Predoc Coding Exercise UCSD Rady School of Management

The attached data comes from the academic article "The Effect of Early Education on Social Preferences" by Cappelen, List, Samek, and Tungodden. Also find the paper attached.

Coding Exercise Questions

- 1) Recreate Tables 1 and 3 for this paper.
- 2) What robustness test do you think are useful to do for this paper? Such a test may be desired to confirm that the results hold. Describe the test below. Use code to generate another table with a new robustness test.
 - I think the paper has done a good job testing whether the PA and PK dummies have any impacts on explaining the regression models. One suggestion might be to look at the actual F-stat to check if it is well above the Stock and Yogo weak instruments convention of F < 10.
- 3) Can you think of another original research question you could ask related to this paper? Describe the question below, indicate how you are going to test the question and indicate why you think it is important, in about 5 sentences maximum.
 - I think there has been a lot of change in preschool curricula with new applications such as Montessori or Reggio Emilia. Reggio Emilia focuses more on collaborative learning whereas Montessori focuses on independent learning. One original research question is to test the effects of these approaches to children's learning outcomes. One can follow the same method as in this paper but increase the number of children participants and encourage more diversity in participants selected.
- 4) Download a dataset that helps you answer the question you came up with. Provide preliminary evidence on the results to your research question.
 - I am unable to find any public sources of data, but I believe it might be possible to get data from doing RCTs in countries that have implemented Montessori and Reggio Emilia approaches such as Italy. Also, this <u>paper</u> listed sources of data that they used for the analysis.

Personal Background Questions

After completing this coding exercise, please answer the following questions:

- 1) List the title (not the number) of the highest econometrics course you have completed along with your grade in that class (please convert to A-F scale if necessary).
 - Advanced Econometrics (Econometrics II) A
- 2) In one sentence, describe your experience with
 - a. Stata: intermediate, mostly used for coding exercises
 - b. Python: intermediate, used for both class and internship work
 - c. R: rusty, used for class in undergraduate study only
- 3) Please state in 3 sentences what you hope to gain from this job.
 - Gain hands-on experience in economics analysis

- Receive mentorship from day 1 for economics jobs
- Opportunity to fill in the gaps of academic study by taking classes, attending workshops
- 4) Please state in 3 sentences where you see yourself in 5 years.
 - Be in the 3rd year of my Ph.D. program or work in an economic consulting firm.
 - Have contributed to research by publishing 4 more papers in the fields I'm interested in (1 accepted to journal already, 1 in progress).
 - Have more time for my family.

Your submission

Please include the following files in a .zip folder named 'Lastname_Exercise.zip'.

- All data used in this exercise (.csv or .xlsx)
- One code file that you used to answer Coding Exercise questions 1, 2, and 4 (please name it 'Lastname_Code', it should be a .do, .R, .py, or .ipynb file)
- A file containing answers to all Coding Exercise and Personal Background questions (please name it 'Lastname_Answers.pdf')
- Your undergraduate academic transcript (please name it 'Lastname_Transcript.pdf')