

*Longitudinal Structural Equation Modeling* by Todd D. Little  
Chapter 6 Reading Questions

1. This stage of invariance testing has the measurement model fit across multiple groups, but no equality constraints are applied.
  - A. **Configural**
  - B. Weak
  - C. Strong
  - D. Strict
  
2. This stage of invariance testing applies equality constraints to the item loadings across all groups.
  - A. Configural
  - B. **Weak**
  - C. Strong
  - D. Strict
  
3. This stage of invariance testing applies equality constraints to the item intercepts across all groups.
  - A. Configural
  - B. Weak
  - C. **Strong**
  - D. Strict
  
4. Which of these is a recommended way of evaluating weak and strong invariance?
  - A. A significant  $\chi^2$  difference test.
  - B. A non-significant  $\chi^2$  difference test.
  - C. A change in RMSEA of less than .05.
  - D. **A change in CFI of less than .01.**
  
5. When comparing a model with latent means constrained to be equal with the unconstrained Strong model, what does a significant  $\chi^2$  difference test result indicate?
  - A. The measured means are significantly higher than the latent means.
  - B. The latent means are significantly higher than the measured means.
  - C. None of the latent means are significantly different between groups.
  - D. **At least one latent mean is significantly different between groups.**
  
6. What should be done if invariance fails?
  - A. Remove the item that is causing an issue.
  - B. Continue on to latent parameter testing.
  - C. **Relax constraint on the item causing an issue to establish partial invariance.**
  - D. Re-evaluate theoretical model.
  
7. What level of invariance is **REQUIRED** to evaluate differences in latent variances and covariances?
  - A. Configural
  - B. **Weak**
  - C. Strong

- D. Strict
8. What level of invariance is **REQUIRED** to evaluate differences in latent means?
- A. Configural
  - B. Weak
  - C. Strong**
  - D. Strict
9. Which of these is true about Effect Sizes?
- A. Manifest-variable effect sizes are always larger than latent-variable effect sizes.
  - B. Latent-variable effect sizes are always larger than manifest-variable effect sizes.**
  - C. Both latent-variable and manifest-variable effect sizes should be the same.
  - D. It's impossible to know before-hand which effect size will be larger.
10. When should a parameter listed in the modification index be included in the model?
- A. When the modification index is small.
  - B. When the modification index is large.
  - C. When it makes theoretical sense.**
  - D. When it would improve model fit.