# Basic Review Assignment:

Use the basic data set file posted for this assignment to answer the following questions (you can work with others! Come ask for help if you get lost!). This data file contains a set of “personality” characteristics and 369 people’s ratings of those personality characteristics. Use p<.05 for all of these tests.

*Descriptive Statistics*

Pick three variables (any three!) and find the following:

|  |  |  |  |
| --- | --- | --- | --- |
|  | Variable 1 | Variable 2 | Variable 3 |
| Mean |  |  |  |
| Mode(s) |  |  |  |
| Median |  |  |  |
| Variance |  |  |  |
| Standard Deviation |  |  |  |

**Make sure the table is in APA format.**

*Z-Scores/Z-Tests*

The average score on personality tests with a 7-point scale is 4.5 with a standard deviation of 1.25. If a person’s score is found to be a 6 on this scale, are they significantly different from average?

* List the z-score for the person:
* List the critical z-score for p<.05:
* Is that a significant difference?

This sample of students was used to examine the differences between previous tests of loyalty and now. Using the loyal variable, find if our sample is significantly different from a national average of 4.72 with a standard deviation of .87.

* Find the mean (using SPSS):
* Then find the z-score of that mean:
* List the critical z-score for p<.05:
* Are they different from average?

*Single Sample t*

All of these characteristics are expected to have an average score of around 4.5 points, which is the middle of the scale. Pick any ONE characteristic and tell if this college sample is different from the predicted average score.

* List your chosen characteristic:
* List your mean score:
* List your p-value:
* Is your characteristic different from average?
* Write an example APA style sentence stating that they are/are not different from average.

*Dependent t*

Is there a difference in the ratings between assertive personalities and strong personalities (looks like strprs in the dataset)?

* List the mean difference:
* List the p-value:
* Why is this a dependent test?
* Is there a difference in the ratings?
* Write an example APA style sentence stating that they are/are not different.

*Independent t*

Many researchers argue that there is a difference between students who take research studies at the beginning of the semester and students who rush to take research studies at the end of the semester. Using the semestertime variable as your groups, is there a difference in how students rate the moody variable?

* List your means:
* List the p-value:
* Is there a difference in the ratings?
* Write an example APA style sentence stating that they are/are not different.
* Include a bar chart of the data.

*Correlation:*

Is there a significant correlation between the femininity and masculinity variables?

* List the correlation:
* List the p-value:
* Is there a significant correlation?
* Write an example APA style sentence stating that they are/are not different.
* Include a scatter plot of the data.