This assignment asks you to create a scale from three or more variables measured in the National Community Study (Jeffres). These variables should either be interval/ratio level measures, or be measures that have been converted to “dummy” (0/1) binomials with Recodes (into new variables, don’t forget!). Remember that the scale should measure a single construct.

In a brief write-up, accompanied by your SPSS output, do the following:

1. Explain your scale construction decision according to the Scale Construction handout. Explain any Recodes you have used. If you do not standardize, you must explain why.

2. Comment on the distributions of each of the three or more individual measures you selected. Use Analyze --> Descriptive Statistics --> Frequencies to look at the univariate statistics we’ve discussed. Use Analyze--> Descriptive Statistics --> Explore (with Plots–click “Histogram” and “Normality plots with tests”) to look at deviations from normality. You can also try Graphs --> Histogram and click “Display normal curve”. In either case, the axis labeling might be a bit funky; if so, see the “tips” handout “Editing Axis Labels for Histograms.”

You do not need to transform variables on these bases, but rather comment in your write-up. (Chapter 2 of your textbook may be helpful here.)

3. Comment on the distribution of the scale you have created. Use Analyze --> Descriptive Statistics --> Frequencies to look at the univariate statistics we’ve discussed. Use Analyze--> Descriptive Statistics --> Explore (with Plots–click “Histogram” and “Normality plots with tests”) to look at deviations from normality. Check the Kolmogorov-Smirnov statistic in the output, which tests deviation from normality.

4. Run a Cronbach’s alpha coefficient on the scale items. Do this through Analyze --> Scale --> Reliability Analysis (click Statistics --> Correlations; you may also click “scale if item deleted” just for fun). Don’t forget to flip the coding on “negative” items (into new variables!). Comment on the meaning of your alpha. (NOTE: “Standardized item alpha” indicates an alpha with all items standardized–this is actually our handout formula for alpha.)

NOTE: Don’t forget that on your SPSS output, I expect to see the syntax! Remember, to set up your SPSS session to automatically write syntax to the output, do the following: Edit --> Options --> Draft Viewer --> Display commands in log.