

Data Analytics 102: Experiments

name _____

1. Pre-screening of Milgram experiment: Given the setup of Milgram's experiment, to what voltage level do you think the average experiment subject is willing to shock the "learner" in the name of science?
2. Post-Screening: To what degree do you believe the results of the Milgram experiment are generalizable to a larger population? Which population, exactly?

Station 1: Employee Performance

Error Sources: What are the greatest source of error in this particular simulation experiment: Brainstorm 3 and discuss how these sources of error can be mitigated in this experiment?

- 1.
- 2.
- 3.

Data table:

Employee performance Thresholds:

Blue team tree threshold: _____ trees (i.e. millimeter of travel)

Tan team tree threshold: _____ trees (i.e. millimeter of travel)

Actual results:

Blue team cutoff value: _____ Tan team cutoff

Station 2: Cell phones and reaction time

For this station, use the provided experimental template to gather and analyze your data about the reaction time of various subjects.

Station 3: Product Quality

Discuss three sources of error in this experiment and ways they can be mitigated:

Gathered data (use alternate paper as needed):

Conclusion: Which batch of processors from the foundry (i.e. the Orange or the Green) are you going to send to your high-profile customer? Which will you send to your much more forgiving customer?

Discuss your degree of confidence in these results using your knowledge of what statisticians mean by "confidence".