Stat exercise – Research Design

Paste your responses below and attach your output file and your data file.

You have received a data set via email. Your job is to a) clean the data; b) organize the datafile (labels etc); c) analyze the data.

1. List all the steps you took in preparing the data file for analysis. Include how you dealt with missing values and any exclusions you made. Look through the notes to make sure you don’t miss anything.

2. Now compute scale scores (in syntax) for the SDO scale (<https://www.researchgate.net/publication/38414041_Social_Dominance_Orientation_A_Personality_Variable_Predicting_Social_and_Political_Attitudes>). Do any recodes as necessary and paste your syntax below. What was your reliability estimate? Is it adequate?

3. Correlate SDO with political orientation (polorient). What should you do before you do the correlation? (and do it)

4. Do a regression equation predicting SDO with political orientation and empathy scale scores (ec=empathic concern, pt=perspective taking, pd=personal distress), controlling for gender. You can find the subscale items here: <https://backend.fetzer.org/sites/default/files/images/stories/pdf/selfmeasures/EMPATHY-InterpersonalReactivityIndex.pdf>. Check to see if you need to recode things. What other steps do you need to do before you do the regression? Also note that not all the subscales were used in this study. You’ll need to create these subscales in syntax (paste syntax below). What kind of regression should you do? What are your results?

5. Do an ancova with SDO as the DV and political orientation and gender as IVs and empathy as a covariate. What other things do you need to do prior to this analysis? How does this differ from your analysis above? Are your factors random or fixed?

6. Do a factor analysis on the empathy scale items Use an oblimin rotation (this is what you want to use if you think your factors will be correlated). There are several ways to determine how many factors there are—one is to use the eigenvalues (if over 1). Another is to use the scree plot. How many factors are there using each method? Which seems to make the most sense looking at how your items load on the factors? What would you call the factors?