

Chapter 20 (Mediation and Moderation)

Test Bank

Multiple choice

1. A researcher is examining the relationship between science and mathematics performance. The researcher believes that there may be an indirect effect of science on mathematics through literacy. Which of the following types of models would you recommend the researcher examine?
 - a. Mediation
 - b. Moderation
 - c. Neither
 - d. Both

ANSWER: A

2. A researcher is examining the relationship between weight and blood pressure. The researcher believes that there may be an indirect effect of weight and blood pressure through stress. Which of the following types of models would you recommend the researcher examine?
 - a. Mediation
 - b. Moderation
 - c. Neither
 - d. Both

ANSWER: A

3. A researcher is examining the relationship between science and mathematics performance. The researcher believes that science may interact with literacy. Which of the following types of models would you recommend the researcher examine?
 - a. Mediation
 - b. Moderation
 - c. Neither
 - d. Both

ANSWER: B

4. A researcher is examining the relationship between time on task and academic performance. The researcher believes that time on task may interact with age. Which of the following types of models would you recommend the researcher examine?
 - a. Mediation
 - b. Moderation
 - c. Neither
 - d. Both

ANSWER: B

5. A researcher has conducted a moderated multiple regression analysis and finds r^2 of .03. Based on Cohen's guidelines, what is the interpretation of the effect?
- Small
 - Moderate
 - Large
 - None of the above

ANSWER: A

6. A researcher has conducted a moderated multiple regression analysis and finds r^2 of .16. Based on Cohen's guidelines, what is the interpretation of the effect?
- Small
 - Moderate
 - Large
 - None of the above

ANSWER: B

7. Which of the following is NOT an assumption for moderated multiple regression?
- Expected frequencies
 - Homoscedasticity
 - Linearity
 - Normality

ANSWER: A

8. What is one of the challenges with the Johnson-Neyman approach for probing an interaction?
- Interactions cannot be proved with this approach.
 - Regions of significance cannot be determined with this approach.
 - This approach can be used only with continuous moderating variables.
 - Violations of homogeneity of regression cannot be handled with this approach.

ANSWER: C

9. In a mediation model, a positive sign for the direct effect indicates which of the following?
- One unit higher on X is estimated to be higher on Y .
 - One unit higher on X is estimated to be lower on Y .
 - One unit higher on X is estimated to be the same as Y .
 - Impossible to determine with this information.

ANSWER: A

10. In a mediation model, a negative sign for the direct effect indicates which of the following?

- a. One unit higher on X is estimated to be higher on Y .
- b. One unit higher on X is estimated to be lower on Y .
- c. One unit higher on X is estimated to be the same as Y .
- d. Impossible to determine with this information.

ANSWER: B

11. Which of the following represents an indirect effect in a simple mediation model?

- a. The dependent variable influences the mediating variable, which then influences the independent variable.
- b. The independent variable influences the mediating variable, which then influences the dependent variable.
- c. The independent variable influences the dependent variable, which then influences the mediating variable.
- d. The mediating variable simultaneously influences the independent and dependent variable.

ANSWER: B

12. Which of the following is an interpretation of the direct effect of the independent variable on the dependent variable?

- a. How much two cases that differ by one unit on the dependent variable will differ on the independent variable.
- b. How much two cases that differ by one unit on the independent variable will differ on the mediator.
- c. How much two cases that differ by one unit on the independent variable will differ on the dependent variable.
- d. Two cases that differ by one unit on the mediator but are equal on the independent variable will differ by b units on the dependent variable.

ANSWER: B

13. True or false? In a moderation model where X is the independent variable and W is the moderating variable, the inclusion of the interaction term (XW) is testing the effect of X on the dependent variable is conditional on W .

- a. True
- b. False

ANSWER: A

14. Which one of the following is not a way to examine an interaction?

- a. Graphical methods
- b. Johnson-Neyman technique
- c. Pick-a-point approach
- d. All of the above
- e. None of the above

ANSWER: D

15. Which of the following will be evident in a full mediation model?

- a. The relationship between the independent and dependent variable will completely disappear
- b. The relationship between the independent and dependent variable becomes stronger

ANSWER: A

16. Which of the following may impact power in moderated multiple regression?

- a. Measurement error
- b. Sample size
- c. The variance of the predictor is smaller in the population.
- d. All of the above
- e. None of the above

ANSWER: D

17. The underlying framework for mediation is to understand which one of the following:

- a. How the mediator relates to the moderator.
- b. The way in which the independent variable relates to the dependent variable.
- c. Which independent variable is related to the dependent variable.
- d. Which dependent variable produces statistically significant results.

ANSWER: B

18. The direct effect in a simple mediation model is denoted by which one of the following?

- a. a
- b. b
- c. c'
- d. e

ANSWER: C

19. In a moderated regression model, the interaction term reflects which one of the following?

- a. The dependent variable controlling for the moderating variable
- b. The product of the dependent variable and independent variable
- c. The product of the independent variable and moderating variable
- d. The sum of the regression coefficients

ANSWER: C

20. The conditional effect of the independent variable on the dependent variable when the moderating variable is zero is interpreted in which one of the following ways?

- a. The difference in X for two cases that differ by one on W but differ by zero on Y_i'
- b. The difference in W for two cases that differ by one on X but differ by zero on Y_i'
- c. The difference in Y_i' for two cases that differ by one on W but differ by zero on X
- d. The difference in Y_i' for two cases that differ by one on X but differ by zero on W

ANSWER: D

21. Testing that the effect of the independent variable (X) on the dependent variable (Y) is dependent on the moderating variable (W) is conducted by including which term in the moderation model?

- a. X
- b. XY
- c. W
- d. WY
- e. XW

ANSWER: E

22. Which one of the following is needed to determine whether the relationship between the independent and dependent variables systematically varies as a function of the moderator?

- a. Graph of the interaction
- b. Probe for an interaction
- c. Test for an interaction
- d. Visualization of the XY relationship

ANSWER: C

23. Which one of the following is NOT an effect size that is recommended to avoid in reporting mediation results?
- a. Kappa squared
 - b. Partially standardized total effect
 - c. Ratio of the indirect effect to the direct effect
 - d. The proportion of variance in the dependent variable that is explained by the indirect effect

ANSWER: B

24. The assumptions for moderation are the same as which of the following procedures?
- a. Binary logistic regression
 - b. Multinomial logistic regression
 - c. Multiple linear regression
 - d. Simple linear regression

ANSWER: C

25. The assumptions for mediation are the same as which of the following procedures?
- a. Binary logistic regression
 - b. Multinomial logistic regression
 - c. Multiple linear regression
 - d. Simple linear regression

ANSWER: C

26. Moderation occurs in which of the following situations?
- a. The effect of the dependent variable on the moderating variable can be predicted by the independent variable.
 - b. The effect of the independent variable on the dependent variable can be predicted by the moderating variable.
 - c. The interaction of the independent and dependent variables can be predicted by the moderating variable.
 - d. The moderating variable can be predicted by the effect of the independent variable on the dependent variable.

ANSWER: B

27. Which one of the following represents moderation?
- a. Exponentiation of the regression coefficient
 - b. Interactions in factorial ANOVA
 - c. Random effects with a completely crossed design
 - d. Repeated measures within persons

ANSWER: B

28. Which one of the following reflects partial mediation?
- a. Some relationship between X and Y remains, and that relationship becomes stronger.
 - b. Some relationship between X and Y remains, but that relationship is smaller in magnitude.
 - c. The relationship between X and Y completely disappears.
 - d. The relationship between X and Y exponentiates.

ANSWER: B