CFA & SEM: Lab Exercise 2

Holzinger and Swineford (1939) collected data on 6 psychological tests administered to 73 female students from the Grant-White high school in Chicago. There are 3 tests that represent verbal intelligence and 3 tests that represent spatial intelligence. It is assumed that the 2 intelligence factors are correlated.

1. Reproduce their factor analysis model depicted below. Be sure to set the scale of your latent variable in order to achieve model identification.
2. Examine overall fit indices to evaluate the plausibility of the model.
3. Are all the parameter estimates significant and predictors contributing importantly to the latent constructs? Are the latent constructs correlated significantly?