

Can Good Peers Hurt? The Effect of Top Students on Girls' Educational Outcomes



Exposure to good peers of either sex during middle school reduces the probability that top-performing girls are placed in one of their preferred high schools.



High-achieving boys have a detrimental effect on the selectiveness of the schools in which top female students are placed. These placement effects are driven by both lower admission scores and weakened preferences for selective and academic schools.



Exposure to high-achieving girls improves the admission exam scores of poor-performing girls. This protective effect on scores translates into an average increase in the selectivity of the high schools in which low-performing girls are placed.

CONTEXT

Previous work on peer effects in educational settings shows that the magnitude and nature of peer effects is quite mixed, with important variations across contexts. The evidence also suggests that the effects of peers on individual behavior and performance vary greatly depending on individual characteristics. This paper studies the potentially gendered impacts of early and sustained exposure to good peers during middle school in Mexico. Our results contribute to the understanding of the origins of early educational gender gaps, which can have long-term effects in the labor market. Understanding these effects is also important for the design of interventions that compensate potential peers' externalities.

PROJECT

Our sample comprises 50 middle schools in Mexico City in which we randomly allocated students to classes. We take advantage of the variation in the share of high-performing boys and girls that this allocation generates across classes to study the effects of good peers on girls' individual educational outcomes. We define high performers as those who score in the top 25 percent of the distribution of scores in the middle school placement exam in Mexico City. Using administrative records on the high school admission process in Mexico City to measure the impact of middle school peers on placement outcomes, we disentangle the effects of peers by sex on exam performance and girls' aspirations. We rely on admission exam scores as a proxy for academic achievement and students' revealed preferences for more selective schools as a proxy for greater aspirations.

RESULTS

Our results show that the presence of top peers in the classroom, regardless of their sex, negatively affects top students in terms of high school placement outcomes (see Figure 1). An increase of one standard deviation in the share of top peers decreases the probability that a top-performing girl is assigned to one of her preferred schools by about three percentage points, irrespective of her peers' sex. Exposure to good peers also affects the type of schools to which girls are assigned. For top-performing girls, a one-standard deviation increase in the share of high-achieving boys in their classroom decreases the quality (in terms of selectivity) of the school to which they are assigned by almost 0.5 standard deviations.

High school admission test scores of top-performing girls are also negatively affected by exposure to good peers of either sex (Figure 2). Top female peers instead have a positive effect on the admission scores of low-performing girls, which translates into more selective placement outcomes.

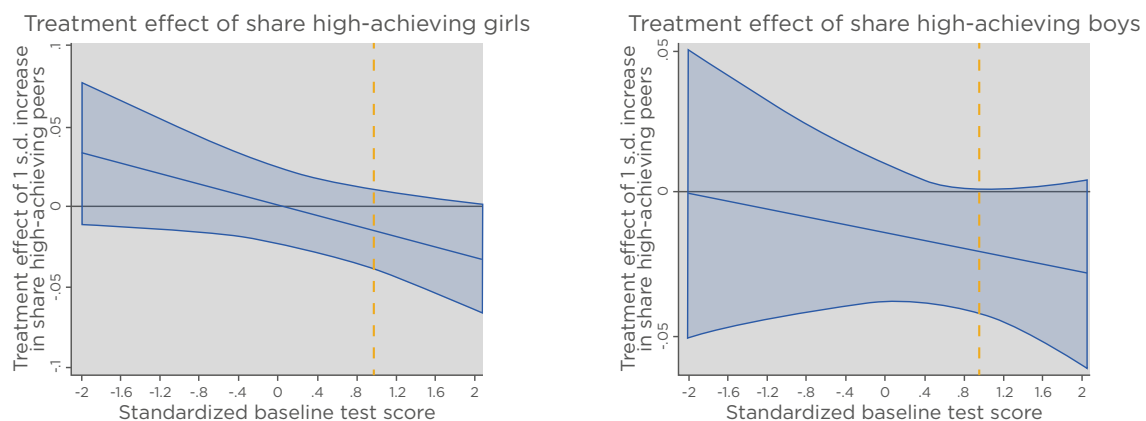
The effect of good male peers on placement outcomes of top-performing girls' is also driven by changes in their aspirations (see Figure 3): a one-standard deviation increase in the share of high-achieving boys reduces the average selectivity of the high schools that these girls choose by 0.10 of a standard deviation. In turn, there is no statistically significant effect of high-achieving peers on the selectivity of the schools preferred by low-performing girls.

POLICY IMPLICATIONS

Despite considerable reductions in gender gaps in school enrollment and graduation rates, labor market disparities in occupations and wages across men and women persist. To narrow these gaps, it is important to understand the origin of the forces that drive them. Our paper sheds light on the asymmetric responses that girls experience from exposure to good peers of different sexes while in middle school. We focus on potential sources of disparities early on, when there is still a window of opportunity to reverse the barriers that hinder girls' educational trajectories.

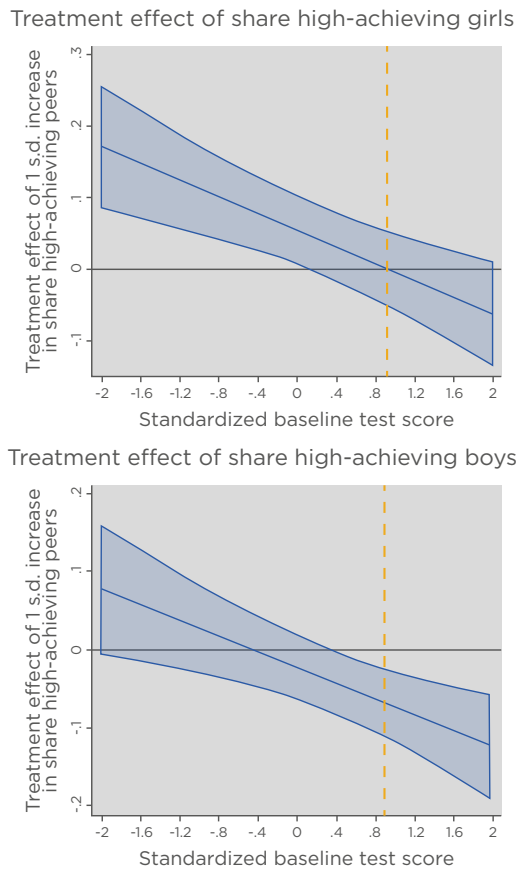
Importantly, we do not find any evidence of changes in effort, disruptive behavior, or grades during the first year of exposure to high-achieving peers. The influence of peers from either sex only starts to materialize after sustained exposure, during 8th grade. This is potentially good news, as it allows for the design of timely interventions. Early programs that foster students' socio-emotional development during childhood and adolescence may be helpful to reduce the discouragement effects that male high-achieving peers can have on top-performing female classmates. Additionally, professional development activities for teachers that equip them with tools to identify potential negative class dynamics could help prevent (or at least ameliorate) the negative effects that top male students have on high-achieving girls' motivations and aspirations.

Figure 1. Marginal Effects of Good Peers on High School Admission into a Preferred School



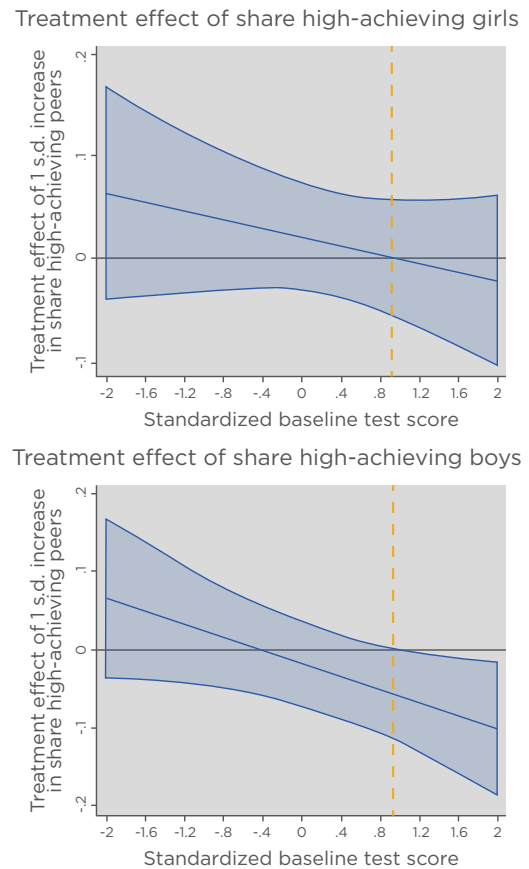
Note: This graph plots the marginal effect of the share of high-achieving girls (left) and the share of high-achieving boys (right) on the outcome of interest (y-axis), in this case being admitted to high school, and the standardized baseline test score (x-axis).

Figure 2. Marginal Effects of Good Peers on High School Admission Exam Scores



Note: This graph plots the marginal effect of the share of high-achieving girls (top) and the share of high-achieving boys (bottom) on the outcome of interest (y-axis), in this case the score on the high school admission exam, and the standardized baseline test score (x-axis).

Figure 3. Marginal Effects of Good Peers on the Selectivity of Preferred High Schools



Note: This graph plots the marginal effect of the share of high-achieving girls (top) and the share of high-achieving boys (bottom) on the outcome of interest (y-axis), in this case the average cut-off of the set of schools students choose in their application portfolios, and the standardized baseline test score (x-axis).



FULL STUDY

[Busso, Matias, and Veronica Frisncho. 2021. "Good Peers Have Asymmetric Gendered Effects on Female Educational Outcomes: Experimental Evidence from Mexico."](#)

DEPARTMENT OF RESEARCH AND CHIEF ECONOMIST

The Department of Research and Chief Economist generates new ideas to enrich the knowledge base that supports the policy agenda of the Inter-American Development Bank (IDB) and its member countries for achieving sustainable and equitable development in the region. To maximize the impact of its research, the Research Department carries out activities that serve as inputs to other IDB departments, governments, the academic community and public opinion in the region.

