



O Brother, Where Start Thou?

Sibling Spillovers on College and Major Choice in Four Countries

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POLICY ISSUE

Prior research has established that the choice of a college and major has long-term implications for a student's future outcomes, and many recent educational interventions have focused on supporting students in making informed college decisions. Little is known, however, about which factors students consider in making this important decision. While it seems likely that a student's social network influences their perception of various college options, it has been difficult to isolate the effect of such influences, given that social networks are not randomly assigned.

This study aims to identify the causal effect of one particular social connection: an older sibling who attends college. Using data from four countries, we investigate whether a student's choice of college and major is affected by the college enrollment of an older brother or sister. We find that an older sibling's acceptance to or enrollment in a given college and major makes their younger sibling more likely to attend the same college and to pursue the same major, or to attend college at all. These effects appear to be driven by older siblings sharing information about the college experience that would otherwise be difficult for younger siblings to obtain, suggesting that policies that help to bridge this information gap could influence more students' choices about whether and where to attend college.

STUDY DATA AND FINDINGS

Our data comes from administrative records in Chile, Croatia, Sweden, and the United States. In Croatia, Chile, and Sweden, centralized admissions systems set strict acceptance thresholds for specific colleges and majors based on a student's high school grade point average (GPA), performance on a college entrance exam, or a combination of the two. In the United States, institutions set their own admissions standards and typically consider many factors in addition to GPA and test scores. We therefore limit our analysis in the United States to a subset of 21 colleges that incorporate a strict test score threshold into their admissions process.

KEY FINDINGS

IN ALL FOUR COUNTRIES

- Older siblings' enrollment in a given college induces many younger siblings to later apply to and enroll in that same institution (or even the same college-major combination).
- The quality of college and college-major chosen by older siblings changes the quality of those same choices by younger siblings.

IN THE UNITED STATES

- Older siblings' enrollment in colleges with higher B.A. completion rates and peer quality induces younger siblings to upgrade their college quality, partly driven by increasing their likelihood of enrolling in four-year colleges at all.
- Spillover effects on college quality and enrollment are driven largely by students from families whose demographic and economic characteristics predict lower four-year college enrollment rates.

We focus on sibling pairs where the older student was very near the threshold for admission to their target college and major. Within this group, students who are accepted into the program have very similar qualifications to those who were not. This allows us to investigate the causal effect of a narrow acceptance on younger siblings' college enrollment.

Across these diverse contexts, we find that an older sibling's acceptance into their target college and major increases the likelihood that a younger sibling will enroll in the same college or major. We also find that, in the United States, an older sibling's enrollment in a 4-year college causes the younger sibling to be more likely to attend a 4-year college at all. These effects persist for siblings who are more than 5 years apart in age and are present regardless of the gender match of the siblings. Effects are strongest among students who are statisti-

cally least likely to go to college (based on family income, parental education and other characteristics). These effects are also more potent when the older sibling is accepted to a relatively high-quality college, as measured by the average qualifications of peers and the school's dropout rate.

POLICY IMPLICATIONS

These findings constitute some of the earliest evidence that social networks have a meaningful impact on college decisions. Further investigation into these social effects could point to potential avenues for influencing these high-stakes choices.

We believe that the interpretation best supported by our results is that older siblings affect their younger siblings' college choices through the dissemination of subtle information about the college experience—information that would be

difficult or impossible to obtain otherwise. This interpretation fits with the evidence that sibling effects are most powerful for students who have the least exposure to college.

If this is the case, our results lend support to the notion that expanding access to 4-year colleges requires policies that reduce the information gap between advantaged and disadvantaged students. Policymakers could, for example, seek to mimic these sibling spillovers effects for students who are least likely to go to college by creating in-depth mentorship programs that connect prospective students with current college students or alumni from similar communities.

FULL REPORT

For the complete working paper, visit wheelockpolicycenter.org.

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