**Meeting attendees.**

Xia Jiang,  Garrett Barber

**Meeting time**

2:00 – 3:00 pm, 2/1/2023

**Meeting agenda (an addition meeting in response to an email question).**

1. Review the progress of the work assigned last week.
2. Since the readmes for the tested are not completely updated yet, Dr. Jiang will do the tests during the week once all the readmes enhanced and pushed to the github repo.
3. Discuss issues encountered during the week.
4. Work assignment.

**Research Design**

iRCT – an intelligent pseudo randomized controlled trial.

1. Implement the simple matching estimator method as described in Jiang’s slide (AboutDID.pptx).
2. Created a simple test dataset using the same example Jiang used in her slides.
3. Test 1) with the dataset created in 2).
4. Include a transform function in our iRCT (See the MBIL package) that can convert all the covariates into one variable (such as the X in the example).
5. Develop a function that convert multi-value variables into a binary variable and include it in the iRCT pacakge.
6. Apply iRCT to our LSM-15year.
7. Identify more interesting “treatment” variables such as Menopausal status in our LSM-15 year, use method developed in 5) to convert them into binary each respectively, if they are non-binary. Then apply iRCT each respectively.
8. Compare what you learned from using iRCT with what you can learn from our MBIL methods, and from the other causal learning methods that we have access to.
9. In terms of the completed causal network, such as the you (Garrett) learned using FCI with our LSM-15year, you can just retrieve the direct causes to the target variable (BCM) and compare with our MBIL and iRCT.

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**Progress made in the past week.**

As shown by Garrett’s file called /Users/xij6/Documents/Research/git/XiaJiang-2Github/iRCT/docs/Garrett's findings for 1.18.23 meeting.docx

**Issues/Questions and Comments**

Jiang’s edits and comments based her testing of iRCT on 1/28/2023

1) Found error on README.md of iRCT. See screenshot below.

Graphical user interface, text

Description automatically generated

2) Revised and edited iRCT README.md

3) See warning below. Hope we can get rid of these warning.

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See the follow warnings from the testing:  
See the caveats in the documentation: https://pandas.pydata.org/pandas-docs/stable/user\_guide/indexing.html#returning-a-view-versus-a-copy  
 self.obj[key] = value  
/Applications/anaconda3/lib/python3.7/site-packages/pandas/core/indexing.py:1676: SettingWithCopyWarning:  
A value is trying to be set on a copy of a slice from a DataFrame.  
Try using .loc[row\_indexer,col\_indexer] = value instead  
  
See the caveats in the documentation: https://pandas.pydata.org/pandas-docs/stable/user\_guide/indexing.html#returning-a-view-versus-a-copy  
 self.\_setitem\_single\_column(ilocs[0], value, pi)  
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**Ongoing tasks that cover more than a week**

Developing iRCT and our CausalLearning package.

**Specific tasks for the coming week (the original task assignment for two weeks)**

1. Finish up pc.py.
2. Write a simple python file to call your jar file concerning the rFCI.
3. Develop a web application for iRCT and the CausalLearning each respectively. You don’t have follow the format/style of our current iMed and iMedbot website, but you can use them as your resources. Using the local host to test it for now.
4. Work on the tech reports/papers. Look into some relevant journals for format of methodology paper. I will share with a list of relevant journals. Also you can look into the series of Journals under MDPI (https://www.mdpi.com/about/journals)

**Less urgent tasks**