

Essay on statistics

[Profession](#), [Student](#)



Statistics

Assumptions

- I. The level of computer anxiety among students is dependent on whether or not they own computers and the student's age.
- II. The relationship between the dependent variable, which is the level of computer anxiety among students, and the independent variables, which are whether or not they own computers and the student's age, is linear.

Hypothesis statement

T-tests are normally performed to determine whether the linear relationship between the variables is significant. If the linear relationship between the dependent variable and the independent variables is significant; the slope cannot be equal to zero.

The null and alternate hypothesis will be;

H₀: The slopes of the independent variables are equal to zero

H₁: The slopes of the independent variables are not equal to zero

H₀ and H₁ are the null and alternate hypothesis respectively.

T-test results

The t-calculated after performing the regression analysis using SPSS are; 0.848 for the computer ownership variable and 1.916 for the student's age variable.

Hypothesis testing and decision

T-Critical can be determined from the t-distribution tables. From the table, at 95% confidence level, the t-critical is 1.984.

For the computer ownership variable, the t-calculated of 0.848 is less than the t-critical of 1.984. Therefore, we accept the null hypothesis and reject the alternate hypothesis. From the results, we can conclude that computer ownership is not a significant determinant of anxiety levels among students. For the student's age variable, the t-calculated of 1.916 is less than the t-critical of 1.984. Therefore, we accept the null hypothesis and reject the alternate hypothesis. From the results, we can conclude that computer ownership is not a significant determinant of anxiety levels among students.

References

- Klugh, H. E. (2009). *Statistics: the essentials for research* (6, illustrated ed.). New York: Wiley.
- Weisberg, S. (2005). *Applied linear regression* (3, illustrated ed.). Hoboken, New Jersey: John Wiley and Sons.