Class 3 — iTV Experiments
Populations, Cases, Local ATE

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Here are a few of the questions that arose during my reading. You will have others, so this list is not meant to restrict our discussion.

- Review 1: What are the minimal stories or committments reuqired for valid statistical inference from a randomized experiment?
- Review 2: How do each of the two approaches to statistical inference for counterfactual causal quantities approach the "fundamental problem of causal inference"?
- What is the ATE? Why would we care about it? What is the $\widehat{\text{ATE}}$? What justifies the use of $\widehat{\text{ATE}}$? When is OLS a good way to get $\widehat{\text{ATE}}$? When might OLS be a bad way to get $\widehat{\text{ATE}}$?
- Why would the SE from an OLS of outcome on treatment tend not to be correct? [What about bias (see Imbens footnote 18)? Or consistency?]
- What is "data mining" and why would we care (And why does it come up, twice, in Deaton's discussion? And how can one work around those two different criticisms?)
- Deaton claims that randomized trials ought not to have any special claim regarding the kind of knowledge these designs provide. For only one example: "This means that, if the World Bank had indeed randomized all of its past projects, it is unlikely that the cumulated evidence would contain the key to economic development." (442). What are Deaton's concerns?
- Imagine we wanted to make a policy, and we had money to randomly sample people from the population potentially subject to the policy. We then ran a randomized experiment on the random sample. How might or might not results from this procedure be a "reliable guide to policy in the parent population"?
- Imbens (defender of randomized experiments) says "Similarly, questions involving general equilibrium effects cannot be answered by simple experiments." What does this mean?
- When would a structural model be useful even given a randomized experiment?
- How does reading Sears and Henrich et al make you want to change your designs? (Or not change them but change how you think about them?)
- Sears and Henrich et al. are concerned that the behavioral sciences understanding of "human nature" is biased because of our lab study populations. What does this mean? How does description of an aspect ("the nature of") a population ("humans") relate to causal theories or mechanisms generating behaviors within such populations?
- Is the issue for Sears and Henrich et al more the subjects or the lab-based nature of the research? What is the issue?
- What does Sears recommend? What do we think about his recommendation?
- What does Henrich et al recommend given what they describe as the highly unrepresentative nature of Western, Educated, Industrialized, Rich, and Democratic (WEIRD) study populations? What do we think about their recommendations?