Below we will list the differences between the pretest scores of the experimental groups vs the differences between the pretest scores of the control groups. We will do the same for the post-tests. We will look at the overall scores from the ‘Giant Dataset’

The appropriate means for Bodie, Busiol, and Fassaert are all listed in the last portion of the ‘Pretest vs Posttest’ Deliverable. This document is to report the results of the independent t-tests of Pretest\_Experimental vs Pretest\_Control and Posttest\_Experimental vs Posttest\_Experimental

**Pretest Experimental (x) vs Pretest Control (y)**

Bodie Scale:

Mean of x: 5.368

Mean of y: 5.318

x - y = 0.05

P-value: 0.5307

T-statistic: 0.628

Conclusion: The difference in means isn’t statistically significant, because the difference in means is only .05, and the p-value is .5307. We fail to reject the null hypothesis.

Busiol Scale:

Mean of x: 3.842

Mean of y: 3.819

x - y = 0.023

P-value: 0.6506

T-statistic: 0.45332

Conclusion: The difference in means isn’t statistically significant, because the difference in means is only .02, and the p-value is .6506. We fail to reject the null hypothesis.

Fassaert Scale:

Mean of x: 2.604

Mean of y: 2.617

x - y = -0.013

P-value: 0.7276

T-statistic: -0.349

Conclusion: The difference in means isn’t statistically significant, because the difference in means is only .01, and the p-value is .7276. We fail to reject the null hypothesis.

**Posttest Experimental (x) vs Posttest Control (y)**

Bodie Scale:

Mean of x: 5.676

Mean of y: 5.342

x - y = 0.334

P-value: 0.0001

T-statistic: 3.935

Conclusion: The difference in means is statistically significant, because the difference in means is .334, and the p-value is less than .05. We reject the null hypothesis.

Busiol Scale:

Mean of x: 4.067

Mean of y: 3.864

x - y = 0.203

P-value: 0.0005

T-statistic: 3.5044

Conclusion: The difference in means is statistically significant, because the difference in means is .203, and the p-value is less than .05. We reject the null hypothesis.

Fassaert Scale:

Mean of x: 2.814

Mean of y: 2.582

x - y = 0.232

P-value: 8.164e-09

T-statistic: 5.9249

Conclusion: The difference in means is statistically significant, because the difference in means is .232, and the p-value is less than .05. We reject the null hypothesis.

The overall conclusion is that when comparing the post scores, the mean of x usually goes up and the mean of y stays relatively the same. Because of this, there’s more of a significant difference between the two post means than there are when comparing the pre means. This sort of reinforces all the theories of previous documents from this project.