EDUA 7850 - Design & Analysis of Educational Research (Quantitative)

Assignment 5

Due: Wednesday Feb 26, 2020 (no class next week - Feb 19)

Data file - college student data.sav

Note: (1) As mentioned in class, we will interpret all assumptions in this data file as not being violated to such an extreme to clearly warrant the use of non-parametric tests. Therefore, we can focus on ANOVA only for this assignment. (2) Use Tukey for all post-hoc tests when needed.

1. Perform an ANOVA to answer the following research question. Be sure to include all relevant analyses (i.e., post-hoc analyses when needed).
   1.1. Is there a difference between students who are either single, married or divorced in terms of academic achievement?
   1.2. Prepare a brief written interpretation of the results of your analysis in 1.1.

2. Create a new variable called *hrstv2*.

3. Group the values of the continuous variable *hrstv* into the following categories within *hrstv2*

hrstv	*hrstv2*
0 to 8	1 (small amount of tv)
9 to 14	2 (moderate amount of tv)
15 and over	3 (large amount tv)

4. Perform an ANOVA to answer the following research question. Be sure to include all relevant analyses.
   4.1. Is there a relationship between watching either a small, moderate, or large amount of television and academic achievement?
   4.2. Prepare a brief written interpretation of the results of your analysis in 4.1.

5. Compute the correlation between *hrstv* and *currgpa*.
   5.1. Prepare a very brief interpretation of this correlation.

6. Compare your interpretation in 4.2 to that of 5.1. Prepare a brief summary of your comparison.

7. Be sure to include the following parts for this assignment. These can be submitted as separate files.
   7.1. Revised data file (lastname data assign 5.sav)
   7.2. Output file (lastname output assign 5.spv)
   7.3. Interpretation of results (lastname results assign 5.docx)