UDACITY

Return to "Data Analyst Nanodegree" in the classroom

Test a Perceptual Phenomenon

REVIEW

HISTORY

Meets Specifications

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.

- Well done! Null and alternative hypotheses are specified correctly.
- Mathematical symbols are referring to the population means

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

- Please look at here for a more detailed assumptions for conducting t-test.
- The t-test for dependent means is considered typically "robust" for violations of normal distribution.This means that the assumption can be violated without serious error being introduced into the test in most circumstance.
- However, if we are conducting a one-tailed test and the data are highly skewed, this will cause a lot of error to be introduced into our calculation of difference scores which will bias the results of the test. In this circumstance, a nonparametric test should be used.

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.

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.

Well done for conducting the correct statistical test - the test statistics are reported correctly. Conclusion drawn is well aligned with the test results.

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.

DOWNLOAD PROJECT

RETURN TO PATH