Data Handling Assignment #3: Partialling

Due: Tues., Feb. 19
Worth: 10 pts. (5% of your course grade)

Please type, double-spaced, your write-up, and hand in everything in hard copy. As always, attach your SPSS output WITH syntax showing.

1. From the Group Humor data set, select three variables appropriate to correlational analyses—one DV and two IVs. Examine the simple (zero-order) correlations between X1 and Y, and between X2 and Y. Also run scatterplots for the two relationships. (You’ll need Analyze–> Correlate–> Bivariate for the simple correlations and Graphs–> Scatter–> Simple for the scatterplots.) Comment on what you find.

NOTE on how to adjust your scatterplots in two ways required for this assignment:

1. To use “bins” to indicate how many cases occur at a particular point, and
2. To show the regression line of best fit,
do the following to each scatterplot graph in your output: Double click on graph to bring up the Chart Editor view. Double click on any of the points in Chart Editor. Select the Point Bins tab in the Properties window and then click (in order) Bins, Marker Size, Apply, and Close. Back in the Chart Editor, click Chart --> Add Chart Element --> Fit Line at Total. Then click Close in the Properties window and return to the Output view by clicking the “X” in the upper right corner of the Chart Editor.

2. Use partial correlation analysis to examine the (first-order) partial between X1 and Y controlling for X2, and between X2 and Y controlling for X1. (You’ll need Analyze–> Correlate–> Partial.) Discuss what you find with regard to partial redundancy, full redundancy, and suppression. What does this mean in terms of the variables you’ve chosen? That is, what have you found? Give some interpretation as well.