

**Study Guide for Test 4:
Relationships Between Two Variables and Chi Square**

Chapter 10: Relationships Between Two Variables

1. Know how to read statistical tables including identifying the dependent and independent variables, whether the relationship between the variables is positive or negative, and the test of statistical significance presented in the table.
2. What is elaboration? How is it related to spurious relationships, intervening effects, and conditional effects?
3. For each of the following be able to define it and provide an example through the use of a figure: spurious relationship, intervening relationship, conditional relationship. Be able to identify the dependent and independent variable.

Chapter 11: Chi-Square

1. What is the difference between a "test of statistical significance" and a "measure of association"? Be sure to be able to define each in your own words.
2. Be able to provide examples of "test of statistical significance" and a "measure of association".
3. What is meant by the concept of statistical independence?
4. Know how to use sample data provided in a table to calculate a Chi Square. Know how to interpret the Chi Square. Know how to interpret the findings in the table: the dependent/independent variable, direction of effect, and the "substantive" meaning of the information in the table.
5. How are the null hypothesis, sampling, and the test of significance related to one another?

Regression Analysis

1. What is the value of a scatter diagram?
2. What level of measurement are the variables that are used in a regression analysis?
3. What does a correlation coefficient tells us?
4. What does a coefficient of determination tell us?
5. What does the slope of a regression line tell us?
6. What is the purpose of determining a regression line? Be sure to mention its relationship to error in predicting the dependent variable.
7. Know how to interpret SPSS output that displays the results from a regression analysis.