



# PHILOSOPHY OF ECONOMICS & POLITICS

## LECTURE 12: EVIDENCE-BASED SOCIAL POLICY

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# Today's agenda

- \* Recall Michael Young: **segregation works** — obviously!
- \* But how do we know?
- \* Today we are going to look at a development in recent economics and social science that is receiving a lot of (philosophical...) press: **evidence-based social policy**
- \* We'll understand how exactly this movement understands evidence, why it does so, and what's wrong with it
- \* If we have time, I'll briefly introduce the four main strategies to deal with the so-called '**problem of external validity**'

# Evidence-based social policy

- \* EBSP is a strong and highly acclaimed recent movement especially in the areas of education and development economics





# Evidence-based social policy

- \* What, then, is EBSP?
- \* Basic idea: **social policy decisions should be based on the ‘best available evidence’**
- \* That much is obvious, trivial even. But what’s the ‘best available evidence’? **The hierarchy of evidence**
- \* It can be seen as promoting a stance similar to one of John Stuart Mill’s: **experiments are the gold standard for causal inference** (method of difference)

# EBSP Movement in UK

- \* List of 'What Works Centres' in UK:
  - \* **National Institute for Health and Care Excellence** (NICE; Health and social care)
  - \* **Sutton Trust/Educational Endowment Foundation** (Educational achievement)
  - \* **College of Policing/What Works Centre for Crime Reduction** (Crime reduction)
  - \* **Early Intervention Foundation** (Early intervention)
  - \* **What Works Centre for Local Economic Growth** (hosted by LSE, Arup, Centre for Cities; Local economic growth)
  - \* **Centre for Ageing Better** (Improved quality of life for older people)
  - \* **What Works Centre for Wellbeing** (Wellbeing)



# EBSP: Examples from education

- \* RCTs have been performed to test claims about:
  - \* the role of technology in schools ('computer-aided instruction')
  - \* class size
  - \* school vouchers (allocation of vouchers by lottery in Bogotá, Colombia; Metco-programme in Boston)
  - \* compulsory attendance laws (in the form of 'natural experiments')
  - \* achievement incentives ('cash for grades')
  - \* macro education policy (e.g., the effects of a large-scale expansion of higher education in the West Bank and Gaza Strip)

# In favour of RCTs

- \* Observational studies always face the problem of confounders
- \* The ‘standard solution’ is to condition on background factors (socio-economic status, income, age, gender...)
- \* But: (a) Every economist comes up with her own list of favourite background variables; and (b) results tend to be highly sensitive to the exact choice
- \* Randomisation is often thought to solve this problem
- \* A randomised trial (generally speaking) also allows the blinding of researchers, which helps with various biases



# Against RCTs

- \* The questions that can be addressed with RCTs are very narrow, in a twofold sense:
  - \* They concern only the ‘efficacy’ of policies
  - \* They identify an ‘average causal effect’
- \* We’d like to know tons of things besides efficacy: cost-benefit considerations, side effects, implementation, moral, cultural and political considerations...
- \* Average causal effects are potentially true of no-one (no woman has 1.66 children); a positive overall result might mean that the policy is extremely beneficial to a small minority but harmful to the majority



# Against RCTs

- \* One main advantage of RCTs in medicine is the possibility of blinding
- \* But that's hardly an option in social science (you can't hide from a subject that you've sold him a bed net!)
- \* Randomisation might introduce novel kinds of artefacts: risk-averse subjects might not like the fact that they're playing a lottery and leave the experiment in order to obtain the treatment through a different route for sure; so the test population might be unrepresentative with respect to risk aversion



# Against RCTs

- \* The main problem is, however, that of external validity: there is no guarantee that the results generalise to other settings, and the way in which RCTs are set up makes this problem particularly pressing here
- \* In general, every study is subject to external validity issues (for an analogy, think of animal studies – we never know in advance whether something that works in animals will also work in humans)
- \* But RCTs give us knowledge ‘cheaply’, which comes at a cost because we don’t know what to do with it
  - \* Since we don’t know why a result holds, we have no basis for generalising it
  - \* Results may be relative to a specific intervention
  - \* There may always be ‘general equilibrium effects’



# In defence of RCTs

- \* Proponents of RCTs counter that:
  - \* Everyone faces the problem of external validity (true)
  - \* We shouldn't give up the benefit of executing our own interventions (false – interventions may create new biases)
  - \* We should build on a secure foundation and go on from there (false – even if the basis were secure, what does it help if it's irrelevant to the purpose at hand)
- \* This last point ignores the identification issues RCTs have; and it doesn't address these questions:
  - \* How *many* RCTs do we need to generalise?
  - \* How *similar to the target situation* does our RCT have to be?



# In sum...

- \* Some of the criticisms of the evidence-based policy movement are made by the same authors who criticised the natural experiments/instrumental variables movement (e.g., Deaton, Heckman)
- \* These authors, consequently argue *for more theory* in evidence-based policy
- \* Perhaps we don't need more theory but *better knowledge of the causal mechanisms* that are responsible for outcomes?



# External validity: Strategies

- \* The literature distinguishes **four strategies** to deal with the problem:
  - \* **Investigating mechanisms** (Dan Steel and others): if C causes E in the lab, and we have reason to believe that the mechanism responsible continues to hold, we have reason to believe that C causes E in the relevant policy setting
  - \* **Causal tendencies** (Cartwright): if C causes E in the lab and C has a stable tendency or capacity to bring about E, then C will continue to contribute towards E even in the presence of disturbances
  - \* **Engineering** (Guala): if C causes E in the lab and we build the policy situation in such a way that it mimics the lab closely, we have reason to believe that C causes E there too
  - \* **Field experiments** (List): if C causes E in the lab and continues to do so in a variety of field settings, we have reason to believe that C causes E in the relevant policy setting