

**Writing Assignment #1**  
**PSYC 2202**  
**Measures of Central Tendency**

**Overview**

In this assignment, you will calculate the mean and the median for a set of data. Then you write a 1-2 paragraph summary in which you explain and interpret these statistics to a naïve audience.

**Learning Outcomes**

- Correctly calculate and interpret measures of central tendency
- Demonstrate an ability to explain statistical calculation and analysis to others

**Why Do this Assignment?**

- Immediate Benefit: This assignment is a way to check your understanding of measures of central tendency. Because they are relatively easy to calculate, you may think you understand the significance and use of them better than you do. Writing an explanation of these statistics serves as a check on your knowledge and reinforces your understanding of them.
- Long Term Benefit: Thinking about how to explain the steps in calculating a statistic and thinking about to explain the reasoning behind an analysis will help you:
  - Write logical and clear research papers while in school
  - Help you write your capstone proposal and final project
  - Assist you in your career path, since employers will ask you to explain how you plan on doing a project, why you plan on doing it in that way, and to analyze outcomes

**Specifics**

Pretend you have been hired as a data scientist for an on-line store. It is a small company that is trying to minimize the number of days between receiving an order and the client receiving the order. The owners of the on-line store are clueless when it comes to statistics, which is why they have hired you. Your first task is to calculate the average number of days between ordering and receiving the order. It has been a slow month --- word is getting out that this company is slow to send orders – so you only have data from 20 orders. Look at the data table. Calculate the mean and median days (the “Day” column in the data chart) between ordering and receiving an order from the company. Then write a 1-2 paragraph explanation of:

- Measures of central tendency (what are they? Why are they important?)
- How you calculated each statistic (explain the steps)
- The value that you calculated for each statistic
- Explain which statistic is more useful as measure of the average time between ordering and receiving an order
- Write the first draft of the paper then bring it to class for peer review
- Write final draft based on peer feedback

**Data**

Order #	Days	Order #	Days	Order #	Days	Order #	Days
1	7	6	6	11	9	16	2
2	3	7	5	12	7	17	8
3	7	8	5	13	9	18	6
4	6	9	9	14	2	19	7
5	7	10	3	15	5	20	7