Presentation 0501

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Research Topic

1. During the pandemic, is the **well-being index** of home workers lower?
2. Whether the **time allocation** of home workers differed significantly from that of the control group.

Data & variable

Data

IPUMS Time Use data 2020 & 2021

Well-being index variable

0 for the worst life, 10 for the best life

Time variables

`exercise time`, `social time`, `sleep time`, `commute time`, `work time`, `self-care time`. (unit: minutes per day)

Treatment

`Distance working or not`

Control variables

`Occupation`, `industry`, `family size`, `race`, `sex`, `...` etc.

Empirical strategy

variables:

- Outcome var. (Y): `well-being` & `Time use`
- Treatment (D): `Distance working or not`
- Control var. (X): `occupation`, `industry`, `family size`, `race`, `sex`, `...` etc.

pdslasso

The `occupation` and `industry` are categorical data, when we put these two variable into the regression, it will be a lot of dummies, so we use LASSO here to kick off those unimportant control variables.

psmatch

After controlling **all** the workers' characteristics, how working form home affect well-being/Time allocation.

Further Analysis

Subgroup Analysis

Put interaction term into model, such as age$\times$`WFH`, `sex`$\times$`WFH`.

Mediation Analysis

$$D|X \xrightarrow{\alpha} \mathit{TimeUse} \xrightarrow{\beta} \mathit{WellBeing}$$

$$D|X \xrightarrow{\gamma} \mathit{WellBeing}$$

To check whether if α and β are significant.