Research Ethics (3)

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Question:

• I made you read the actual Ioannidas article in PLOS one instead of some pop-lit summary of it in the economist or NYT. Was this:
  • A. Useless, mean, and misguided
  • B. I understand why you did it, but really?
  • C. A questionable choice for the Thursday night before homecoming but maybe another week
  • D. A welcome challenge
The Ethics of Randomized Controlled Trials

• On a randomized experiment on the effects of public housing in NYC:

• “They should immediately stop this experiment,” said the Manhattan borough president, Scott M. Stringer. “The city shouldn’t be making guinea pigs out of its most vulnerable.”
The Ethics of Randomized Controlled Trials

• Claim:
  • RCTs (experiments) are the best ways to know what works.
    • Wasting money (and failing to produce results) in development economics literally kills people.
    • It is unethical NOT to test programs fully

• Counterclaim
  • We don’t run many experiments in rich countries
    • When the “treatment” is valuable, control groups are inherently unethical.
    • The power disparities say it all.
Publication Bias

• First: p-values and rejecting the null hypothesis
  • .05 as a critical value
  • If the null hypothesis is true (i.e. if the treatment has no effect in the overall population), there is less than a 5% chance we would see a value this large in our sample.

• What happens if researchers run many many studies but only publish those with significant results?
Publication Bias (Solutions)

- Consumer caution (and journalistic caution)
- More replication
  - Posting replication data and .do files is now mandatory at most social top science journals.
- Publication of null findings

- Many Labs Reproduction project at UVA
- Ioannidas is running a meta-research lab (i.e. a lab that evaluates the replicability of research at top medical journals)
What about fraud?

- Michael LaCour
  - Police patrols vs. fire alarms