Unit 4  PS503: Correlation

To-Do List

Complete Readings

Correlational analyses are absolutely fundamental to psychological research. You have often heard the phrase “correlation does not imply causation.” In truth, the evaluation of causation lies in the research design, not in the statistical procedure chosen. So, while it does not establish cause and effect, it often does serve as a starting point and gives insight into the relationship between phenomena: Is marital status related to happiness? Are IQ scores related to subsequent level of income? Is the level of social support in the environment related to how long an individual can maintain sobriety? These are the types of questions we address with various forms of correlational procedures. The readings for Unit 4 provide an overview and review of various issues in correlational analyses, including assumptions about data, computation, statistical and practical significance, and interpretations of outcome. Read Chapters 7 and 8 in your text, Applied Statistics. For a review of the reading, refer to the Chapter 7 and Chapter 8 PowerPoints in Doc Sharing.

Participate in Discussion Threads

50 pts

Pearson’s r (1 of 2):

Find a peer-reviewed article in your area that employed a Pearson’s r as part of the data analysis for that study. Look for words such as “relationship between,” “predictive of,” and “associated with” in the statement of the research hypothesis and/or title of the article. Then simply review the results section to see whether a Pearson’s r was employed in the analysis. Use this study, with appropriate APA reference posted in the response, to answer the following questions:

a. What were the variables examined?
b. What was the r? What does this number tell us about the relationship between the two variables?
c. Were confidence intervals reported?
i. If so, what were they? What do they mean?
ii. If not, explain why it is important to include confidence intervals in
published research reports.
d. Was an effect size reported?
i. If so, what was it? What does it mean?
ii. If not, explain why it is important to include effect sizes in published research reports.

Spearman’s rho (2 of 2):
Discuss how a Spearman’s rho differs from a Pearson’s r.
a. Think of an example of a research question that would result in a dataset that would be appropriate for a Spearman’s rho regarding data analysis.
b. What might be the r? What does this number tell us about the relationship between the two variables? Explain why you think you might get this result.

Attend Seminar

Seminar Topic
At the graduate level, seminars serve two purposes: they provide you with an opportunity to discuss the concepts from the reading as well as to apply, synthesize, and evaluate those concepts. The seminars will challenge you to analyze problems and situations that are similar to typical academic and clinical settings. Come to seminar prepared to discuss the following:
1. Discuss and evaluate the various most commonly employed types of correlations in research.
2. Discuss and evaluate the chi-square test of association.