

PSYC 5322: Psychometrics

Tarleton State University

Homework 10

Spring 2020

For this exercise, you'll need the `hw8data.csv` file from the last two homework assignments.

1. Draw a path model based on the factor structure you confirmed in the last homework. You should have 3 factors and no cross-loadings. Be sure to write down the estimates for (1) the factor loadings, (2) the factor covariances, and (3) the residual variances.
2. Using the SEM module in JASP, compute modification indices and list the top 5 modifications (along with their MI values) that could be performed.
3. Choose ONE modification and build a new model (Model 2) incorporating that modification. Draw a path model for Model 2, and write down the BIC values for both models (Model 1 and Model 2)?
4. Does Model 2 fit better than Model 1? If so, by how much? Compute and interpret a Bayes factor to express this relative model fit.