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Policy Research

Past Evaluations:

What Do We Know?

Presentation at the Secretary's Innovation Group
Washington, DC

April 10, 2014

Peter Schochet, Ph.D., Senior Fellow

Rigorous Evaluations Are Feasible!

- Many informative random assignment studies have been conducted
  - Range of interventions, including SNAP
  - Multiple settings
  - Diverse populations similar to SNAP recipients

What Employment Strategies Work?

- Models that combine
  - Work experience
  - Skills training (especially in community colleges)
  - Intensive case management and support services
  - Activities that target specific industries
- Providing only transitional jobs does not have long-term effects

How Can the Research Be Improved?

- *Unify* the class of tested intervention across sites
  - Help interpret findings
- Introduce *planned variation*
  - Go beyond the single treatment and control group
  - Vary promising intervention components
- Evaluators should be selected *early*

For More Information

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Quasi-Experimental Designs for Social Policy Interventions

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Introduction and Summary

- There have been significant advances in the use of quasi-experimental methods to create credible comparison groups
- Experimental methods are ***still*** the best starting point for impact evaluations
  - Ensure unbiased estimates
  - Most precise estimates

Problems With Random Assignment

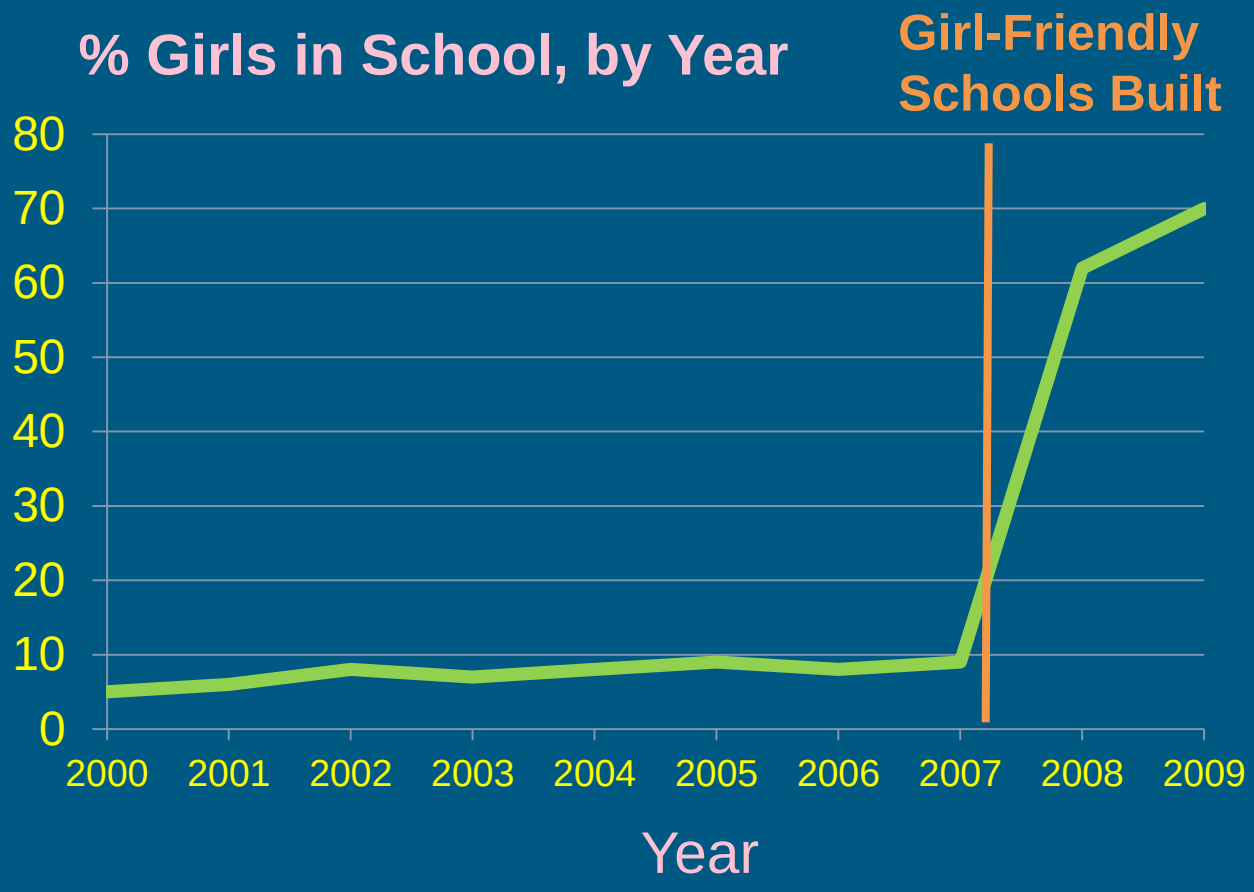
- Cannot always do RCTs
  - Entitlement programs
  - Undersubscribed programs
  - Site refusals
- Takes time to get results

What Are Alternative Designs?

- Pre-post or interrupted time series (ITS)
- Matched comparison group or propensity scoring
- Instrumental variable (IV)
- Regression discontinuity (RD)

Pre-Post or ITS Designs

- **Ok if pre-period outcomes are very stable and there are large post-period effects**



Matched Comparison Group Designs

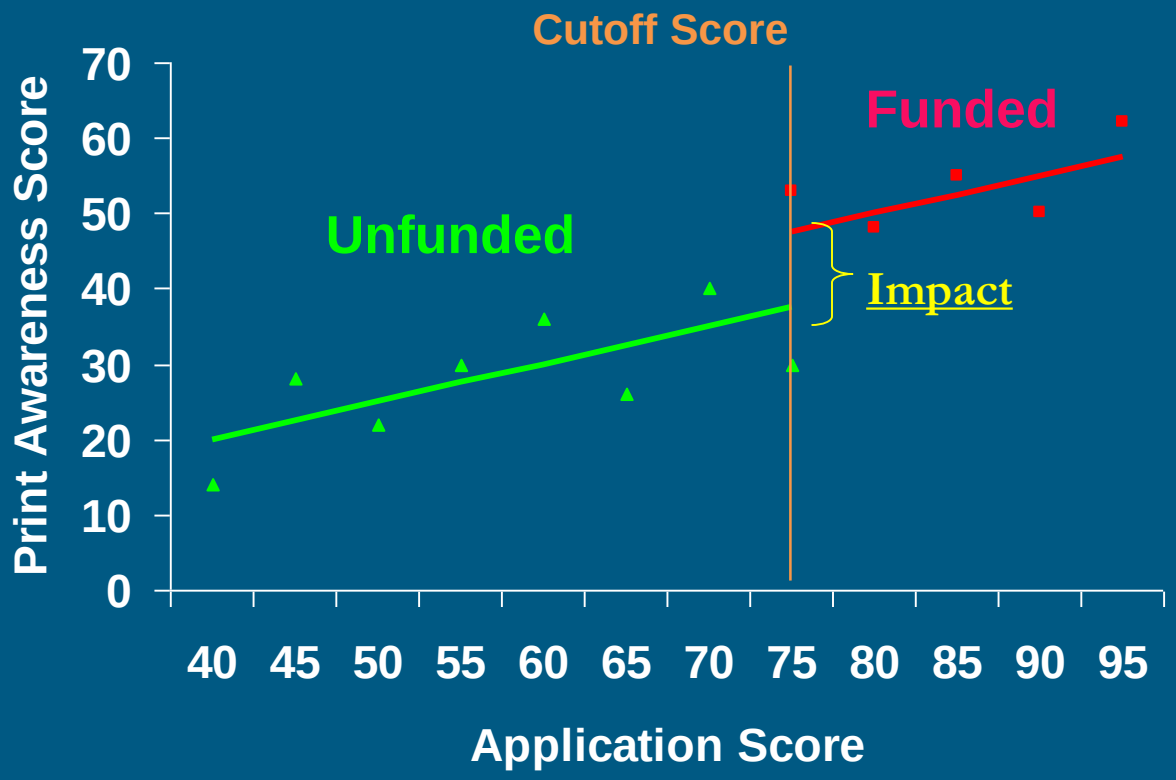
- **Some studies found that these methods cannot replicate impacts from experiments**
  - **LaLonde (1986); Fraker and Maynard (1987); Agodini and Dynarski (2004); Peikes et al. (2008)**
- **Some studies are more optimistic**
  - **Heckman and Hotz (1989); Deheija and Wahba (1999); Mueser et al. (2007); Shadish et al. (2008)**
- **Some have expressed extreme caution**
  - **Smith and Todd (2005); Fortson et al. (2012)**
- **Literature on conditions with better replications**
  - **Glazerman et al. (2003); Heckman et al. (1997); Bloom et al. (2005); Cook and Wong (2008)**

RD Designs

- ***Scoring rule*** **is used to define who gets the treatment**
  - **Income threshold**
  - **Risk index**
- **Becoming increasingly popular**
- **Replication studies are promising (Cook & Wong 2008, Gleason et al. 2012)**

Example: Early Reading First Evaluation

Grants Were Awarded to Sites with the Highest Application Scores



Conclusions

- **Credible quasi-experimental designs are available if RCTs are not an option**
  - ***But need the right conditions***
  - ***Need larger samples than experimental designs***

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Sample Size:

How many study participants?

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Having Sufficient Samples Is *Critical*

- Estimates of program effects are measured with *error*
- Need large samples to be able to say that likely program effects are different than zero
- *Requires sufficient enrollment* to generate large treatment and control groups

What Determines Sample Size Needs?

- Unit of random assignment
  - Smaller samples if *individuals* are randomized than *"groups"*
- Expected effects
  - Smaller samples if impacts are likely to be large
- Whether sites can be pooled
- How much the outcomes vary across people

Example of Sample Size Requirements

Minimum Program Effects on Employment
(Percentage Points)

Number of Sites (100 treatments, 100 controls per site)	Individuals Randomized	SNAP Offices Randomized (10 per site)
1	17	20
5	8	10
10	5	7