

SAMPLE WRITTEN ANALYSIS SUBMISSION

THIS SAMPLE IS PROVIDED TO GIVE YOU AN IDEA AS TO WHAT THE FINAL PRODUCT SHOULD LOOK LIKE. YOU ARE FREE TO MAKE UP YOUR OWN STUDY. THE DATA IS IN THE INSTRUCTIONS. I HOPE YOU ENJOY APPLYING YOUR DATA TO ILLUSTRATE TO ME YOUR UNDERSTANDING OF THE STATISTICAL CONCEPTS WE HAVE STUDIED THIS TERM.

Null Hypothesis:

The high school where a student takes a science class has no statistically significant impact on high school students' science class performance.

Population and Representative Sample:

The population is the bigger group, in this case the high school students in Fort Bend Independent School District. My representative sample were students from three different high schools in Fort Bend ISD: Hastings, Taylor, and Elsie High Schools.

Dependent and independent variable(s):

In my analysis, the independent variable is the high school where students take their Science class; Hastings, Taylor, or Elsie. This is the variable that I manipulate in my study.

The dependent variable is the student's test scores or performance. This is what is being measured in my experiment.

How the Experiment was Conducted:

I decided to pick my sample from 3 different high schools in Fort Bend ISD. Each subject selected was in a science class at each of these schools. At the end of the grading period I asked students to give me their test scores for all major exams from the term. My ultimate goal was to see if the students were performing at different levels at the different high schools. From each school, I picked 8 students that have Science as one of their main courses. Each student's scores are reflected in the data set forth below.

Method of Analysis:

The method of analysis I used was ANOVA. I used this method because my goal is to distinguish if there is a difference among the 3 schools. The ANOVA method determines whether 3 or more groups have any difference, in this case the aforementioned high schools.

Calculations and Data Analysis:

(Perform your data analysis. You can put your numbers in a table to more clearly show your results)

Conclusion

Tell me if you failed to reject your null hypothesis or if you reject your null hypothesis. My data show that the F value is _____. At alpha of _____ I must (reject/fail to reject) my null hypothesis. I therefore must conclude that the location of where a student takes science in Fort Bend Independent School district does not have any effect on the statistical significance on a student's performance in a high school science class.