Homework 2, PSYC 3500  
t-tests

Worth 30 points

**FOLLOW THESE DIRECTIONS CAREFULLY**.  
All homework assignment files submitted must be in MS Word, and must be turned in by the due date and time in order to be graded. Any work not turned in by the due date and deadline time will earn a grade of “0” points. File submissions that are not properly named will also earn a grade of “0” so please follow the directions carefully.

Assignments must be named with the following format: Lastname\_Firstname HWork 2

For example, John Doe would submit: Doe\_John HWork 2

When completing the homework assignment, please copy and paste your SPSS output into MS Word IN ORDER. That is, you should copy and paste the SPSS output into MS Word, in order, for Question 1, then Question 2. Then, repeat the steps for the second data set in the homework assignment.

For this assignment, determine the correct t-test to run for each problem set. For each data set, use a two-tailed test (SPSS’s default) with a 0.05 alpha level.

1. Put the data into an SPSS spreadsheet and in variable view name the variable (or variables), label, decimals, values if needed, and measure. Screenshot data and variable view then copy each into MS Word.
2. Run the appropriate t-test in SPSS, including all options used in the in-class example. Copy the entire output into MS Word.
3. APA format t-test write up for the problem set, written in MS Word.

For Homework #2, you should include, IN ORDER, pasted into MS Word:  
-SPSS data view for Set #1.

-SPSS variable view for Set #1.  
-t-test analysis SPSS output for Set #1.

-APA format t-test write up for Set #1.

-SPSS data view for Set #2.

-SPSS variable view for Set #2.  
-t-test analysis SPSS output for Set #2.

-APA format t-test write up for Set #2.

\*\*\*Hint: you will use two different t-test analyses in this homework assignment; make sure to round the appropriate values in your write-up \*\*\*

**(Problem Sets begin on next page!)**

**Problem Set #1**

A health psychologist is interested in the region of United States a person was raised and number of siblings. He randomly samples 30 participants at a local airport asking them what area of the U.S. they were raised (East or West): 15 are from the East and 15 are from the West. He asks each participant how many siblings. Does region of U.S. one is raised relate to the number of siblings?

\*\*HELPFUL HINT: you CANNOT enter the data exactly as it is shown here. You need to do SOMETHING (involving a condition column and values) in order to set up the data for the correct t-test).

East: 1, 3, 2, 4, 2, 1, 3, 2, 1, 2, 0, 5, 3, 0, 4

West: 0, 2, 4, 4, 5, 3, 4, 4, 3, 3, 4, 5, 5, 5, 0

\*\*HINT: when you interpret the output make sure to choose correctly if it is a one-tailed or two-tailed test based on the scenario above.

**Problem Set #2**

A researcher is interested in the effects of mood on memory. Participants (*n* = 13) were given a list of 20 words that were positive valence (i.e., happy, joy, smile) words. Participants were instructed to study the list of words for 10 minutes to learn as many as they could. The participants then wrote down the words they could remember. The research recorded the percentage of words remembered. Then participants were shown a movie that induced a positive/happy mood. The movie is meant to evoke a positive feeling in the participant.

Participants were given a different list of 20 words that were positive valence words. Participants were instructed to study the list of words for 10 minutes to learn as many as they could. The participants then wrote down the words they could remember. The research recorded the percentage of words remembered.

Percentages:

|  |  |
| --- | --- |
| BeforeMovie | AfterMovie |
| 35.00 | 70.00 |
| 50.00 | 75.00 |
| 10.00 | 50.00 |
| 40.00 | 65.00 |
| 10.00 | 45.00 |
| 20.00 | 75.00 |
| 40.00 | 70.00 |
| 50.00 | 65.00 |
| 35.00 | 70.00 |
| 50.00 | 75.00 |
| 30.00 | 85.00 |
| 30.00 | 95.00 |
| 35.00 | 60.00 |