**Test a Perceptual Phenomenon**

**Meets Specifications**

Dear student,

Congratulations on finishing this difficult project! Good job! Your work definitely shows your strong statistical reasoning ability. Remember that all the hard work will pay back. Keep up your good work! :)

**Responses to Project Questions**

Q1: Question response correctly identifies the independent and dependent variables in the experiment.

Q2a: Null and alternative hypotheses are clearly stated in words and mathematically. Symbols in the mathematical statement are defined.

Q2b: A statistical test is proposed which will distinguish the proposed hypotheses. Any assumptions made by the statistical test are addressed.

Good job using the correct statistical test and addressing the corresponding assumptions. Well done!

[Here](http://support.minitab.com/en-us/minitab/17/topic-library/basic-statistics-and-graphs/hypothesis-tests/tests-of-means/why-use-paired-t/) is another reference that talks about why the paired t-test should be used. Hope you find it useful too.

Q3: Descriptive statistics, including at least one measure of centrality and one measure of variability, have been computed for the dataset’s groups.

Q4: One or two visualizations have been created that show off the data, including comments on what can be observed in the plot or plots.

A line plot is not the best representation of the data, since the line suggests a connection between sequential participants, where each participant is independent of the next. Instead, a pair of histograms or a histogram of the differences can serve as a better representation of the data.

Q5: A statistical test has been correctly performed and reported, including test statistic, p-value, and test result. The test results are interpreted in terms of the experimental task performed. Alternatively, students may use a bootstrapping approach to simulate the results of a traditional hypothesis test.

The t-statistic value is correct. Please also revise the figures which should show -8.04, not -8.19. I set this as "MEET SPECIFICATION" because you already pointed out it in the report. But please do revise the figures.

Q6: Hypotheses regarding the reasons for the effect observed are presented. An extension or related experiment to the performed Stroop task is provided, that may produce similar effects.