In-person session 11

April 2, 2026

PMAP 8521: Program evaluation
Andrew Young School of Policy Studies

Plan for today

General questions

IV questions

IV fun times

Synthetic data fun times

General questions

The final project instructions mention that we need to preregister our questions.

Do we really need to do that?

Tell us more about exam 2

Percentages and percentage points

Summarizing data yourself vs. letting ggplot do it

Citations with Quarto

Inline chunks and hidden chunks

IV questions

Can you review endogeneity and exogeneity?

Slide from lecture

Can you review the three IV conditions?

Slide from lecture

Why does using instruments mean we can write off the other influences?

Does this actually work in practice?

I just want to poke holes in every possible instrument story

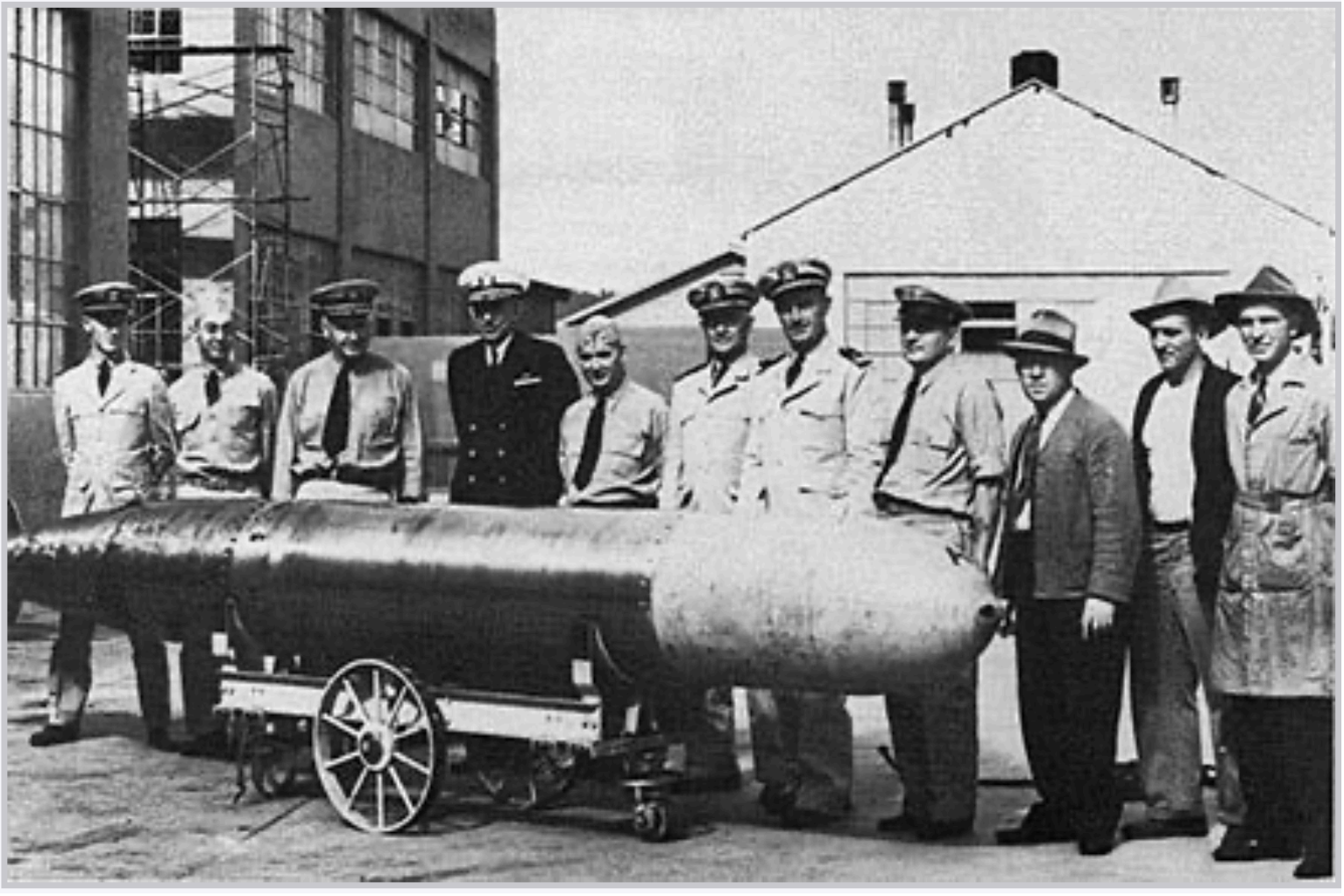
Are there certain disciplines that tend to use instrumental variables more than others, like how we learned that DAGs are big in public health and diff-in-diff and RDD are all the craze in econ?

Why are you making us do 2SLS manually when `iv_robust()` exists?

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?



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

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?

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

IV fun times

Synthetic data fun times!

Basic process

1: Draw a DAG

2: Create standalone exogenous columns

3: Connect endogenous columns

4: Polish columns

Iterate. Iterate so so much.