**Chapter 13: Correlation and Regression**

1. If one or more of your variables is measured as an ordinal variable, you should use a Spearman’s correlation instead of a Pearson’s correlation.

\*True

False

Learning Objective: 13-1: Identify when to use Pearson’s and Spearman’s correlations.

Cognitive Domain: Knowledge

Answer Location: Spearman’s (*rs*) Correlations

2. Identify the weakest correlation of the following options.

A. −2.00

B. −1.00

\*C. 0

D. 1.00

Learning Objective: 13-2: Interpret the sign and value of a correlation coefficient.

Cognitive Domain: Knowledge

Answer Location: Direction and Strength of Correlation Coefficients

3. Five women indicted their body mass index and the ounces of soda they tend to drink per day. A researcher would like to know if there is a relationship between these two variables. Identify the null hypothesis for this two-tailed test.

A. H0: ρ < 0

B. H0: ρ > 0

C. H0: ρ ≠ 0

\*D. H0: ρ = 0

Learning Objective: 13-4: Write null and research hypotheses using words and symbols.

Cognitive Domain: Application

Answer Location: Two-Tailed Pearson’s Correlation Example

4. For the study in question #3, indicate the degrees of freedom (*df*).

A. 5

B. 4

\*C. 3

D. 2

Learning Objective: 13-5: Compute the degrees of freedom (*df*) and determine the critical region.

Cognitive Domain: Application

Answer Location: Two-Tailed Pearson’s Correlation Example

5. For the study in question #3, indicate the critical value for a Pearson’s correlation using α of .05.

A. .754

B. .811

\*C. .878

D. .950

Learning Objective: 13-5: Compute the degrees of freedom (*df*) and determine the critical region.

Cognitive Domain: Application

Answer Location: Two-Tailed Pearson’s Correlation Example

6. Compute the effect size for this correlation, *r*2.

\*A. .882

B. .304

C. .077

D. .067

Learning Objective: 13-8: Compute an effect size (*r*2) and describe it.

Cognitive Domain: Application

Answer Location: Two-Tailed Pearson’s Correlation Example

7. Describe the size of the effect for this correlation.

A. small

\*B. large

C. medium

Learning Objective: 13-8: Compute an effect size (*r*2) and describe it.

Cognitive Domain: Application

Answer Location: Two-Tailed Pearson’s Correlation Example

8. Which of the following is the best description of the results for this correlation?

A. The number of ounces of soda consumed and women’s BMI is significantly negatively correlated.

B. The number of ounces of soda consumed and women’s BMI is not significantly negatively correlated.

C. The number of ounces of soda consumed and women’s BMI is not significantly positively correlated.

\*D. The number of ounces of soda consumed and women’s BMI is significantly positively correlated.

Learning Objective: 13-9: Summarize the results of the analysis using American Psychological Association (APA) style.

Cognitive Domain: Application

Answer Location: Two-Tailed Pearson’s Correlation Example