In-person session 11

October 31, 2022

PMAP 8521: Program evaluation
Andrew Young School of Policy Studies

Plan for today

Super quick R thing

IV questions

IV fun times

Quick R stuff

Why did my nonparametric plot look wrong??

Reprexes!

Why can't we use `rdrobust()` with `tidy()` or `modelsummary()`?

IV questions

Given the strict criteria for instrumental variables, they seem pretty impractical and uncommon (especially compared to diff-in-diff and RDD).

Why do you include instrumental variables as a part of this course?

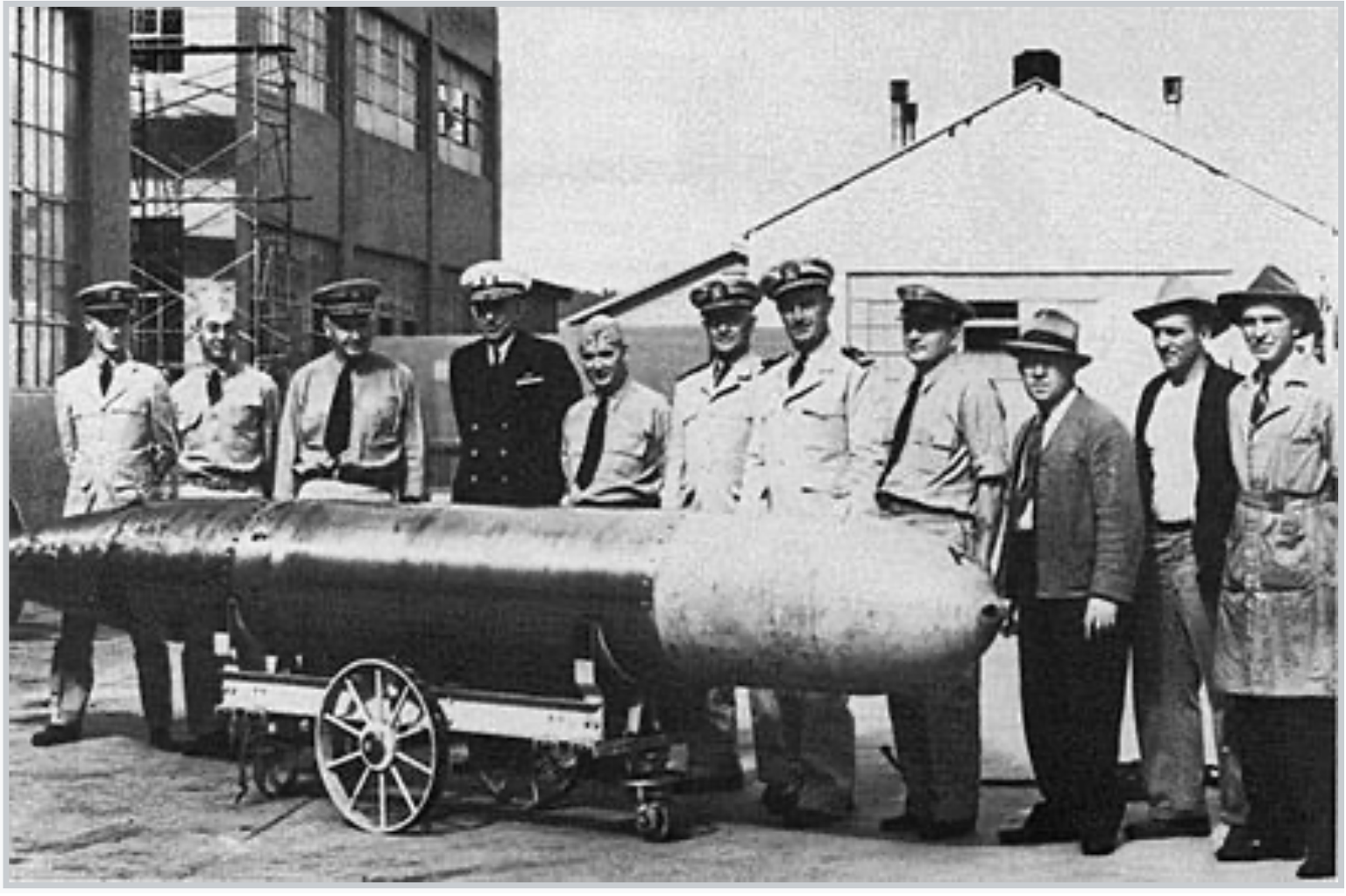
What's really the point of doing IV if finding instruments is so difficult and easy to mess up?

Why even bother?

Is there like a “bank” of good IVs?

Do you have a method that helps you think of instruments, or a popular process that people usually use to come up with ideas?

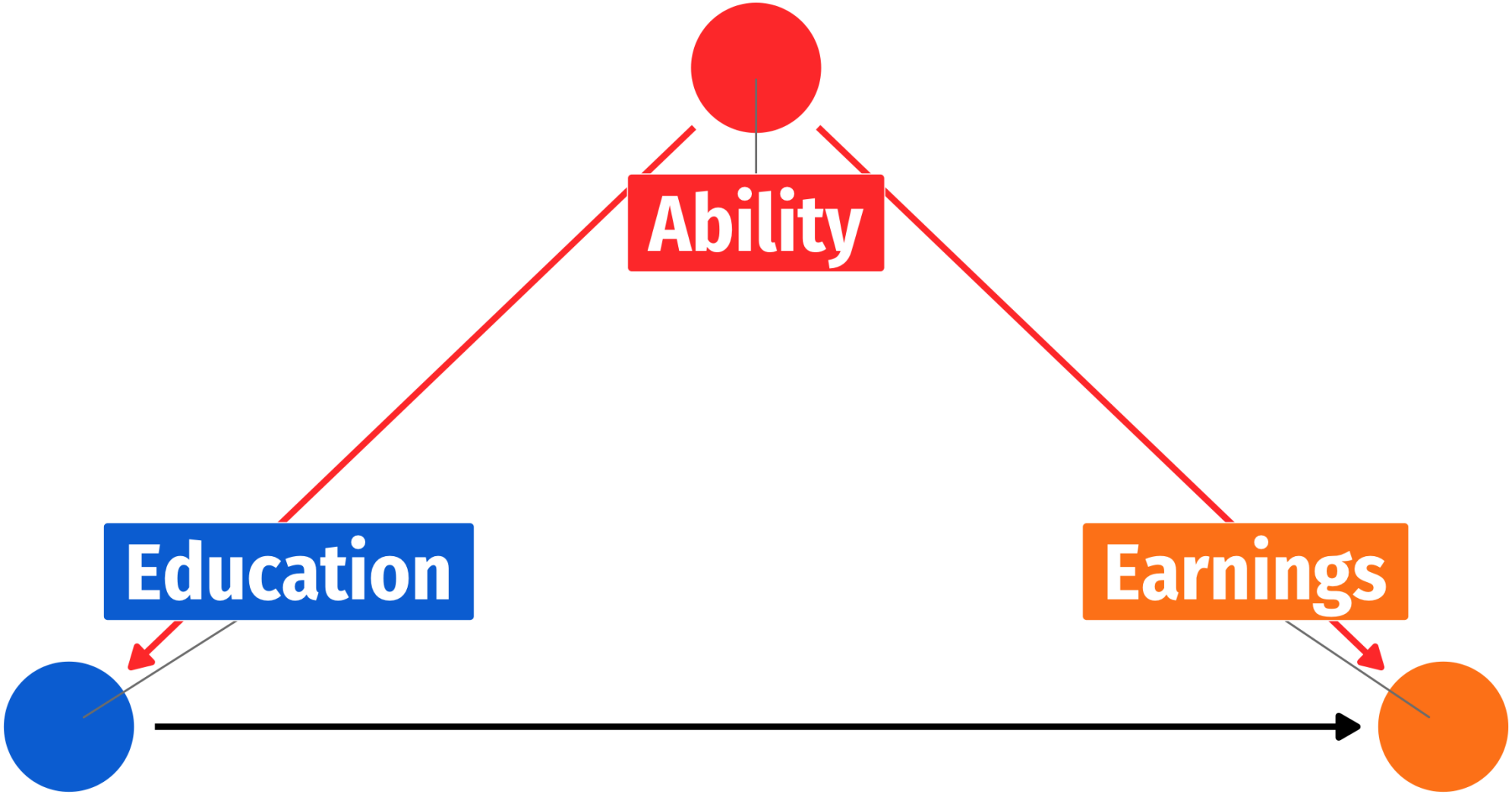
What does it mean to tell a good story about excludability and exogeneity?



Why would we use instrumental variables when we can simply use DAGs to control for things instead?

What is the advantage of using an IV versus trying to find a variable that is correlated with the excluded variable of interest? For example, trying to find a variable highly correlated with "ability"? This seems also difficult but less difficult than finding a true IV.

Could we assume that things like “ability” are latent variables and then try to model them directly?


Ability
Education
Earnings

In the lecture you mentioned that the instrumental variable should be weird (or make people say huh?). However, in *The Effect*, the author states that the instrument should be relevant. This is a bit mixed messaging. Which approach should we use?

Formal definitions of relevancy, excludability, and exogeneity

Why are things like weather, distance, or terrain bad instruments? How do they violate the exclusion restriction?

Lecture slides

Fuzzy RDD requires an instrument,
but instruments seem impossible to find,
so can we ever really do fuzzy RDD?

IV fun times