# In-person session 11

**March 30, 2023**

PMAP 8521: Program evaluation
Andrew Young School of Policy Studies

# Plan for today

**Super quick R things**

**IV questions**

**IV fun times**

# Quick R stuff

# Selecting things!

# 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?

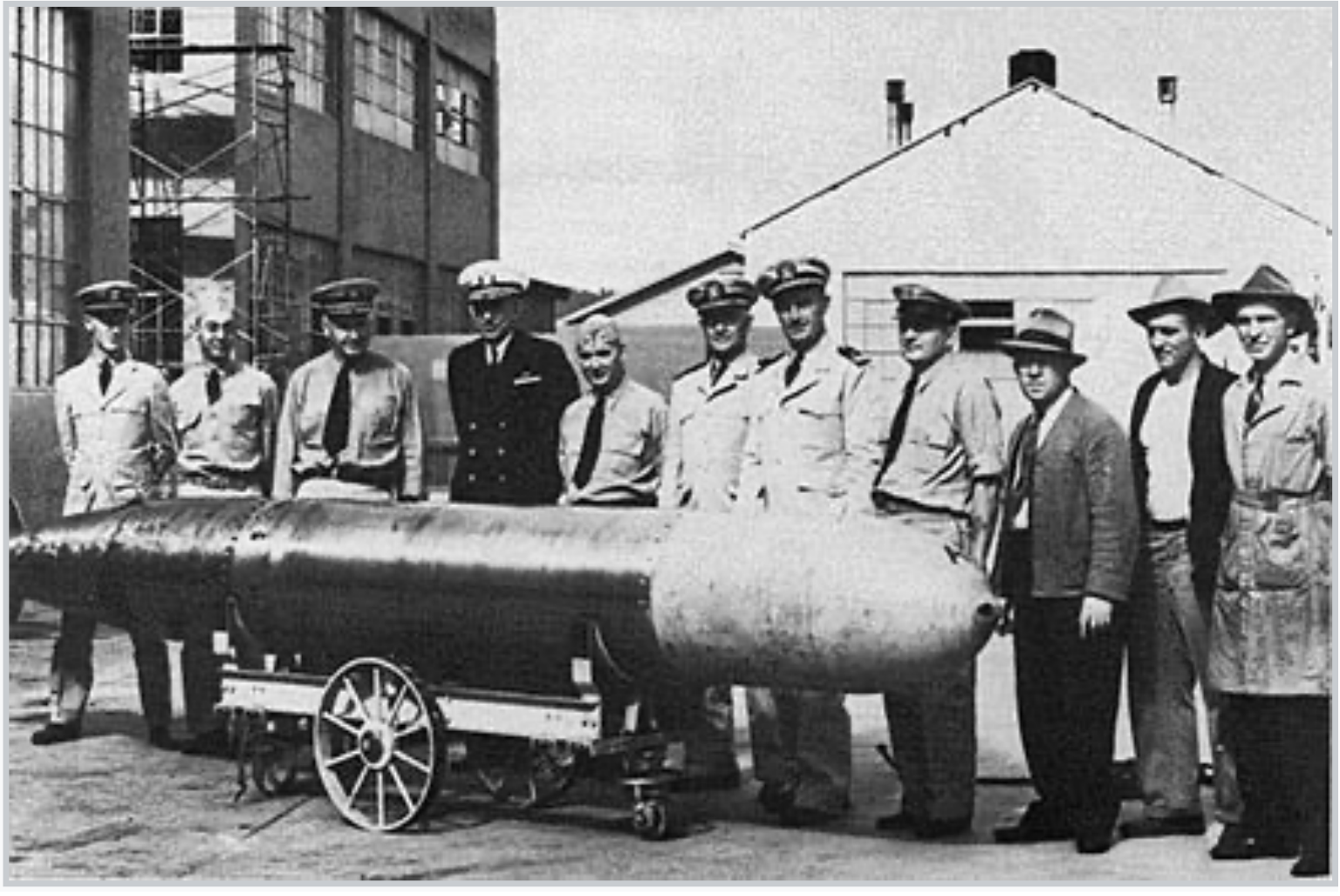
What's really the point of doing IV if finding instruments is so difficult and easy to mess up?

# 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?**

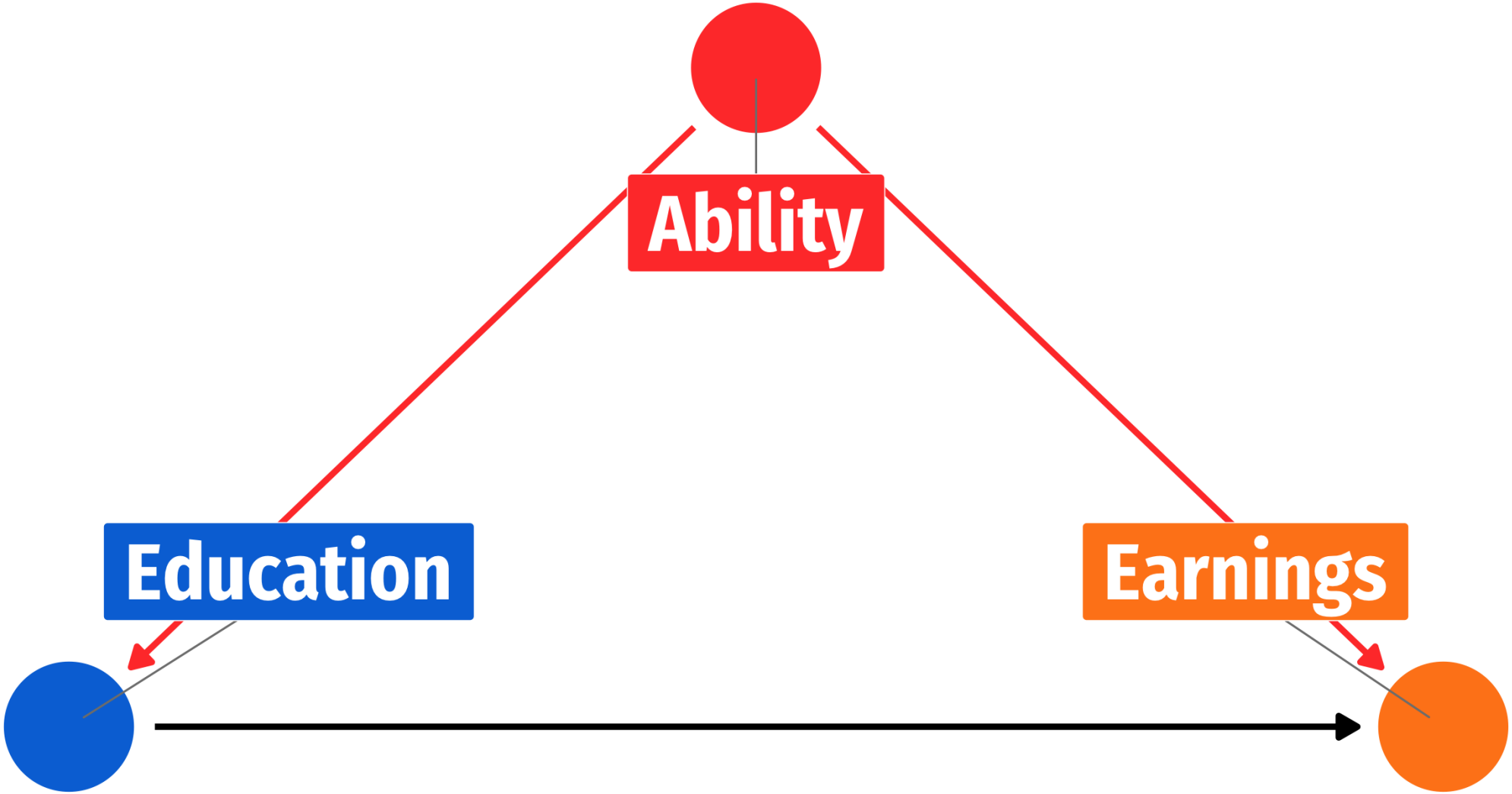
# What does it mean to tell a good story about excludability and exogeneity?



**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?**

# Schedule update

# IV fun times