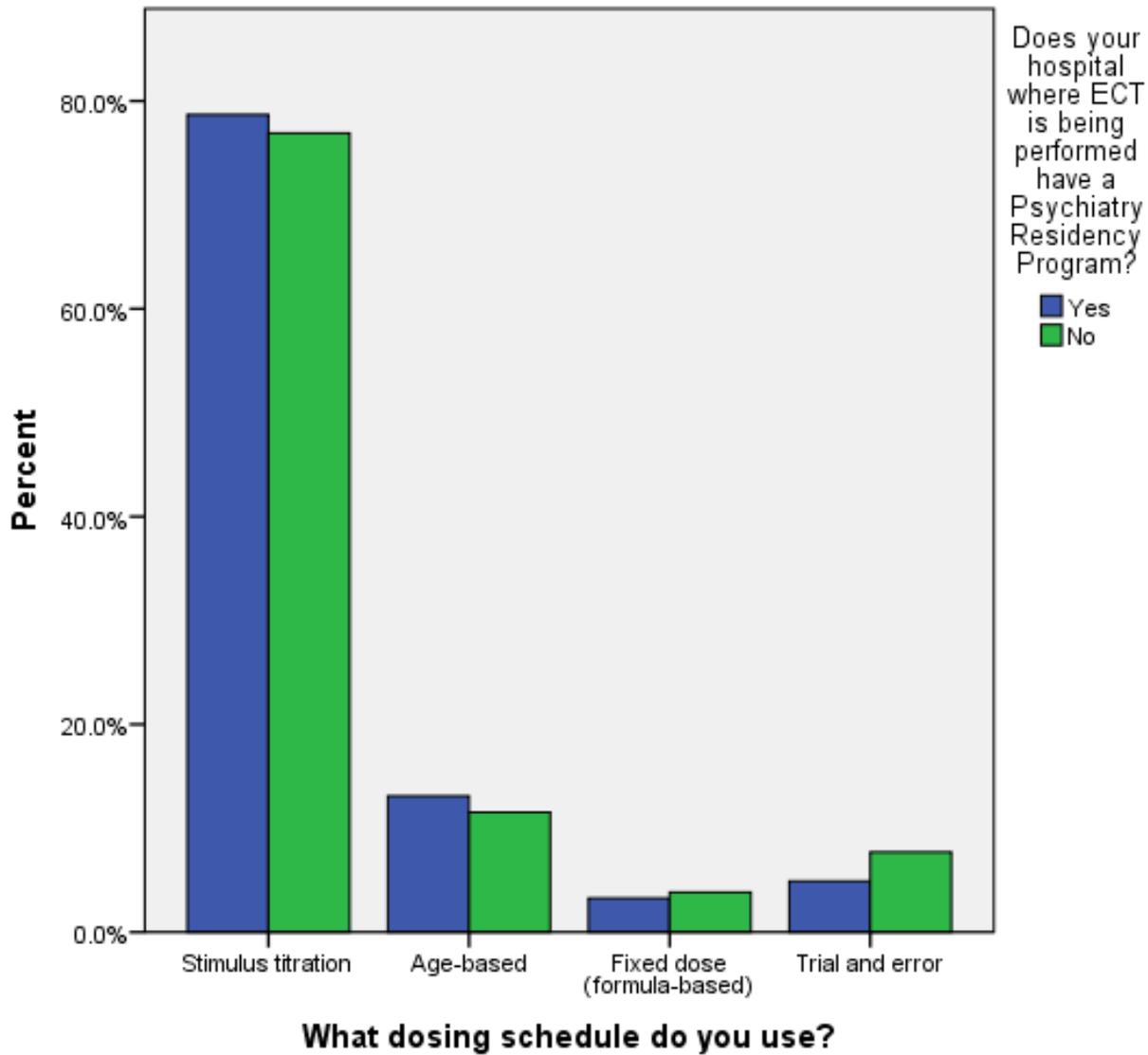
[Go Back](#)

Element Properties



[Go Back](#)

Resulting Plot



[YouTube Tutorial on This Topic](#)

[Karl L. Wuensch](#), May, 2015.