SPSS Assignment 2

JP

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# Context (20 points)

You are interested in whether there are differences in tech anxiety between different BMI groups. You think there will be differences between the BMI groups but you’re not sure which group will have a higher score. Your tasks are to create hypotheses, conduct both descriptive and inferential statistics, and visualizations for descriptive and inferential statistics. You will submit your answers to anything that is not SPSS specific (hypotheses, t critical value, write up) on this **word document and will turn in this document** as well as your **SPSS output file**. Email me if you have any questions about submitting both documents.

## Create a null and alternative hypothesis (in words) (2 points)

H0:

H1:

## Recode ccc\_bmi into bmi\_categories (2 point)

* put your initials after your newly created variable
* please provide labels in the variable view
  + under and normal weight < 25
  + overweight 25 – 29.99
  + obese 30+

## Get a composite average score for tech\_anxiety (2 points)

* there are 3 variables (mtuas\_anxiety\_q1, mtuas\_anxiety\_q2, mtuas\_anxiety\_q3) that will make up the composite score

## Conduct descriptive statistics for the following variables (2 points)

* please write out what the mean and standard deviation for the composite score to get full credit
* make sure to include your initials after the composite score
* get descriptive statistics (of your choosing) for the following variables
  + bmi\_categories
  + mtuas\_anxiety\_q1
  + mtuas\_anxiety\_q2
  + mtuas\_anxiety\_q3
  + Average tech anxiety variable

## Check the assumptions (1 point)

* Does your data look normal based on the tests and visuals?
* Are there outliers? Which participants are outliers if there are any?

## Conduct inferential statistic (one-way ANOVA) (1 point)

* report the correct inferential statistics in the form of a F-statistic; e.g., *F*(df between, df within) = F value, p value

## Tell me whether or not your finding (F statistic) is statistically significant (1 point)

## Tell me what groups are significantly different from one another (2 points)

## find the F-critical value for a two-tailed test (2 points)

* look at your F table to see the F critical value for your test

## Show some type of visualization that shows the difference in the BMI groups on tech anxiety levels (could be line plot or boxplot) (2 points)

## Reject/Retain the Null Hypothesis? (1 point)

## Write up on your findings (2 points)