

***Discussion:***  
**The Gender Difference of  
Peer Influence in Higher Education  
(Li Han and Tao Li)**

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# 1 Peer effects in higher education

- Results

- (a) There are (strong) peer effects in higher education

- (b) Only females experience peer effects

- (c) Effects are asymmetric: smart help stupid, stupid do not hurt smart

- (d) Results are robust across outcome and treatment variables

- Contributions

- (a) New dataset (Chinese college), better suited for the question

- (b) Careful analysis of a quasi-randomized experiment

- (c) Interesting results, different from previous studies

## 2 Why China?

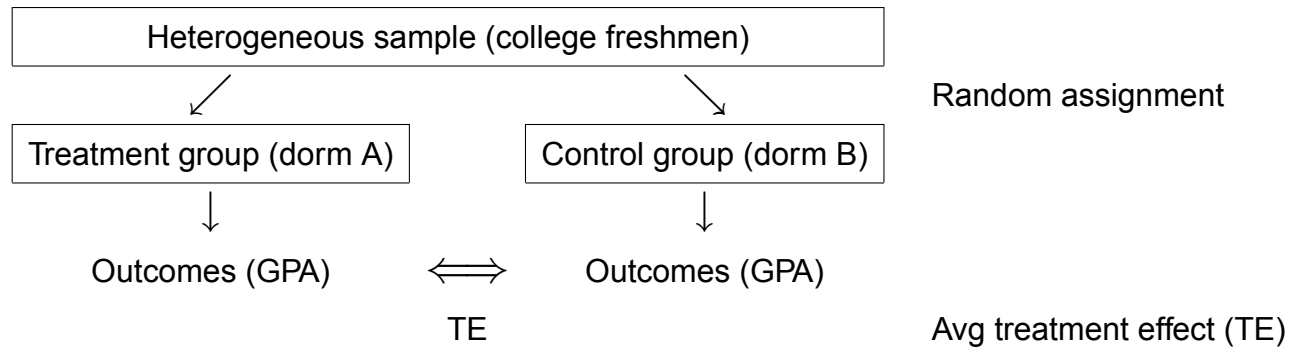
- Interesting in itself!
- Larger social interaction between students

$$\Delta\text{outcomes} = \text{PE} * \text{interaction} * \Delta\text{peers}$$

- Students share small room for long period (4 years)
- Few other opportunities for voluntary social interaction
- Roommates in same year and same major
- Random component in dorm room assignment
  - Parents and students have no say in room assignment
  - Administration assigns students to rooms quasi-randomly
  - Room change strongly discouraged

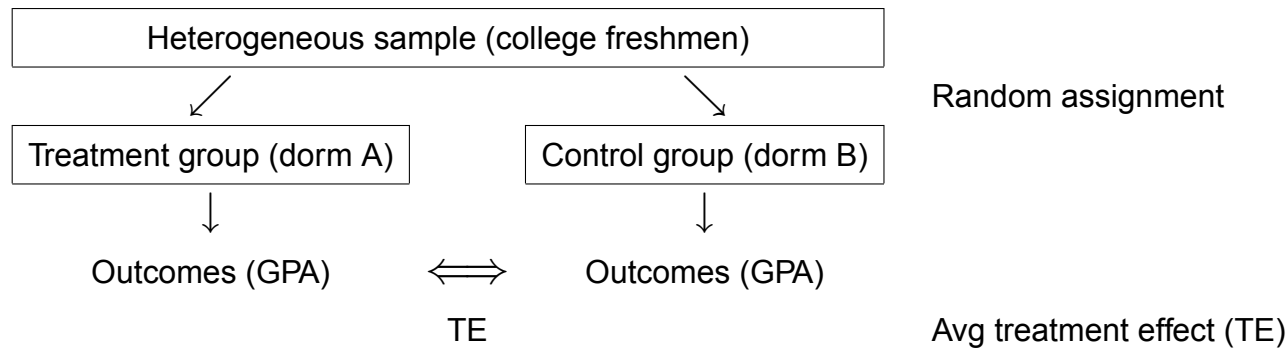
### 3 Randomized experiment

- An ideal experiment:

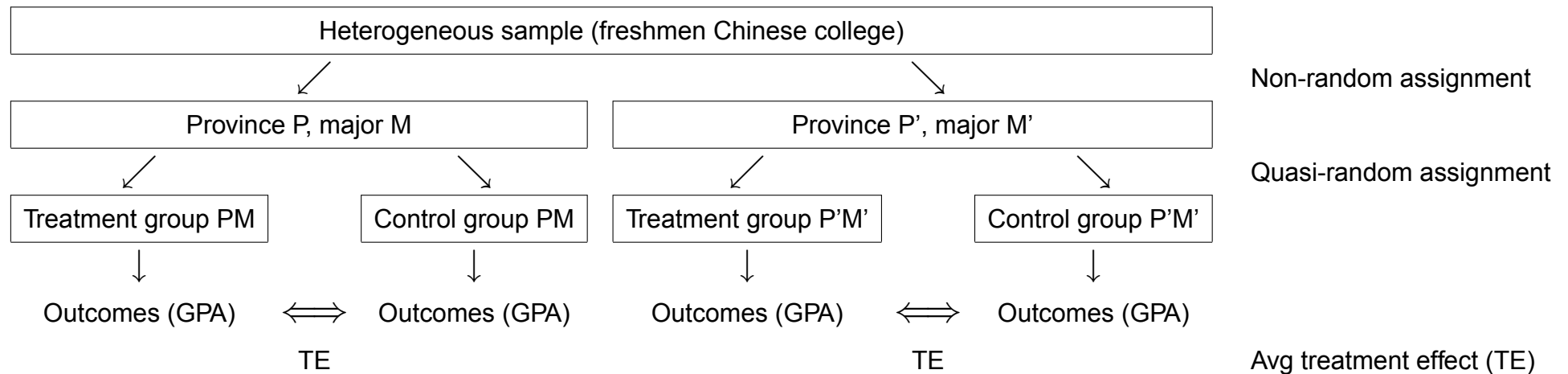


## 4 Randomized experiment

- An ideal experiment:



- The quasi-experiment in this paper:



## 5 Randomized experiment

- Quasi-random assignment of freshmen to dorms
  - Housing office copies student ID numbers from Excel file to vacancy list
  - Is this random?
  - Careful description of the process & randomization checks
  - Restrict to non-host-province subsample
- But: if assignment is random, then why is roommates' ability different?
  - cf twin studies
  - Sampling error?
  - Is this random?

## 6 Gender differences in peer effects

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- Results

- Women:  $\beta_1/\beta_2 = 0.71^{**}$

- Men:  $\beta_1/\beta_2 = -0.28$

- Technical remarks

- Need standard errors on the estimates of interest, i.e.  $\beta_1/\beta_2$

- Is the *difference* between men and women significant?

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- \* “Females obviously work harder, ...” (p.3)
- \* “Males obviously play more soccer”

# 11 Summarizing

## 1. A very nice paper!

- Interesting topic
- Carefully implemented empirical work
- Provoking conclusions

## 2. Quasi-randomized experiment

- Some doubts about the source of the identifying variation

## 3. Gender differences in peer effects

- Need to test the difference
- Can we directly test the hypothesis of interest?

## 4. External validity

- The Gender Difference of Peer Influence in Higher Education *in China*

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