IN4402: Applied statistics for management and economics
PRESENTING QUASI-EXPERIMENTAL METHODS

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LATERCERA PM

Paranoia por el Joker en EEUU: el estreno del Guasón pone en alerta a la policía

Autor: Patricia Reyes   JUE 3 OCT 2019 | 01:48 PM

- How could we know?

- Let's design a study…

CSP

- Let's think of what we would need…
  - Comparable groups
  - Internal validity (that changes in X affect changes in Y)

- What are we **avoiding**?
  - Endogeneity

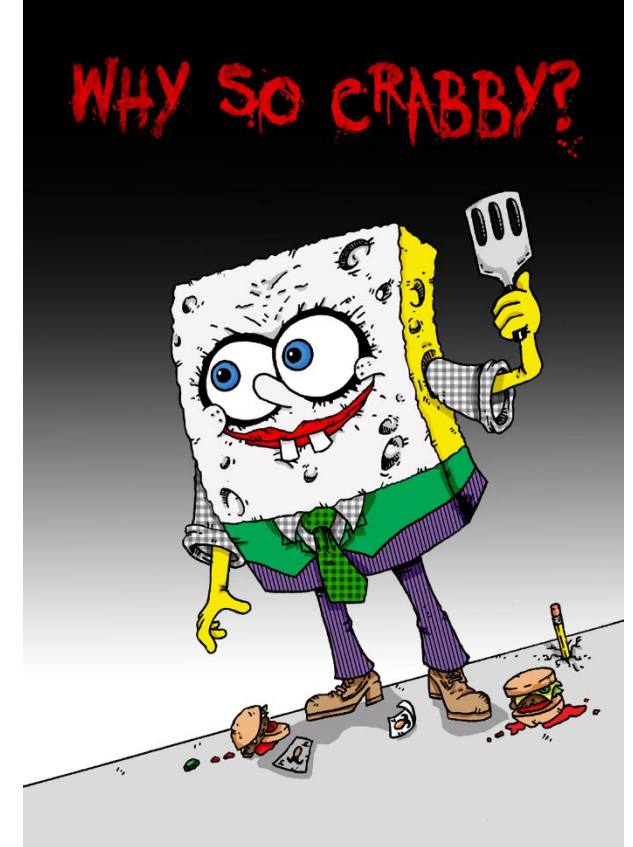 (this is, X correlated with ε when $Y = X\beta + \varepsilon$)

- What if we have a variable (*Z*) that removes correlation between *X* and *ε*?
    - **Exogenous** differences
    - Using one variable as an **instrument** of another

- What if we study crime **tendencies before** and **after** actions movies are showed?
    - If **tendencies** are **similar**, maybe we don't need comparable groups.
    - Just the **difference** matters

CSP

- What if we **artificially** build a **comparable** group?
  - Only reason to pass an action movie was the population of a State, we could use a **control**

- We could compare medium populated states around a **cut-off point**
  - If breaking point of showing or not a movie was P people, then being **little down P** and **little above P** would be similar

- How could we **be sure**?

PART IV: CUASI AND NON-EXPERIMENTAL METHODS

- Instrumental Variables

- Differences in Differences (and natural experiments)

- Panel Data

- Regression Discontinuity

- Robustness Check

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