Homework 1

Directions: Log on to my personal webpage, and download the file called, "Homework I Data." A codebook, entitled "Homework I Codebook" is also available on Blackboard to explain each variable and its operationalization. Your answers should be of sufficient length to exhaustively address every component of the prompt. Your answers must be professionally organized, typed, and all Stata code needed to reproduce your results must be appended to the end of your assignment. Your work is due by II:59:59 pm on February 4, 2022.

- I. Read the GSS data into Stata. Print the first five rows of data (using Stata commands), and copy and paste the Stata readout into your homework to answer this question.
- 2. Using the variables, "occupational_presitge" and "years_of_educ," identify a dependent variable, independent variable and a hypothesized relationship between them. Explain the rationale for your hypothesis. What evidence would we need to see in order to confirm of disconfirm our hypothesis? Finally, what is the unit of analysis and level of measurement for your variables?
- 3. What are the three necessary components to draw a causal inference? Explain each.
- 4. Explain the concept of endogeneity and the three ways we discussed it can arise.
- 5. Suppose we have appropriate time-ordering, association between variables, and exogeneity. How can we maximize the likelihood that we observe some causal relationship and not random chance?
- 6. What is the level of measurement for the following variables?
 - a. "nonwhite"
 - b. "sexuality"
 - c. "ideology"
 - d. "age"
- 7. Calculate the percentage of respondents who identify as straight, who identify as bisexual, and who identify as gay or lesbian. Report your results.
- 8. Create a dichotomous variable such that respondents who are at least 65 years of age receive a code of "I" and all others are coded "o." What is the mean value of this newly created variable? What does this value tell us about our sample?
- 9. Create a string variable for the race of respondents. Using Stata, create a table showing the percentage of respondents who are white compared to nonwhite. Copy that printout and paste it into your answer for this question. What is the median race?
- 10. Copy and paste the contents of your do-file into this portion of your homework.