

What is correlation?

Correlation is a statistical measure that expresses the extent to which two variables are linearly related (meaning they change together at a constant rate). It's a common tool for describing simple relationships without making a statement about cause and effect.

How is correlation measured?

The sample correlation coefficient, r , quantifies the strength of the relationship. Correlations are also tested for statistical significance.

What are some limitations of correlation analysis?

Correlation can't look at the presence or effect of other variables outside of the two being explored. Importantly, correlation doesn't tell us about cause and effect. Correlation also cannot accurately describe curvilinear relationships.

Reference

[Routledge International Handbook of Advanced Quantitative Methods in Nursing Research \(Routledge International Handbooks\)](#)

[Medical Ethics for the Boards, Third Edition](#)