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To Understand the Female Advantage in College Enrollment, Look to the Schools Boys and Girls Attend

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Females are more likely than males to be enrolled in colleges – that fact is now well understood by educators and researchers in highly-industrialized nations, including the United States. As of the fall of 2010, for example, men accounted for only 43% of the students enrolled in America's two- and four-year colleges. And the imbalance is likely to grow; by 2019 the National Center for Education Statistics projects an enrollment increase of 21% for women relative to only 12% for men. Gender gaps vary by racial group. In the 2010 statistics, 45% of white undergraduates were male compared to only 42% of Hispanic undergraduates and 37% of black undergraduates.

What accounts for such startling gender differences in college enrollment? Researchers have documented that girls get better high school grades, enroll in more rigorous courses, and have loftier ambitions and a greater probability of high school graduation. Looking more deeply, prior research has found that girls may benefit from higher expectations for their performance from parents, peers, and teachers; and girls are more organized, self-disciplined, attentive, dependable, and willing to seek help from others. Yet previous inquiries have been unable to entirely explain the female advantage in college-going. In a pair of recent papers, my colleague Dylan Conger and I take an unprecedented look at another key factor: the different high schools attended by boys and girls. Our hypothesis is that American boys and girls are choosing to enroll in high schools with different attributes – and boys are systematically choosing high schools where lower shares of students continue on to college.

A Child's Gender Affects School Enrollment, Especially When Choice is Possible

Many people are startled by the thought that schools vary in the proportion of girls versus boys. Isn't it all a matter of chance, so that almost all schools will have roughly half boys and half girls? In fact, there are substantial deviations from gender balance in U.S. schools at all grade levels from kindergarten through twelfth grade, deviations that cannot be explained by chance alone. Gender imbalances become greatest beyond elementary and middle school, in high school grades.
Tellingly, gender gaps are greatest in situations where students and their families can make choices about where to attend.

- Some gender sorting happens between sectors and types of schools. For instance, males are slightly underrepresented in private schools and charter schools, and substantially overrepresented in irregular public schools, some of which educate students with special needs and juvenile justice involvement.

- Gender sorting is also prevalent *within* types of schools. It appears to be highest in private schools (where single-sex schools are more common) and within irregular public schools.

- Gender sorting across schools is relatively greater in counties in urban areas along the Eastern Seaboard stretching from Washington DC to Boston. We also see high levels of gender sorting around the Great Lakes, throughout much of Florida, Arizona, California, and in the more populated, western areas of Oregon and Washington.

- Counties that have relatively more local private schools, irregular public schools, and charter schools turn out to have greater levels of gender sorting within their public schools. This situation holds true when we compare all U.S. counties, and also when we compare just the most populous, urban counties. Our findings suggest that gender sorting happens most in places where there are more options about which schools to attend.

Why Do Boys and Girls End Up in Different Schools?

If choices are directing boys and girls to different schools, who is doing the choosing?

- One possibility is that parents direct girls and boys toward different schools, but we found no such indications. Parents voiced similar expectations for their male and female offspring and we found no evidence that their child's gender affected whether the parents considered enrolling the child in another school, gathered information on school performance, or moved to a different neighborhood to make their child eligible to attend a particular school.

- The absence of evidence for parental steering – combined with the finding that gender plays a much larger role in high school enrollments than in enrollments for earlier grades – suggests that teenage children are key actors. Their own preferences about schools to attend may play an important role in creating different gender mixes in America's high schools.

The Consequences for College Enrollment

Once we realize that boys and girls attend high school in different mixes, the obvious question is "so what?" Does this help us to understand why girls are more likely to go to college?

Researchers have established that graduates of better high schools are more likely to enroll in college. Imagine a student who would have a 33.3% likelihood of attending a four-year college in the year after high school if he or she attended a high school with a typical percentage of graduates going on to college. If this student attended a very low quality high school (in the bottom ten percent), we would predict that this student would only have a 16% chance of enrolling in a four-year college. By contrast, if he or she attended a very high-quality school (in the top ten percent), the probability of college enrollment would rise to a remarkable 80%.

Controlling for the pre-high school test scores of students and other student characteristics, we find that differences in quality between schools with different gender mixes explains 11% of the gender gap in four-year college enrollment. Boys currently attend somewhat lower quality schools – and if boys and girls attended high schools of the same quality, we would expect the gender gap in college enrollment to shrink significantly. Closer gender balance in high schools would shrink the college gender gap by 5% for white young people, and by 16% for blacks and 12% for Latinos. In sum, high school boys and girls often gravitate toward

different schools, but it does the boys little good – at least when it comes time to see who goes on to college.

Read more in Mark C. Long and Dylan Conger, "Gender Sorting across K-12 Schools in the U.S." *American Journal of Education* 119, no. 3 (2013): 349-372 and Dylan Conger and Mark C. Long, "Gender Gaps in College Enrollment: The Role of Gender Sorting across Public High Schools." *Educational Researcher* (2013).