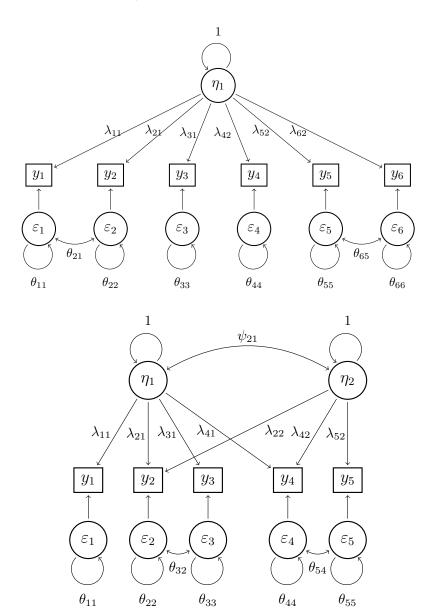
- 1. Consider the following two path models. For each, answer the following questions:
  - (a) How many observations does this model account for?
  - (b) How many parameters are in the model?
  - (c) How many degrees of freedom does this model have?
  - (d) Is the model identified? Why/why not?



 $\theta_{33}$ 

 $\theta_{44}$ 

## **PSYC 4301: Psychological Tests and Measurements**

Tarleton State University

Homework 8

- 2. For this exercise, you'll use the hw7data.csv file from the last homework assignment.
  - (a) Draw a path model based on the factor structure you extracted in the last homework. You should have 3 factors and no cross-loadings.
  - (b) Perform a confirmatory factor analysis for this model in JASP. Write down your estimates for (1) the factor loadings, (2) the factor covariances, and (3) the residual variances.
  - (c) Report and interpret two measures of model fit to assess how well your model explains the observed data: (1) the  $\chi^2$  test, and (2) the RMSEA.