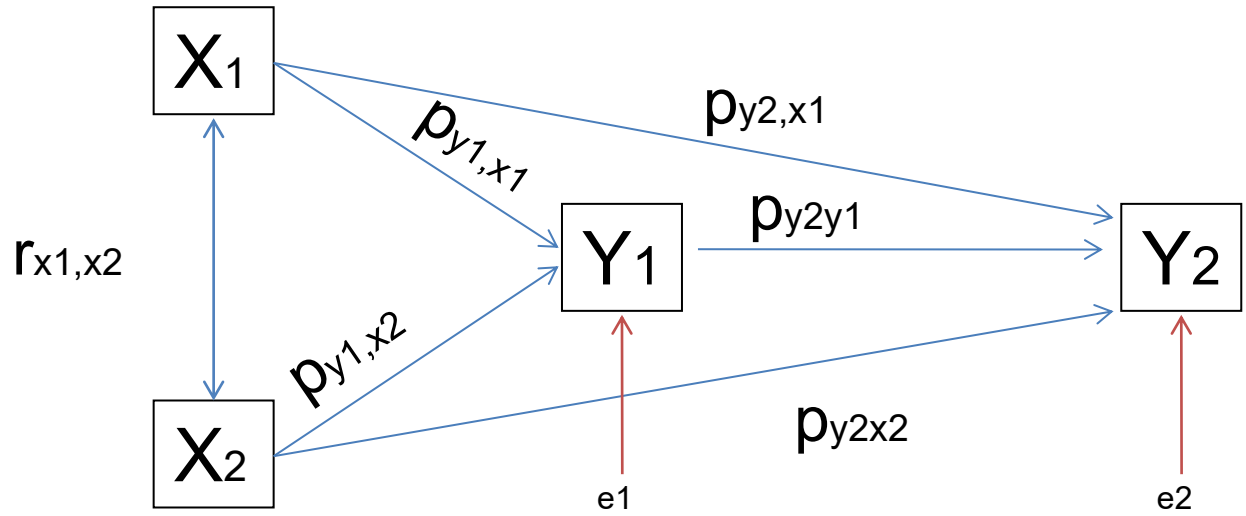
Homework2

This homework is focused on the path model used for introducing into path analysis (see below):



where X_1 represents memory, X_2 creativity, Y_1 thinking and Y_2 problem solving ability.

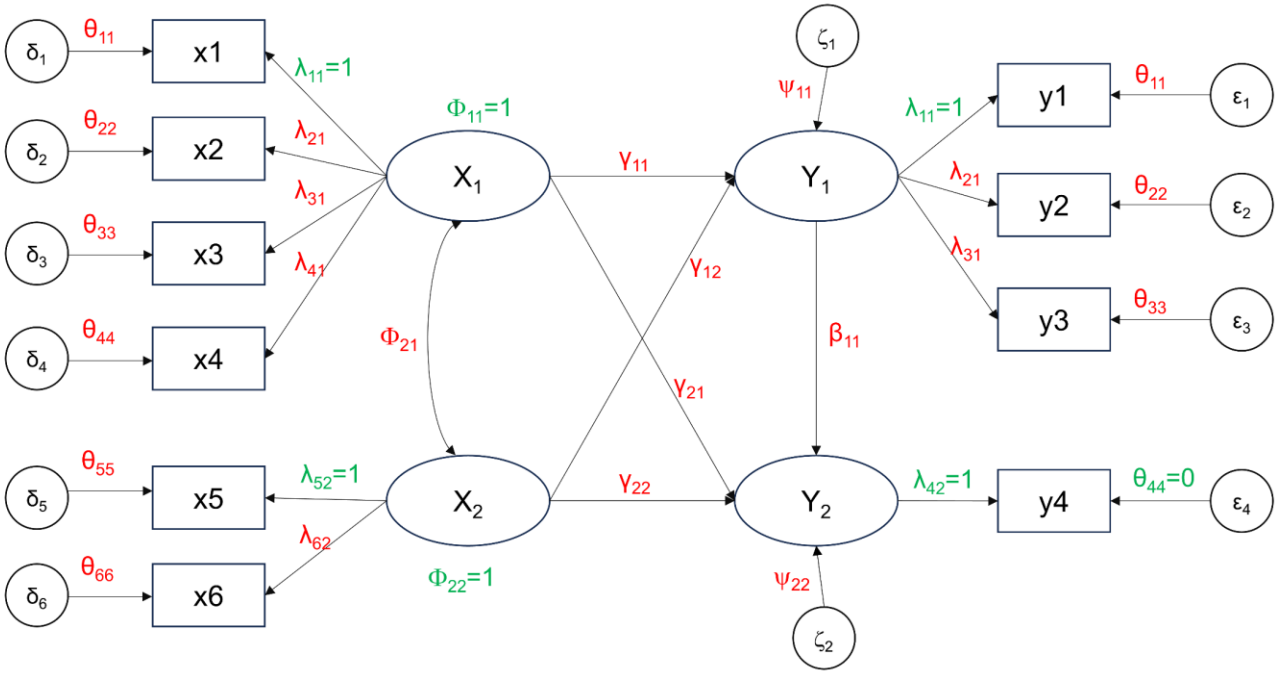
This model can also be investigated as a structural equation model. In order to do so, it needs to be turned into such a SEM model. The following tasks serve this purpose:

1. Transform the path-analysis diagram into a structural equation diagram (consider the X and Y variables as latent variables and add several manifest variables to each latent variable).

2. Add the parameters that have to be estimated to your diagram.

3. Compute the degrees of freedom for the whole model.

See below



S = n(n+1)/2 = 55, numOfFix = 7, t = 23

Degree = s – t = 32, the model is identified