<u>Week 11 Polling</u>

Researcher A reported r = -.86. Researcher B reported r = .43. Which researcher reported the stronger correlation?

Researcher A

Researcher B

A researcher computes r = .45 using a sample of 18 participants. What is the decision for a Pearson correlation coefficient for a two-tailed test at a .05 significance level?

Fail to reject the null hypothesis

Reject the null hypothesis

$$df = 18-2 = 16$$
$$r_{cv} = .468$$
$$.45 < .468 \qquad \therefore Fail$$

A researcher measures the following correlation r = .38. What is the value of the coefficient of determination?

.14

.38

.62

$$(.38)^2 = .1444$$

.76

What does the assumption of linearity refer to?

That the variance of data points is minimal

That all data points fall exactly on a straight line

That the distribution of data points is normal

That the best way to describe a pattern of data is using a straight line

Which of the following is a limitation for interpreting a significant correlation coefficient?

Correlations do not show cause

Outliers can influence the value and sign of a correlation coefficient

Data should not be interpreted beyond the range of data measured

All of the above

The correlation coefficient used to measure the direction and strength of the linear relationship of two ranked variables on an ordinal scale of measurement is called the:

Pearson correlation coefficient

Spearman correlation coefficient

Point-biserial correlation coefficient

Phi correlation coefficient

The correlation coefficient used to measure the direction and strength of the linear relationship of one variable that is continuous and a second variable that is dichotomous is called the:

Pearson correlation coefficient

Spearman correlation coefficient

Point-biserial correlation coefficient

Phi correlation coefficient