

FOUR STEPS TO A PERFECT CORRELATION COEFFICIENT

1 CHOOSE THE RIGHT TEST

Correlation coefficients are used to assess the relationship between two numeric variables. The test will not prove causality and will not produce a prediction model.



R

2 INTERPRET R

The value of r can be from -1 (perfect negative correlation), to 1 (perfect positive correlation). Values less than 0.5 indicate minimal correlation. Values above 0.8 indicated strong correlation.

3 INTERPRET THE P-VALUE

Most statistics software provides a p-value to assess if the correlation coefficient is different from zero. Small p-value can be associated with trivial values of r , especially when samples sizes are small. Always interpret the p-value in the context of the r .



4 PLOT THE DATA

Plotting the data in a simple scatter plot is a great way to get further insights. Plots can suggest the practical utility of the correlation and can expose important non-linear relationships.