

Making Summer Matter: The Impact of Youth Employment on Academic Performance

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Summer Matters

- Summer is an opportunity for enrichment, remediation, work experience, recreation or risky behavior/crime
- Inequities in access to activities and resources that enhance learning during summer
- Summer learning loss:
 - Achievement declines in summer, particularly literacy achievement (Alexander et al., 2001; Burkam et al., 2004)
 - More so for students living in poverty (Downey, von Hippel & Broh, 2004)

Summer jobs provide a developmental experience with the potential to improve school achievement and other educational outcomes

- However, there is limited research on impact of summer work on academic outcomes

Do Summer Jobs Matter for Academic Achievement?

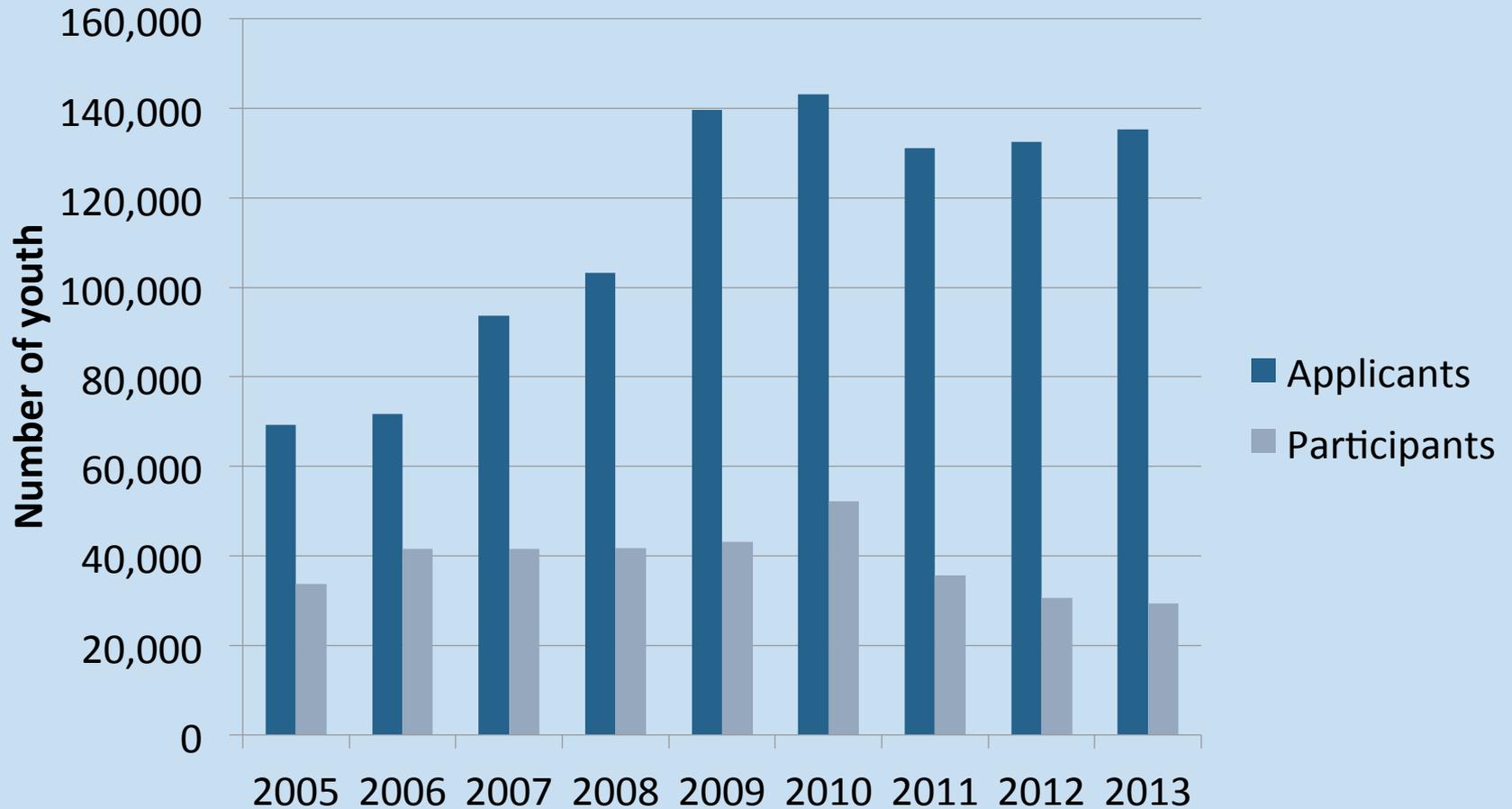
This study examines the impact of summer employment on students' academic achievement.

- Focus on New York City's (NYC) Summer Youth Employment Program (SYEP)
- Approximately 200,000 applications to SYEP from over 130,000 unique students from 2005-2008
- Use a rich longitudinal dataset of NYC public school students' academic and demographic background
- Exploit a naturally-occurring lottery created by over-subscription
- Estimate the effect of summer employment on academic achievement: test taking, passing and scores
- Also examine the effect of repeated program participation

New York City's Summer Youth Employment Program

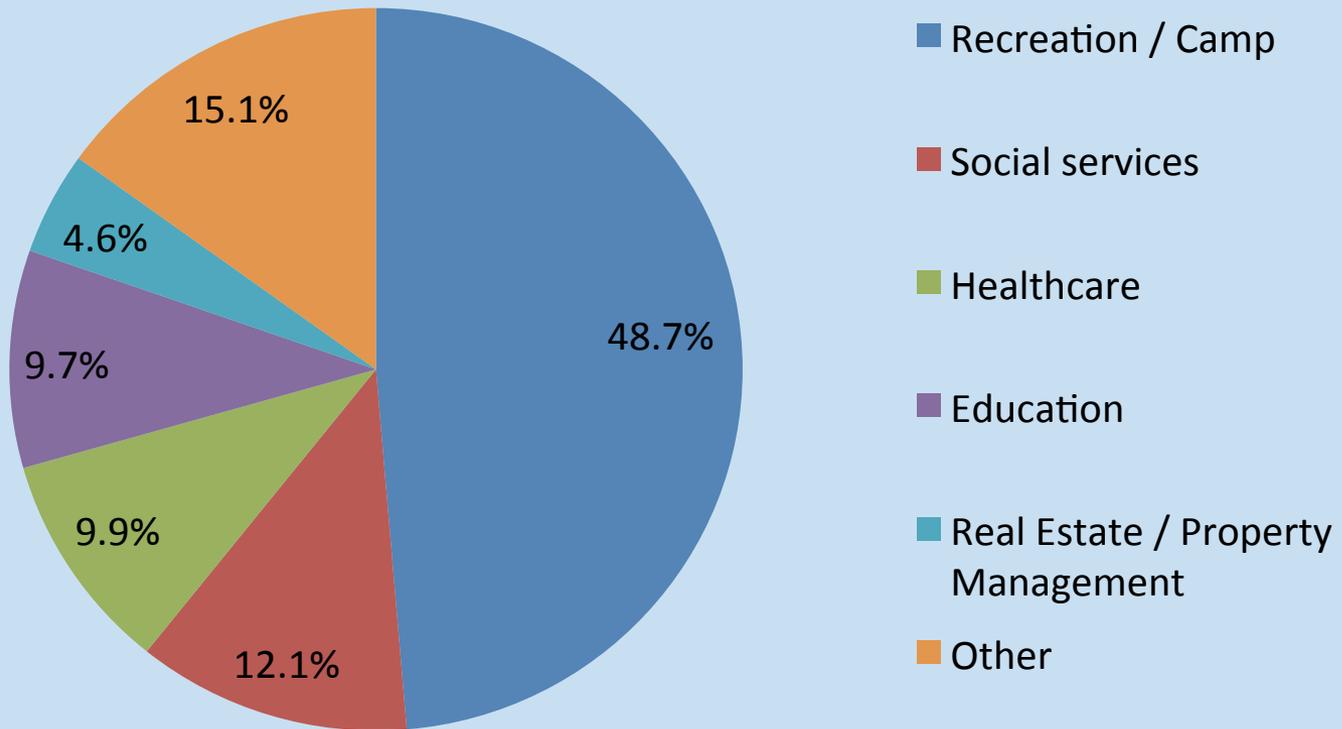
- Administered through the NYC Department of Youth and Community Development (DYCD)
- All NYC residents 14-24 are eligible
- 30,000-50,000 students participate each summer
- Summer job placements are facilitated and supervised by community-based organizations (CBOs) in all 5 NYC boroughs
- Participants work up to 25 hours for six weeks and are paid New York State minimum wage
- Educational & training component – workplace skills and career planning

NYC Summer Youth Employment Program Applicants and Participants, 2005-2013



SOURCE: SYEP Annual Summary, 2005-2013, NYC Department of Youth and Community Development.

NYC SYEP Industry Placement Categories, 2008



Estimating an Impact

- We first estimate intent-to-treat, comparing the outcomes of students who apply to SYEP and win the lottery (treatment group) to those that apply and do not win (control group)
- Not all winners of the SYEP lottery participate in the program-- since winning the lottery is randomly assigned, we can use it as an instrument for SYEP participation
- We then estimate treatment-on-the-treated effects comparing students who win the lottery and participation in the program to those that win and do not participate

Multiple Years of Participation

- Student are eligible to apply to and participate in SYEP multiple years
- Each lottery is independent of others in previous and subsequent years
- No preferential treatment in lottery among second and third year applicants
- We also estimate the effect of a second year and of a third year of participation

SYEP Makes a Difference

- Our results suggest that on average, summer jobs have small positive effects on student achievement
 - Test taking (any exam attempt) improved by 0.5 percentage points (treatment-on-the-treated)
 - Number of attempts improved by 1.6 percentage points (treatment-on-the-treated)
 - Any pass (with a score of 65+) improved by 0.8 percentage points (treatment-on-the-treated)
 - Number passed at (with a score of 65+) improved by 1.3 percentage points (treatment-on-the-treated)
 - Mean standardized exam scores improved by 0.010 standard deviations (treatment-on-the-treated)

SYEP Makes a Difference (con't)

- Also find small, positive effects on graduation outcomes
 - Graduation rate increased by 0.1 percentage points
 - Drop out decreased by 0.4 percentage points (treatment-on-the-treated)

Duration Matters

- Disentangling effects by years of program participation (treatment-on-the-treated):
 - Larger positive effects for second-year participants
 - Test taking improved by 1.6 percentage points
 - Number of exams attempted improved by 2.9 percentage points
 - Number of exams passed with score of 65 or higher improved by 1.5 percentage points
 - Even larger, positive effects for third-year participants
 - Any pass with score of 65 or higher increased by 3.2 percentage points
 - Number of exams passed with score of 65 or higher increased by 6.1 percentage points
 - Mean standardized test scores increased by 0.066 standard deviations

Discussion

- Summer employment can improve educational outcomes and progress in high school
- Although average effects are small, they are promising given high school academic achievement is particularly resistant to program interventions
 - NYC's Conditional Cash Transfer program, for example, offered high schools students \$600 incentive for each regents exam passed, but yielded no significant effect (MDRC, 2013)
 - Even small increases in academic test outcomes may translate into meaningful gains in lifetime earnings and post-secondary education attainment (Deming et al., 2013; Rose, 2005)

How Big Are the Effects?

- Our treatment-on-the-treated estimate that SYEP improves the likelihood of passing any exam at the 65 threshold by .08% is roughly one half the size of the black-white gap of 1.7% and roughly one fifth of the poverty gap of 3.8%
- In a hypothetical allocation of SYEP to the disadvantaged group only, SYEP would reduce the black-white gap and the poverty gap in the number of exams passed (at 65) by almost 20% the poverty gap by almost 45%
- The larger effects of second time participants are large enough to eliminate or substantially reduce the race gap and the poverty gap in exams passed

Cost Analysis

- Roughly \$2,150 per participant
- Drawing on features from SYEP and other social programs, we estimate budgetary cost using:
 - Payment to participant
 - Hours and duration worked
 - Administrative overhead costs of program
 - Cost of educational training component
- Less than 15% of annual per pupil spending in NYC

Implications for Policy

- Summer youth employment programs can be beneficial, but design and type of youth targeted may be important for effectiveness
 - In contrast to earlier programs, NYC's SYEP provides summer-only employment connected to work-related training and mentoring provided by experienced not-for-profit providers, and targets all youth, rather than those out of the system
- Participation across multiple summers
 - Opportunities to participate for more than one summer may be important to fully realize effects
 - Conversely, it may be that students who do not have access to alternate activities or means of finding employment and thus return to the program each year benefit the most

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Thank you

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