Psychology 8032
Assignment 7 – March 18 by 5PM

1. Begin writing your analytic plan for your papers.
    a. At this time, begin your script by including:
        i. The specific research question being tested by a specific model
        ii. The syntax to estimate that model
        iii. Beyond model overall fit, how will you evaluate the utility of the model?
            1. Use the '#' to insert comments into the script.
    b. This process should be provided for each of the building block models that are needed for your full model.

Using the previous assignment as an example. Though, this is a broad description. Being as specific as possible will help you later:

My project examines potential measurement differences in "sports" and well-being between men and women. The work also examines whether the association between "sport" and well-being differs between men and women.

Models will be estimated with increasing levels of invariance for each latent factor, separately. I will examine overall fit of each latent factor in each group separately. This examines whether the general measurement model is at least an adequate fit to the data in each group. [syntax for each group's model]. Models will be evaluated based on overall model fit and whether indicators significantly load on their factor.

After fitting the models to the data in their individual groups, I will test configural, metric, and scalar invariance between the groups. [Describe goals of each level of invariance] [syntax for each factor]. Beyond absolute fit, I will examine change in fit from the configural to metric and from metric to evaluate whether models worsen in fit across models.

After establishing the optimal fit of each individual factor model, I will estimate a model that includes well-being regressed on "sports." In one model, I will estimate the null such that the relationship between "sports" and well-being is equal for males and females. [Relevant syntax] In a comparison model, I will permit that path to differ. I will use a chi-square difference test to evaluate whether those models significantly differ.