Nachmiass RMSS 8e Chapter 17

1. When analyzing multiple variables, the classifications of control variables include:

A) background characteristics as control variables.

B) time and place as a condition.

C) interests and concerns as control variables

\*D) all of these classifications.

2. Which method is NOT a method of control used in multivariate analysis?

\* A) mean substitution

B) cross-tabulation

C) partial correlation

D) multiple regression

3. In using the cross-tabulation method of control, the variable the researcher has identified as the control variable must be:

A) related to the dependent variable but not to the independent variable.

B) related only to the independent variable.

\*C) related to both the independent and dependent variables.

D) unrelated to both the independent and dependent variables.

4. If, after controlling for a third variable, we find that the original bivariate relationship is unchanged, we can conclude that the:

A) original relationship is spurious.

\* B) original relationship is nonspurious.

C) independent variable is the cause of the dependent variable.

D) control variable is related to the independent variable but not to the dependent variable.

5. As a method of control, cross-tabulation is applicable to:

A) nominal variables.

B) ordinal variables.

C) interval variables.

\*D) all levels of measurement.

6. Elaboration involves:

A) demonstrating that a bivariate relationship is spurious.

\* B) introducing control variables to determine the conditions under which an original bivariate relationship occurs.

C) isolating the one independent variable that does the best job of explaining a dependent variable.

D) converting b coefficients into beta weights.

7. In the scheme: Education-->Income-->Political Party Affiliation, Income is:

A) the dependent variable.

B) a conditional variable.

\*C) an intervening variable.

D) an extraneous variable.

8. A disadvantage of cross-tabulation is that it:

\*A) requires relatively large samples.

B) is restricted to the use of only one variable.

C) is only useful for examining causal relationships.

D) is restricted to the use of interval variables.

9. In contrast to cross-tabulation, partial correlation:

A) can be used to show the cause-effect nature of a bivariate relationship.

\*B) produces a summary statistic of the amount of correlation between two variables, controlling for the effects of a third variable.

C) requires nominal or ordinal variables.

D) requires samples of 200 or more.

10. Which correlation is the weakest?

A) r = -1.0

B) r = -0.4

\* C) r = +0.3

D) r = +1.0

11. What three elements of information are needed to compute the standardized beta weight for an independent variable X?

A) the mean of X, the standard deviation of the dependent variable, Y, and the bivariate correlation of X and Y

B) the standard deviation of X, the standard deviation of Y, and the bivariate correlation of X and Y

\*C) the standard deviation of X, the standard deviation of Y, and the beta coefficient, b, of X

D) the intercept, a, the bivariate correlation of X and Y, and the beta coefficient, b of X

12. Suppose we obtained the following multiple regression equation which has a good fit to the data:

Y = 10 + 3X1 + 4X2

If X1 = 2 and X2 = 6, the predicted value of Y would be:

A) 30

\*B) 40

C) 50

D) Y cannot be determined on the basis of the information give.

13. The statistic that expresses the combined effect of several independent variables on a dependent variable is the:

\*A) coefficient of determination.

B) b coefficient.

C) beta weight.

D) partial correlation.

14. Which of the following diagrams violates the simplifying assumptions of causal models?

A) a.

B) b.

C) c.

\* D) d.

15. Consider the following causal model:

The term W signifies the:

A) bivariate correlations of X3 with X1 and X2 respectively.

B) combined effects of X1 and X2 on X3.

C) combined effects of X1, X2, and X3 on X4.

\* D) variation in X4 unaccounted for by X1, X2, and X3.

**Note:** Correct options are marked with “\*”.