

Promise Academy Outcomes

Dr. Roland Fryer's Analysis

Background

Roland Fryer, Jr., is a professor of economics at Harvard University, a research associate at the National Bureau of Economic Research, and a former junior fellow in the Harvard Society of Fellows – one of academia's most prestigious research posts. Dr. Fryer has been working with city data since 2007. He has spearheaded several major research projects, including one investigating the impact of providing incentives to students for school-related achievements. Dr. Fryer recently received over \$40 million to start the Educational Innovation Laboratory at Harvard University, an organization that will devote a great deal of resources to determining what works in education, particularly with regard to reducing the racial achievement gap.

Dr. Fryer has a reputation for being tough-minded, thorough, and exacting in his analyses. He has been searching for best practice programs that could be shown to have demonstrable effects on children's performance.

Analyses

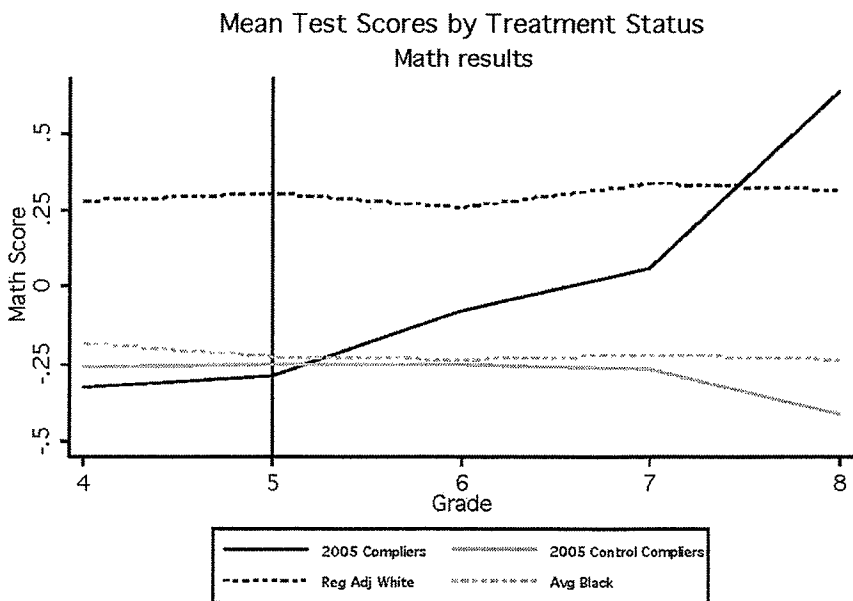
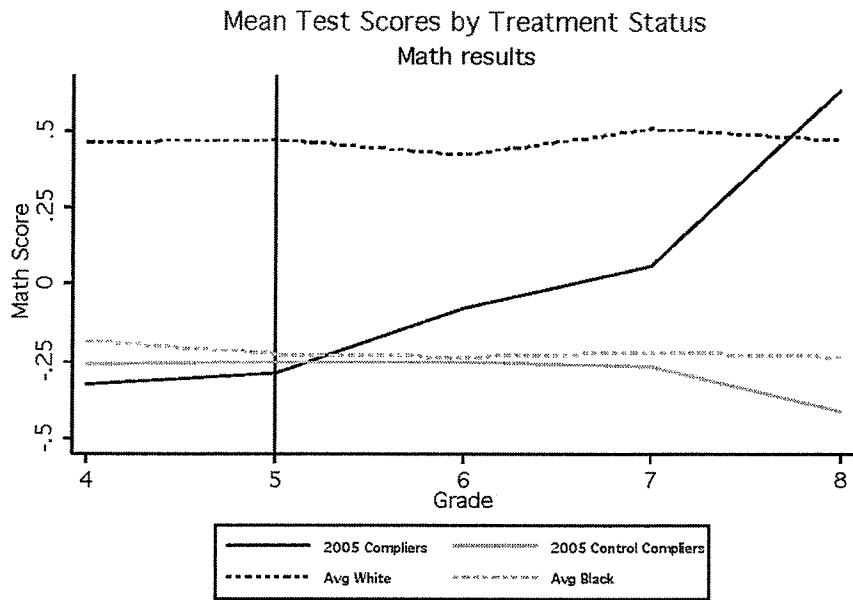
Dr. Fryer was able to obtain access to the New York City Department of Education data for Promise Academy lottery applicants, regardless of their participation status. The requirement for a Promise Academy entrance lottery affords an opportunity to compare the achievement of Promise Academy attendees and non-attendees. The elementary school cohort was of particular interest to us, as these students had spent their whole scholastic careers at Promise Academy (and many had also attended HCZ early childhood programs).

In short order, he combined the lottery data HCZ provided with achievement, attendance, and grade retention information from the DOE into a series of regression analyses. Dr. Fryer and his assistant, Will Dobbie, used a variety of statistical models to examine all of these data.

To help contextualize our results, it is useful to know that effect sizes for interventions tend to be small. For example, studies on small class size have found effect sizes around .22. In contrast, the racial achievement gap is between .64 and .70 standard deviations in math and around .40 in ELA at school entry.

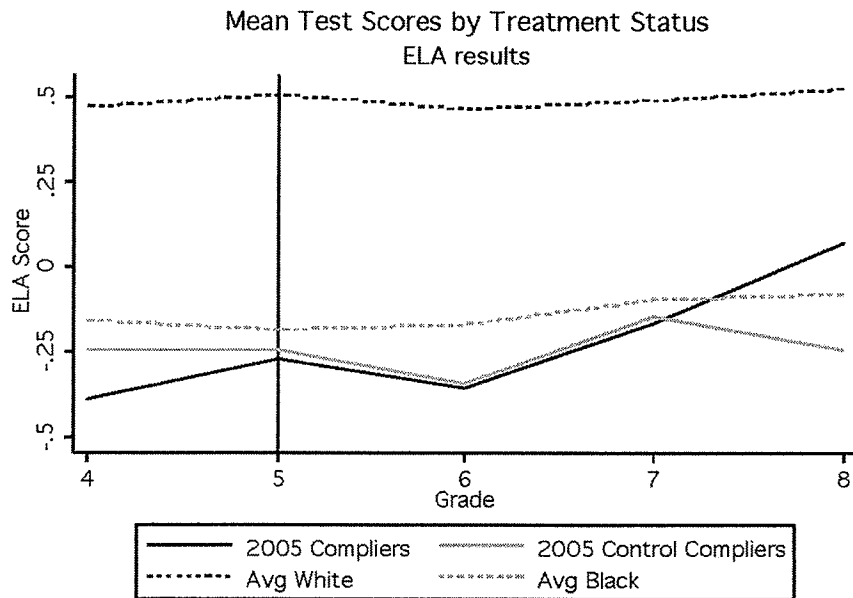
Dr. Fryer investigated performance of Promise Academy applicants over time, comparing their fourth through eighth grade test results to those of white and black students citywide. More specifically, the test results of (1) students who were accepted into Promise Academy and attended (compliers), (2) applicants who were not accepted into Promise Academy and did not attend (non-compliers), (3) white students in New York City, and (4) black students in New York City are presented.

The following charts present historical mathematics test score data for Promise Academy students and for several peer groups who were in the eighth grade in 2007-2008. The second chart differs from the first only with regard to NYC white students: the first chart shows basic performance of all white students while the second shows the results adjusted for socio-economic status (in general, white students have more positive socio-economic indicators than black students).

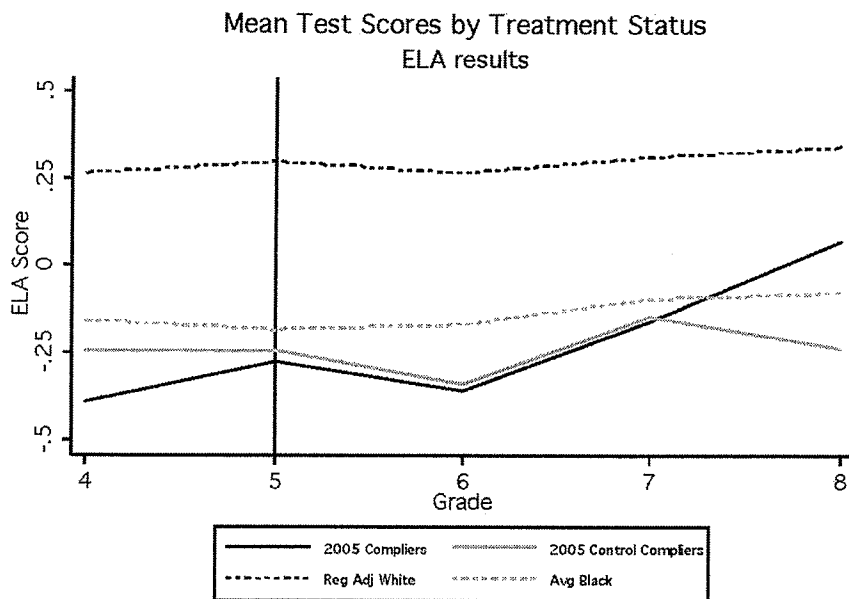


As both charts show, middle school students who entered the school in 2005 started far below the city mean (which is indicated by a 0 on the chart), about .75 standard deviations behind New York City white students, and slightly below black students in the 4th grade (before entry into Promise Academy, which began at sixth grade). Over time, while NYC white and black students showed flat performance from 4th to 8th grade, PA students experienced large improvements from year to year and were outperforming white students by the 8th grade (this is particularly true when we compare our students to the results of NYC white students adjusted for socio-economic status)

The two figures below present information for the same groups in English Language Arts. In the first, Promise Academy students are about .375 standard deviations below the mean in the 4th grade (before school entry); students who applied to the school but do not attend were slightly higher at .25 standard deviations below the mean; black students were a bit higher than that, while still below the mean; and white students who were unadjusted for SES were almost .5 standard deviations above the city mean.



The chart below shows ELA results for white students adjusted for socio-economic status and for all of the remaining groups seen in the previous chart. Adjusted white student performance is approximately .25 standard deviations lower than that for unadjusted white students.



While Promise Academy students have not closed the racial achievement gap by grade eight for ELA – as they do in mathematics – they have narrowed it considerably. Promise Academy students’ results trend upwards, with the slight drop in performance from grades five to six being more than made up for by the growth from sixth to seventh grades. Promise students are slightly above the mean in the eighth grade.

Conclusion

Dr. Fryer has repeatedly expressed a great deal of excitement regarding our results to various audiences. As a researcher who is focused on the achievement gap and has previously found little that makes a dent in it, he is amazed to find an intervention that may well remove the gap altogether in mathematics and narrows it substantially in English Language Arts. HCZ’s evaluation department is continuing to work with him to consider other data points relating to achievement, participation, and grade retention for other cohorts and at Promise Academy II.

Presentations to Harvard colleagues, educators, government officials and others have been well-received. Researchers at the Education Innovation Laboratory are working hard to prepare HCZ-related data for submission to peer-reviewed journals. If all goes according to plan, we anticipate the first of many important publications that shed light on the work of HCZ to become available to the public very soon.