

Homework #10
RPAD 316
Professor Stephen Holt

Instructions: You will be doing the problems in this assignment by hand and in Stata. For the problems by hand, show your work for each step. For any Stata questions, when asked for graphs, save the graph as a .png file and paste the image into the appropriate section of the word document. Paste your code that produced the graph below the graph. When asked for output, you can use a screen capture of the Stata output (saved as a .png and pasted into the homework document). Paste the code used to create the output under the screenshot.

Using dataset 2 in Stata, answer the following questions.

1. Estimate and describe the relationship between mental health and hours worked the previous week.
2. If you control for hours of sleep in a typical night, does the relationship between hours worked and mental health change? If so, how?
3. How much of the variation in mental health is explained by hours worked and hours of sleep alone?
4. Does educational attainment and age change the results when added to the model? If so, how?
5. Conduct a two sample t-test that tests the difference in mental health between volunteering that has contact with patients and those that do not.
 - a. What is the size of the difference between the two groups in average mental health?
 - b. Is the difference statistically significant?
 - c. What does this suggest about interacting with patients while volunteering in a health care setting?