Longitudinal Structural Equation Modeling by Todd D. Little
Chapter 10 Reading Questions

1. Which of these statements best describes the process of mediation?
   A. A variable predicting another variable over time.
   B. A variable exerting causal influence on another variable through another variable.
   C. A variable predicting itself over time.
   D. A variable predicts the magnitude of an association between one variable and another.

2. Which of these statements best describes the process of moderation?
   A. A variable predicting another variable over time.
   B. A variable exerting causal influence on another variable through another variable.
   C. A variable predicting itself over time.
   D. A variable predicts the magnitude of an association between one variable and another.

3. What is required to support a hypothesis of mediation?
   A. At least the *a* or *b* path is significant.
   B. Both the *a* and *b* path are significant.
   C. The product of *a* and *b* is significant.
   D. The *c'* path is no longer significant.

4. What term describes the assumption that all predictive paths from occasion to occasion are at the same magnitude between each of the measurement occasions?
   A. Invariance
   B. Heterogeneity
   C. Tau equivalence
   D. Stationarity

5. What is the recommended method for evaluating the significance of an indirect effect?
   A. Evaluating if both the *a* and *b* paths are significant.
   B. Evaluating the significance of the *ab* product through Monte Carlo simulation.
   C. Evaluating the significance of the *ab* product through bootstrap estimation.
   D. Both c and d.
   E. None of the above.

6. What is needed to demonstrate moderation?
   A. A significant interaction term.
   B. An interaction term stronger than a direct effect.
   C. At least 3 waves of data measuring the interaction.
   D. All of the above.

7. What term describes the effects of multiple predictors of an outcome?
   A. Moderation
   B. Mediation
   C. Indirect effects
   D. Additive effects

8. How can the collinearity of an interaction term be addressed?
   A. Mean centering.
   B. Orthogonalizing.
   C. Modeling the collinearity.
   D. All of the above.

9. When evaluating moderation relationships, how does one determine which variable is the moderating variable?
   A. Theoretical considerations.
   B. Strength of the associations.
   C. Included in the model statement.
   D. The order of variables in product term

10. How should model fit be assessed when evaluating moderation?
   A. A nested χ^2 difference test.
   B. Overall goodness of model fit.
   C. Fitness should be evaluated before adding interaction term.
   D. All of the above.