

Are High-Quality Schools Enough to Increase Achievement Among the Poor? Evidence from the Harlem Children's Zone

Will Dobbie and Roland G. Fryer, Jr.

Harvard University

April 2011

Outline of Talk

- Motivation
- Brief History of the Harlem Children's Zone
- Data
- Econometric Framework
- Main Results
- Communities, Schools, or Both?

Preview of the Results

- Promise Academy middle school successful at increasing math achievement
- Promise Academy elementary school successful at increasing both math and ELA achievement
- Two pieces of evidence suggest that the schools, not the community programs, explain the results

Motivation

- Large racial and socioeconomic achievement gaps
 - Racial gaps arise at age 2
 - 0.64σ in math and 0.40σ in ELA at school entry
 - Typical Black 17 year old reads at the proficiency level of an average white 13 year old
- Many attempts to increase achievement among the poor
 - Early childhood programs
 - Small schools and smaller classrooms
 - School choice/vouchers
 - Neighborhood/school desegregation
- Understanding whether we should focus on community programs, school programs, or both is of tremendous importance for future reform attempts

Brief History of the Harlem Children's Zone

- Rheedlen Centers for Children and Families started in 1970 as a truancy-prevention program
- Rheedlen developed into an amalgam of after-school programs
- Geoffrey Canada decided to create a new organization to focus on changing the dynamic of an entire neighborhood - the Harlem Children's Zone
- HCZ attempts to address all the problems that poor children were facing with a cohesive network of services from birth to college
- HCZ expanded from their original 24-block area in central Harlem to a 64-block area in 2004 and a 97-block area in 2007

The Harlem Children's Zone



- Harlem Children's Zone Lottery Files
 - 2005 and 2006 middle school lottery files
 - 2004 and 2005 elementary school lottery files
- New York City Department of Education Administrative Data
 - Test scores for grades 3 - 8
 - Enrollment data for all grades
 - 1999 - 2000 through 2009 - 2010 school years

Econometric Framework

- Lottery Strategy
 - Comparison of lottery winners and lottery losers
- Distance by Cohort Instrumental Variables Strategy
 - Identification driven by:
 - (1) a comparison of eligible and ineligible cohorts living in the Zone
 - (2) a comparison of students inside and outside of the Zone to control for year effects

Middle School Results

	Lottery RF	Lottery FS	Lottery LATE	Distance LATE
Math	0.262*** (0.049)	1.250*** (0.074)	0.210*** (0.036)	0.187** (0.076)
ELA	0.050 (0.040)	1.251*** (0.074)	0.040 (0.032)	-0.011 (0.068)
F-Stat				0.000
Observations	1409	1409	1409	39062

Elementary School Results

	Lottery RF	Lottery FS	Lottery LATE	Distance LATE
Math	0.183** (0.088)	0.822*** (0.256)	0.222** (0.113)	0.264*** (0.102)
ELA	0.131* (0.073)	0.822*** (0.256)	0.160* (0.088)	0.313*** (0.059)
F-Stat				0.000
Observations	726	726	726	33164

Communities, Schools, or Both?

Middle School In and Out of the Zone

	In Zone	Out of Zone	
Math	0.174*** (0.049)	0.236*** (0.041)	0.241
ELA	0.059 (0.045)	0.038 (0.035)	0.659
Observations	471	1038	

Communities, Schools, or Both?

Elementary School In and Out of the Zone			
	In Zone	Out of Zone	
Math	0.243 (0.169)	0.225* (0.121)	0.795
ELA	0.212 (0.131)	0.168* (0.095)	0.409
Observations	254	507	

Communities, Schools, or Both?

Middle School Sibling Results

	All Lottery	Without Siblings	With Siblings	Sibling Spillovers
Math	0.217*** (0.036)	0.228*** (0.043)	0.191*** (0.066)	0.012 (0.117)
ELA	0.044 (0.032)	0.038 (0.038)	0.089 (0.057)	0.060 (0.100)
Observations	1386	1008	378	485

Conclusions

- What have we learned?
 - Promise Academy middle school successful at increasing math scores
 - Promise Academy elementary school successful at increasing both math and ELA scores
 - Two pieces of evidence suggest that the schools, not the community programs, explain the results
- What's next?
 - Longer term academic outcomes
 - Nonacademic outcomes
 - Disentangling what it is about the schools that drives the results