

AS3 (Assignment 3, Unit 5): Independent and Dependent t-tests on SPSS

Please write your answers in red 😊

It is widely thought that meditation can affect anxiety levels as measured by a 0 to 10 point standardized scale. An investigator wants to test this hypothesis. He selects a random sample and measures all of the participants' anxiety levels before and after a guided meditation exercise. Do the data support his hypothesis?

<u>Before Meditation</u>	<u>After Meditation</u>
3	3
4	4
7	8
5	7
8	8
8	8
4	9
7	4
5	7
6	6
6	8
7	4

1. What is the researcher's hypothesis?

2. What is the null hypothesis?

3. Exactly what mean differences are you comparing here?

4. What is the dependent variable? _____

5. What is the independent variable? _____

6. Please analyze the data with the appropriate hypothesis test on SPSS and cut and paste your SPSS results here:

Based on your SPSS results that you pasted above, please answer the following questions:

7. Please write your “statistical statement”: _____

8. Did you reject or fail to reject the null hypothesis? _____

9. Please write your results in a “literature” or “research study” format:

A researcher hypothesizes that arousal levels will be affected by meditation. A researcher selects a random sample and randomly assigns the sample to 2 conditions: meditation and no meditation. Based on the following data, did meditation have a significant effect on arousal level?

NO MEDITATION	MEDITATION
72	91
162	155
145	152
183	190
123	134
167	157
76	99
112	104
124	143

1. What is the researcher's hypothesis?

2. What is the null hypothesis?

3. What is the dependent variable? _____

4. What is the independent variable? _____

5. What is the appropriate hypothesis test?

6. Please analyze the data using the appropriate hypothesis test on SPSS and cut and paste your SPSS results here:

7. Based on your SPSS results, do you reject or fail to reject the null?

8. Please write the “statistical statement” for your SPSS results:

9. Please write your results in a “literature” or “research study” format:
