Why Do RCT Impact Evaluations?

Notes from Career Academy Research and Practice

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Based on work conducted while at MDRC (www.mdrc.org).
Presentation Outline

- Framework for Impact Evaluations
- Background on the Career Academies Study
  - Policy Context
  - Career Academies
  - Research Design
  - Overview of Findings
- Why Methods Matter
- Implications of the Career Academies for Policy and Practice
- Conditions for Rigorous Impact Evaluations
Framework for Impact Evaluations

- Learn “what works:” Determine the causal effect (or lack of effect) of “interventions” on outcomes
- A long-term and cumulative process
- Questions drive methodology, not the reverse
- Multiple questions require multiple methods
- Methods matter
- Must balance research ambition against operational and political realities
- Knowledge-building should be an integral part of policy development and continuous improvement, not an add-on or after-thought
Context for the Career Academies Evaluation

- Youth employment rates falling
- Wages and earnings stagnant, declining for disadvantaged youth (especially males of color)
- Out of wedlock childbearing rising
- Transition to adulthood lengthening
- Emphasis on academic achievement and “college for all”
- De-emphasis on CTE and STW
- Disappointing evaluation results from school reforms, 2nd chance programs for youth
Career Academies
Program Characteristics and Goals

➢ Key Features
  – *Small learning communities* to promote interpersonal supports and program coherence
  – *Career theme* to combine academic curriculum with career-related course sequence
  – *Employer partnerships* to support career awareness and development activities and work-based learning

➢ Goals
  – *Dropout prevention*
  – *Career development and academic achievement*
  – *Pathways to the labor market and post-secondary education*
What Can Career Academy Research and Practice Offer Evidence-Based Policy?

Practice

- 34-year track record of implementation, planned expansion, and efforts at continuous improvement
- Intervention with goals and core features aligned with important problems in high schools and prominent policy options

Research

- 25 years of non-experimental research and a commitment to learning what works
- 15-year random assignment field experiment involving 9 sites, over 1,700 students, and 12 years of follow-up
- Positive effects on labor market outcomes without compromising on academic goals
Features of the Evaluation

- 9 sites reflecting “typical” Career Academy implementation and urban contexts
- Random assignment field experiment involving over 1,700 students who applied to Career Academies in 1993, 1994, 1995
- Qualitative information on program implementation and context
- Baseline and outcome data:
  - Surveys administered during high school (4 waves)
  - School records data
  - 4-year post-high school follow-up survey
  - 8-year post-high school follow-up survey
Key Findings (High School Years)

Strengths
- Higher level of interpersonal supports from teachers and peers
- Increased exposure to career awareness activities, work-based learning, career-technical courses
- Greater benefits to “higher risk” students

Potential Limitations
- High attrition rates
- Uneven quality of curriculum integration and internships
- Little or no impact on academic performance indicators
Key Findings
(8 Years Post-High School)

- Positive and sustained impact on employment and earnings through 8 years following scheduled high school graduation.
  - Impact for full sample: $2,088 per year (11 percent increase)
  - Impact for young men: $3,724 per year (17 percent increase)
  - Impact for young women: $1,026 per year (not statistically significant)
- High levels of educational attainment, but no impact (positive or negative) from Career Academies.
- Positive impact on family formation and independent living.
Impacts on Monthly Earnings for Young Men
8 Years Post-High School

Monthly Earnings (2006 Dollars)

Months after scheduled high school graduation date
Impacts on Monthly Earnings for Young Women 8 Years Post-High School

<table>
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<th>Months after scheduled high school graduation date</th>
<th>Monthly Earnings (2006 Dollars)</th>
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- Impact
- Academy Group
- Non-Academy Group
Why Methods Matter

- **Outcomes vs. Impacts**
  - Outcomes = *Measures of behavior or performance.*
  - Impacts = *Effects of an intervention on outcomes.*
    Difference between outcomes for program and outcomes for counterfactual.

- The wrong counterfactual risks offering the wrong answer to the right question

- **Outcome standards risk rewarding programs:**
  - based on who they serve, rather than what they do
  - that operate under promising conditions, rather than use promising practices
Impact on On-Time Graduation
High Outcomes/No Impact

Evaluation Sample

National Averages for Similar Students in Similar Schools

Note: National average estimates are adjusted to represent a sample with the same background characteristics as those in the Evaluation Sample.
Judging Program Effectiveness: Outcomes vs. Impacts

Program A

Academy Group

85

Control Group

84

Program B

72

85

Program C

71

53

Percent Graduating On Time
National Comparisons
Post-Secondary Completion
(8 Years Post-High School)

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Academy

- BA or higher: 49.7
- Associate's: 12.3
- Certificate/License: 15.9

Non-Academy

- BA or higher: 50.0
- Associate's: 11.6
- Certificate/License: 17.8

All urban, public high schools

- BA or higher: 27.8
- Associate's: 5.7
- Certificate/License: 11.6
Implications

- Random assignment provided findings that could not have been obtained with other designs.
- Increased investments in career-related experiences during high school can improve post-secondary labor market prospects.
- Career Academies serve as viable pathway to post-secondary education, but not necessarily better than other opportunities.
- Career Academies demonstrate feasibility of accomplishing goals of school-to-career and career technical education without compromising on academic goals.
Conditions for Random Assignment

- Priority Question: What is the impact?
- Ethical and legal standards
  - No denial of services to which otherwise entitled
  - No reduction in expected service levels
  - Informed consent and data confidentiality
- Operational Realities
  - Structured process for program entry or access to resources
  - Excess demand: more eligible applicants than available program slots or resources
  - Fair method for allocating scarce resources
Conditions for a “Fair Test”

- Strong contrast with “status quo”
  - Implementation of program being tested
  - Participant exposure to program services
  - Well-understood alternative to program service

- High quality methods for answering questions about why programs are effective (or not) and for whom

- Dissemination of findings about what works and what does not work
Sustained Investment in Knowledge Building

- Building evidence not just the domain of researchers: partnership among funding agencies, content experts, administrative systems, and researchers
- Set high standards of evidence: grounded in theory, designed for causal inferences and precision, and informed by context
- Mutually reinforcing commitments from partners to balance research ambition and operational realities
Thank you!

For more information on the Research Alliance for New York City Schools:
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Receive regular updates about our work:
steinhardt.nyu.edu/research_alliance/contact