EPsy 8266 Spring 2019 Final Assignment

**Updated: 23 February 2019** 

## Develop and analyze a structural equation model

This assignment is intended to integrate all the work of the course. You will need to develop, run, and evaluate your own model. The assignment should be kept concise, with the first six characteristics (1-6 below) comprising about 3 pages. Tables can be used to explain how the variables are operationalized.

## Characteristics of the models:

- 1. Include 5 latent variables and approximately 3 indicators per latent variable. The use of 5 7 latent variables is a suggestion, but use more if your model has more variables in it. Your model could also include a combination of observed variables.
- 2. Describe each conceptual variable in your model, how it has been operationalized by previous research, and how you are operationalizing it.
- 3. Explain why the relations among the conceptual variables are of interest to researchers and what already is known and not known.
- 4. Draw a structural equation model/path diagram for your model using RAM notation and justify the paths among the latent variables (including the relations among exogenous variables).
- 5. As needed, expand on what you wrote in response to #2 in defining your measurement model. Explain any residual covariances among indicators.
- 6. If at all possible, describe/justify and provide diagrams for at least two alternative models—but you only need to set up matrices and R code for your model of interest.

## Running/evaluating the model:

- 7. Write the equations for your model using LISREL notation.
- 8. Set up the lavaan syntax for your model.
- 9. Run the model in lavaan, evaluate the model's overall fit, and interpret your model findings.

Please note, that the fit of your model has no bearing on your grade on this assignment!