

# Analysis

[Science](#), [Statistics](#)



Analysis Name: Course: Institution: Date: Analysis A negative correlation is depicted by a curve sloping from the left to the right in contrast to a positive correlation between items, which is depicted by a sloping curve from the right to the left.

A correlation of -66 can be interpreted as a gradient of negative 66. Thus, the variables age and their scores on an engagement scale are depicted by increase in either of the variables and a decrease in the other (Boudreau, & McClave, 2008). Thus, an increase in the age can be interpreted as a decrease in their scores on an engagement scale. The relationship between the gender and the engagement is shown by the degree of freedom at 0. 05. Thus, this can be interpreted that an increase in one of the variables, gender and employee engagement, showed a significant relationship such that an increase in one of the variables resulted in increase in another variable at a probable rate of 0. 05. The correlation is based on probability hence it might differ from the actual statistics (Boudreau, & McClave, 2008).

This can be as an effect of the presence of a large data set from which the samples are to be derived. The Pearson's correlation coefficient showed a negative correlation of -66, between the age and the employee. The age of the employees includes all genders; hence, all genders show a negative correlation between their ages and their engagement scales (Viljoen, & Van, 2000). This can interpreted as the inverse of 66/100.

Such that 66 percent increase in one variable results in reduction of the other variable by the same margin. To evaluate the relationship between the gender and ages and their engagement level would be to show the

relationship between the three. An increase in the age of the employees including both genders showed a decrease in the engagement of the employees whereas a decrease in age shows an increase in engagement scores. Thus in relation to the gender of the employees both genders show identical correlation between their ages and their engagement scores. The statistical results that the probability of picking an item that has the -66 correlation from the sample is 0.

05 thus, the probability of picking an element with the identified characteristics is 5/100. Hence, 5 out of 100 people in company are from a specific gender have the possibility of showing the negative correlation showed by the results in correlation study (Boudreau, & McClave, 2008). The samples examined to arrive at the negative correlation could have been arrived at due to the presence of errors in the samples collected. This could be different from the real estimates that are present in the company (Viljoen, & Van, 2000). Moreover the statistical significance of the relationship between the probability of the gender and the engagement score is found to be 0. 05 hence this shows that the estimated sample size might be large hence such an outcome. Moreover, the size of the p value is small; this shows that there is sufficient evidence that the correlation depicted is more or so real.

The presence of a large data set is not necessary because the existing ser has not deviated from the expected results from such a data set (Viljoen, & Van, 2000). The statistical results show that results the gender of the workers in the company does not dictate their productivity but the age of the

workers dictates their productivity. An increase in the age of the employees with reference to their gender has the probability of being affected by their gender at only 0.05. This can be calculated as  $(0.05 * 0.66)$  to arrive at a conclusion if whether gender with respect to age has a relationship with the engagement scores.

Reference Boudreau, N. S., & McClave, J. T. (2008). Student solutions manual, Statistics for business and economics: McClave, Benson, Sincich. Upper Saddle River, NJ: Pearson Prentice Hall.

Viljoen, C., & Van, M. L. (2000). Elementary statistics- calculations and interest for business and economics.

Cape Town? Pearson Education South Africa.