

# In-person session 11

**March 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 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?**

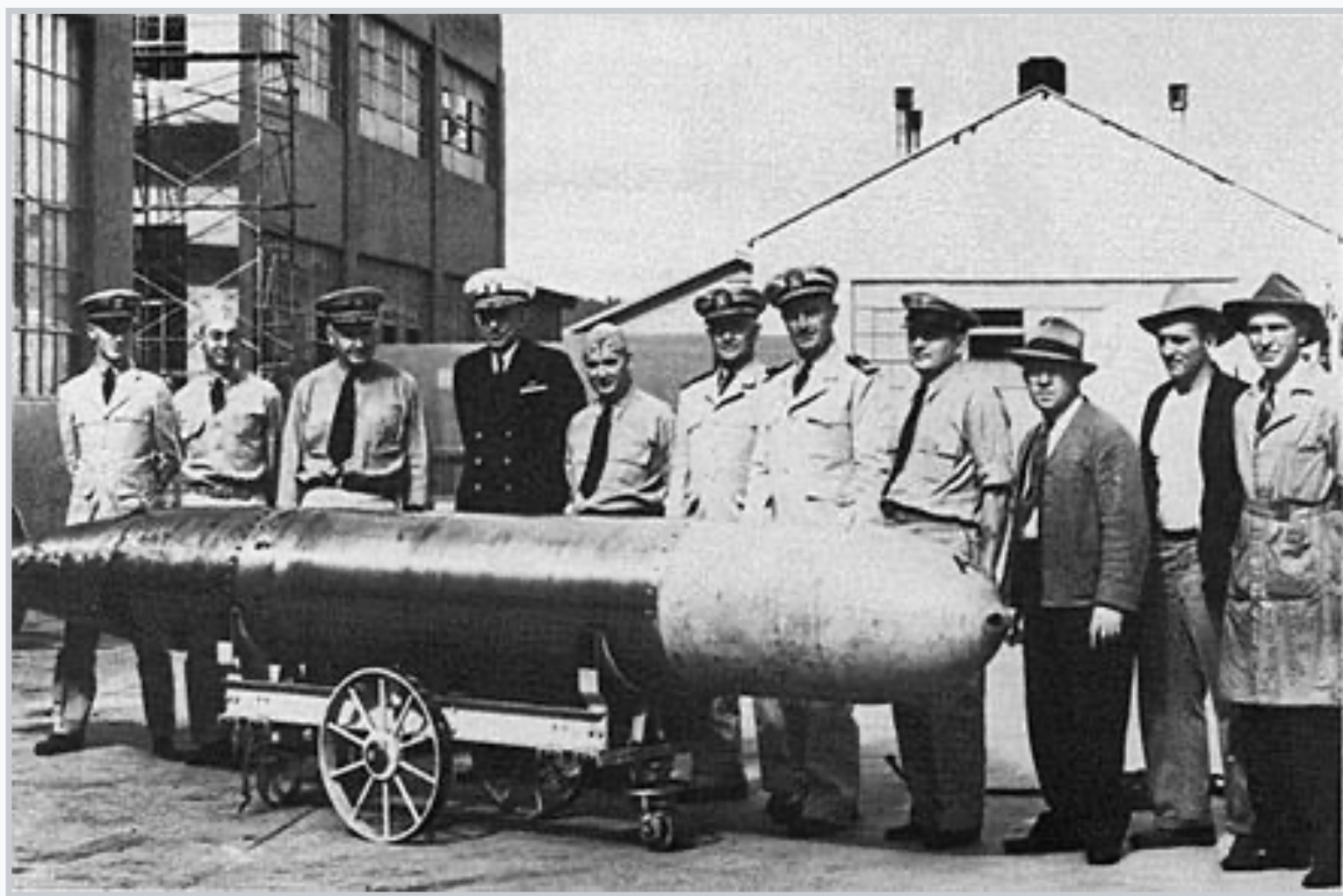
**Why even bother?**

**Is there like a “bank” of good IVs?  
Finding the right IV seems like  
taking a bunny out of a magician’s hat.**

**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?**

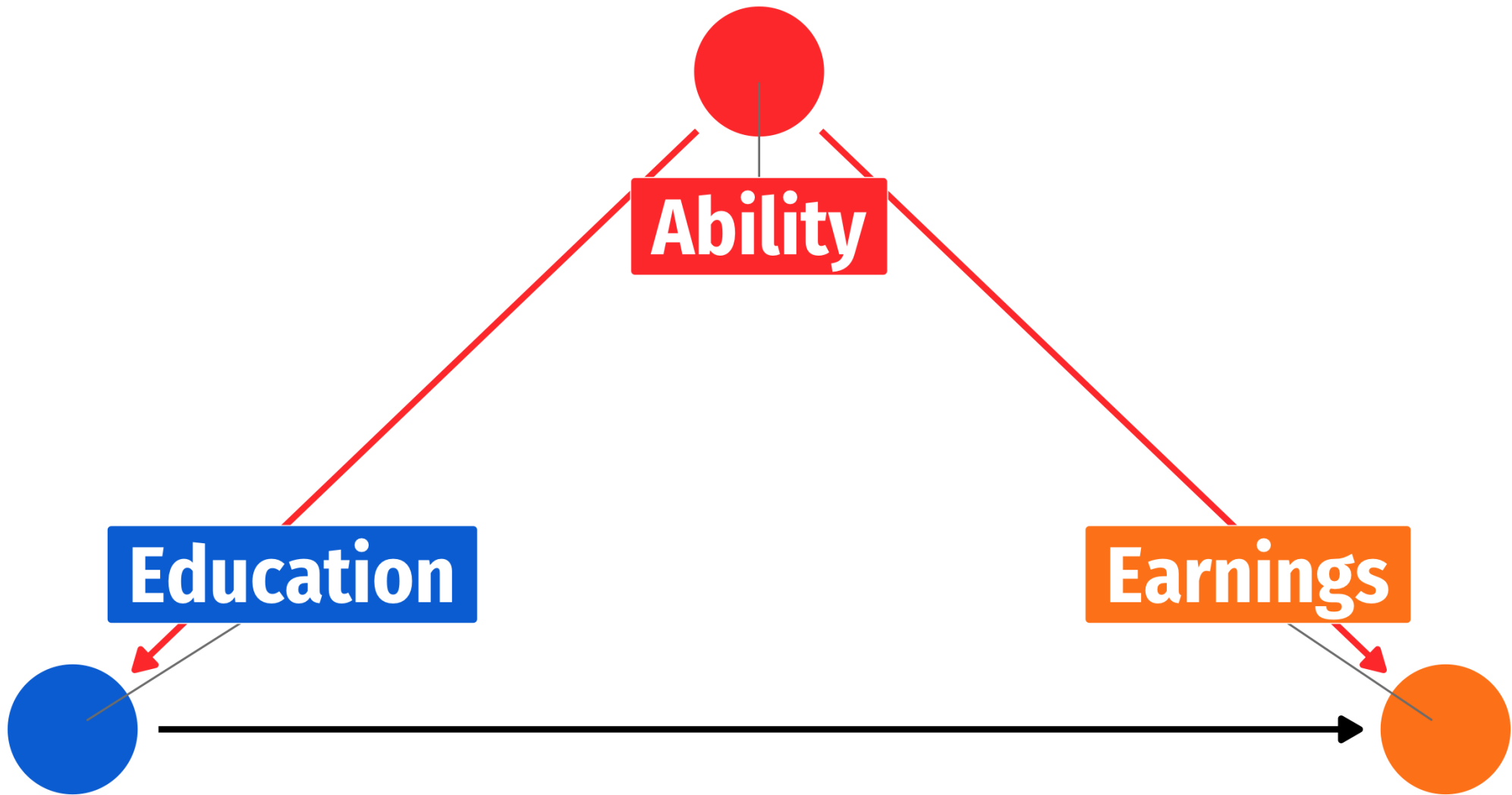




**Why would we use instrumental variables when we can simply use DAGs to control for things instead?**

**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?**



**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