

SPSS ASSIGNMENT #6
Independent and dependent t-tests



45 points



You will conduct two independent t-tests and one dependent t-test for this assignment

Remember to use “the” key word in your answers.

PART A INDEPENDENT T-TESTS (31 points)

Is there an effect of sex on touch scores and/or suicidality? To find out, conduct two **independent t-tests**, one on each DV. Be sure to look at the homogeneity of variance (HOV) test results as this will determine which row of the output you should get your numbers from.

But first – use the SPSS calculator to add up SQBR1 + SQBR2 + SQBR3 + SQBR4. This will give you a new variable. Call it “suicidality”.

Cohen’s d (point estimate) is a measure of effect size. This tells you how much influence the IV is having on the DV. The bigger the number, the stronger the effect size. In SPSS, be sure to ask for the effect size. Keep your eyes open for this option. Also, when reporting sig values (i.e. p values, report “2 sided”).

Effect of sex on touch scores (13 points)

	men	women
Mean		
SEM		

Levene’s F value for HOV	Sig value for F	Is F sig (y/n)?	Have HOV? (y/n)

Value of t	df	Sig value for t	Is t sig (y/n)?	Cohen’s d

What can we conclude about the effect of sex on touch scores? Note: Note: if there is an effect, be sure to specify for which sex touching was highest or lowest. **2.5 points**

Bonus Points! Copy and paste the output into a word document and hi-light the numbers you used in the tables above. Set this document aside. You will be adding more to it in a few minutes.

Effect of sex on suicidality 13 points

	Men	women
Mean		
SEM		

Levene's F value for HOV	Sig value for F	Is F sig (y/n)?	Have HOV? (y/n)

Value of t	df	Sig value for t	Is t sig (y/n)?	Cohen's d

What can we conclude about the effect of sex on suicidality? Note: if there is an effect, be sure to specify for which sex suicidality was the greatest or lowest. **2.5 points**

Bonus Points! Copy and paste the output into the same word document as before and hi-light the numbers you used in the tables above. Set this document aside – you are not done with it yet 😊

PART B DEPENDENT T-TEST (12 points)

Use a **dependent t-test** to see if there is an effect of environment (micro vs macro) on optimism.

environment	Mean level of optimism	SEM
MICRO		
MACRO		

means compared	t-value	df	Sig value of t	is t significant(y/n)	Cohen's d
MICRO vs MACRO					

9 points

What can we conclude about the effect of environment on optimism? Note: if there is an effect, be sure to specify which environment showed the highest (or lowest) level of optimism. **3 points**

LAST QUESTIONS! 1 point each

Look at the results for all three t-tests. Which test to compare means had the largest effect size? touch for men vs women OR suicidality for men vs women OR optimism for micro vs macro environment.

Explain why.

Bonus Points! Finally - copy and paste the output into the same word document with the other SPSS results. Hi-light the numbers you used in the tables above. Upload this in Canvas to the assignment called "Digital Wellness Assignment 6: Bonus Points"⁷. Do all this correctly and earn **5 bonus points** that you can redeem for rewards at the end of the semester.