

**Assignment 2**  
**Due December 19, 2007**

For this assignment, you will utilize a subset from General Social Survey 2004 database. At <http://www.sarkisian.net/sc705/datasets.html>, you will find a zipped folder with SPSS and Stata files. These files contain 19 variables describing 807 individuals (all cases with missing data were deleted).

- 1) Design a theoretical model using these variables. This model should contain at least five latent variables, some of them with multiple indicators and some with single indicators. Include at least 2 latent variables with multiple indicators, with at least 3 indicators per latent variable. You can examine correlations among variables to get an idea about the relationships among variables. Further, specify the paths among these latent variables, theorizing both direct and indirect effects. Don't specify all possible paths, however – make sure your structural model will be overidentified!
- 2) Import your data into LISREL (i.e., create a .PSF file). If you are using a student version of LISREL, note that you can import SPSS files, not Stata. Then use PRELIS to define variable types (continuous or ordinal) and obtain a covariance matrix (for simplicity, use a regular covariance matrix for this assignment). Note that if you are using a student version of LISREL, you should only include 15 variables or fewer in your covariance matrix, so select only the variables you are planning to use. Start a running log that will contain all your syntax and output as well as your brief comments.
- 3) Define and estimate (a) your measurement model and (b) your combined model in LISREL using the covariance matrix you generated. For each step, assess parameter estimates, standard errors, significance tests for parameters, as well as the overall model fit. Attempt to improve the model by relying on residuals and modification indices, but keep in mind that your changes should be theoretically meaningful. Include brief comments illustrating your thinking in this process.
- 4) In the end of your log, include a brief discussion of your final model with the path diagram. Interpret your findings, discuss direct, indirect, and total effects, and discuss how the final model differs from the original theoretical model. Also, address model fit and its limitations, if any. Note that there is no page limit for the log you submit for this assignment but please edit it to contain only the relevant syntax, output and graphs.