

Glossary

1. Bivariate

Involving two random variables, not necessarily independent of one another.

2. Constant

A quantity assumed to have a fixed value in a specified mathematical context.

3. Correlation

The term correlation indicates the relationship between two variables, where change in the value of one variable leads to the change in the value of another variable.

4. Linear Correlation

The correlation between two variables is said to be linear if there is a corresponding unit change in the value of one variable then there is a constant change in the value of the other variable. That is in case of linear correlation, the relation between the variable x and y is of the type y is equal to a plus bx .

5. Multiple Correlation

In multiple correlation, we study together the relationship between three or more factors like production, rainfall and use of fertilizers.

6. Negative correlation

If the values of two variables move in opposite direction, so that with an increase in the value of one variable, the value of the other variable decreases, or with a decrease in the value of one variable the value of the other variable increases, then the correlation is said to be negative.

7. Non-Linear Correlation

The correlation between two variables is said to be non-linear or curvilinear, if there is a corresponding unit change in the value of one variable then the other variable does not change at a constant rate but at a fluctuating rate.

8. Partial Correlation

In partial correlation, though more than two factors are involved, correlation is studied only between two factors and the other factors are assumed to be constant.

9. Positive Correlation

When values of the variables move in the same direction, that is, when an increase in the value of one variable is associated with an increase in the value of the other variable, or a decrease in the value of one variable is associated with the decrease in the value of the other variable, then the correlation is said to be positive.

10. Proximity

It is the state, quality, sense, or fact of being near or next.

11. Scatter Diagram

Scatter diagram gives an idea about the relationship between paired data and can provide information that is more useful. It is a graphical technique used to analyze the relationship between two variables.

12. Simple Correlation

In simple correlation, we study only two variables – say price and demand.

13. Slope

It measures the steepness of the data.

14. Variable

It is a quantity capable of assuming any of a set of values.

15. Y Intercept

It is a line drawn through the data crosses the "Y" axis.