

# Basic statistics

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



Basic Statistics of Affiliate Research Questions Is there a significant correlation between age and depression according to the data available in Book 5

Pearson Correlation

Number of Observations: 681

Table 1

Pearson Correlation Matrix

AGE

DEPRESSION

AGE

1. 000

DEPRESSION

-0. 047

1. 000

Graph 1

From the statistical analysis using SYSTAT the Pearson correlation coefficient was established to be -0. 047. This implies that there correlation between age and depression according to the statistics is very weak. The independent variable in this case is age men while the dependent variable is depression. In the experiment it would be possible to observe how depression changed with significant to change with regard to age and not vice versa because age was bound to increase regardless of the changes in depression. The Pearson correlation implies that when the data is plotted

graphically the values will not fall into a straight line. A negative correlation implies that the likelihood of depression reduces with an increase in age. A positive correlation would have been indicated by straight line implying that as a person ages there is an increase in the likelihood of individuals being depressed according to the data provided in book 5 (Weiss, 2006). In essence, an analysis of the data using SYSTAT implies that there is no significant correlation between age and depression. Age should therefore not be a factor when predicting the likelihood of an individual becoming depressed. Therefore, one can conclude that biological factors related to ageing do not affect the capacity of individuals to deal effectively and healthily with depression. In fact, the weak correlation implies that as one gets older perhaps due to experience and hardening they become less prone to depression.

2. Is there a correlation between work and depression?

Pearson Correlation

Number of Observations: 698

Table 2

Pearson Correlation Matrix

WORK

DEPRESSION

WORK

1. 000

DEPRESSION

-0.113

1.000

Graph 2

Analysis using SYSTAT indicates that the correlation between work and depression work and depression is actually -0.113. A correlation with a figure less than 1 indicates that there is no correlation between the two variables or the correlation could be very weak to be of any statistical significance. In this case one can comfortably conclude that there is no significant relationship between work and depression. The independent variable in this case was work and the dependent variable was depression. The correlation value in this case assumes a negative integer. The positive integer implies that there is a negative correlation between work and depression according to the data provided in book 5 (Weiss, 2006). This implies that if the value of the integer was 1 then it would have been expected that the people without work were more likely to be depressed than the people who were working. In essence, the data may be implying that although work is not a significant determinant with regard to the prevalence of depression according to the data, it would have been expected that in cases where a relationship occurred it would have been a negative relationship. The data can be explained in terms of socio-economic factors. People who are working and are able to earn a living are less likely to be depressed because they can satisfy most of their needs as compared to people who are not working and do not have any other source of income.

References

Weiss, D. J. (2006). Analysis Of Variance And Functional Measurement: A Practical Guide, Volume 1. New York, NY: Oxford University Press.