

Presentation Assignment, BANA 3363, Darren Grant, Summer 2014.

Find a question that can be answered using the one of the statistical techniques learned in this class. These techniques fall into two categories: 1) comparing the value of the same variable in two populations, or 2) examining the relationship of two variables in single population.

An example of the first type of technique is as follows. If you wondered whether guys read their textbooks more than girls, then you might ask a set of randomly chosen, male and female SHSU students how much time they spend reading their textbooks each week, and then do a comparison of means.

An example of the second type of technique is as follows. If you wondered whether wealthier students were more likely to purchase the textbook, then you might ask a set of randomly chosen students about their disposable income and how often they buy the books for their classes, and then regress the second variable on the first.

To complete this assignment, complete the following steps. First, get your topic cleared by the instructor. In the event of multiple requests for the same topic, it will be first come, first serve.

Second, gather a total of 30 observations and enter the data in an EXCEL spreadsheet. The data should represent a random, representative sample from the population(s), as best you can achieve, and the observations should be independent of each other.

Third, create a graphical display of the data. This may be a histogram, a bar graph (segmented or side-by-side), or a scatterplot, depending on the question you are asking, the data you have, and the type of technique you are using for your analysis. Put this in a second sheet in the spreadsheet.

Fourth, formulate null and alternative hypotheses for the question that you wish to answer. Then conduct that test. If you are using a technique in category 1, this will be a test for equality of means or proportions. If you are using a technique in category 2, this will be a test of the relevance of the independent variable in a regression model.

Fifth, draw conclusions about your question, based on the results of your data analysis.

Sixth, create a 5-minute slide presentation with 5 slides:

1. The question and the data used to answer it (literally, list your data)
2. A graphical display of the data
3. A statement of your Null and Alternative hypotheses
4. Statistical results, including a test statistic and p-value
5. Your conclusion, in context

In the “notes” section of each slide, briefly outline what you plan to say about that slide. Keep the slides simple, and then, instead of reading the slide, use what you say about the slide (outlined in “notes”) to enhance the audience’s understanding of that slide.

Seventh, submit both the EXCEL spreadsheet (two sheets) and the powerpoint presentation (5 slides with notes) via email to dgrant@shsu.edu and mcg004@shsu.edu by 10:00 am on June 25. Grading is based primarily on following the instructions and conducting the tests properly: do this and you will get at least a B. Several students will be invited to give their presentations after the final exam that evening, for the opportunity to earn an A.