

# Correlation

Business



The main purpose of linear correlation is to show how strongly two variables affect each other. If the increase in one variable leads to no definite change in the other variable, we say that there is no correlation between the two variables.

If the increase in one leads to the increase in the other, we say there is a positive correlation. However if the increase in one leads to a decrease in the other, there is negative correlation. The strength in of the relationship between two variables is show by the preciseness of the shift in one variable as the other increases. In a perfect linear correlation, all te points fall in a straight line. If the data however forms a straight vertical or horizontal line, there is no correlation as one variable has no effect on the other. An example of correlation in my daily life is the relationship studying and passing of exams.

Students who study hard are more likely to pass as compared to those who do not. This does not mean a causality relationship as studying does not always result to high grades. Scientific methods involve the formulation of hypothesis, testing, and analyzing the results and formulating a new hypothesis based on the results. When trying to establish a causal relationship in the above example, one needs to be aware of the following factors. The percentage of students who study hard for their exams.

The percentage of students who pass their exams. The percentage of students who study hard and they pass their exams. Other factors that may lead to exams failure such as fatigue. Amount of work the students had to

study fro. This scenario represents a case of positive correlation in that the higher the number of students who study, the higher the pass rate.