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Key Facts

Evidence shows that

such as text

Our findings show

intervention

that only a more

intensive mentoring

increased college

enrollment among a

high school seniors.

The intensive mentoring

especially effective

intervention was

for women and

for students who

had less support

in navigating the

process.

college application

general population of

brief interventions

messages or email reminders can

enrollment rates for some students.

increase college

College Mentoring Supports College Enrollment and Persistence

By Scott Carrell, UC Davis and Bruce Sacerdote, Dartmouth College

Among OECD countries, the United States has fallen from 1st (in 1990) to 9th (in 2016) in terms of the percentage of working age individuals with a bachelor's degree. The benefits of a college education are widely known. People with some college or more have consistently higher rates of labor market participation and lower levels of unemployment than those without any college. Among the employed, those with a college degree have lifetime average earnings that are 43 percent higher for men and 51 percent higher for women than those with only a high school diploma. We compared different types of interventions aimed at increasing college enrollment among high school seniors. We find that more intensive mentoring is effective in supporting students who lack the assistance often provided by parents or college counselors.

Raising college enrollment and graduation rates has become a top priority for poverty and education policy in the United States. In 2016, 69.7 percent of 2016 high school graduates were enrolled in colleges or universities,⁴ however, just 21 percent of Americans age 25 and over had completed a bachelor's degree.⁵ A variety of interventions have been developed that aim to promote college readiness, most of which are aimed at students in middle school. However, researchers have recently begun to ask whether conducting interventions at later ages is more beneficial and whether brief or more intensive interventions are more effective.

Brief Educational Interventions Support College Planning and Enrollment

Leading theories about why students do not apply to and enroll in college include lack of prior planning, procrastination, lack of organizational skills, and lack of support. Interventions aimed at promoting college readiness are often carried out with students well before high school, in order to support preparatory course work. For older students on the verge of making a decision about

whether to apply to college, brief interventions including email reminders and texting have been used. One study showed that brief, low-cost information interventions can increase college enrollment by as much as five percentage points for high-achieving, low-income students.⁶

We wanted to find out whether interventions at older ages are effective among a broad group of high school students and whether there is a difference between brief informational interventions and interventions that are more intensive. Our research compares brief interventions with an intensive student mentoring intervention among high school seniors in New Hampshire from 2012-14. Based on a list of qualified students provided by school guidance counselors, we randomly assigned students to groups receiving different interventions and a control group as follows:

- Group 1 received an intensive mentoring program that provided one-on-one mentoring, payment of application and College Board fees and a \$100 cash bonus upon completing the application process.
 - Group 2 received a cash bonus upon

¹OECD. 2017. "Education at a Glance".

²Bureau of Labor Statistics. 2018. "Employment Status of the Civilian Population 25 Years and Over by Educational Attainment."

³Tamborini, Christopher R. et al. 2016. "Education and Lifetime Earnings in the United States." *Demography*.

⁴Bureau of Labor Statistics. 2017. "College Enrollment and

Work Activity of 2016 High School Graduates".

"Educational Attainment of the Population 18 Years and Over, by Age, Sex, Race, and Hispanic Origin: 2017." "Hoxby, Caroline and Turner, Sarah. 2013. "Expanding College Opportunities for High-Achieving-Low Income Students." Stanford Institute for Economic Policy Research.

⁵U.S. Census Bureau. Current Population Survey. 2017.

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completing the application process (no mentoring).

- Group 3 received information from colleges and encouragement to submit transcripts.
- Group 4 received no mentoring, cash incentives or informational support (control group).

We also collected demographic data and surveyed the students during their first two years after high-school graduation. We used multiple regression analysis to calculate the effect of receiving the intervention on the outcomes of enrollment at any college and college persistence (continuing three or more semesters).

Mentoring Interventions May be More Effective than Brief Interventions

Our results showed that only the intensive mentoring intervention was effective; it led to a statistically significant increase in college college enrollment for these students by 10.3 percentage points. Students that participated in the intensive mentoring intervention that enrolled in college were as likely to continue in college as students in the control group.

Mentoring Support Acts as a Substitute for the Support of Parents and Teachers

Our results show the benefits of in-person mentoring support relative to less intensive, brief interventions. To learn more about why mentoring works for certain students, we looked at the relationship between the intervention received and students' level of need for help navigating the college application process. We also looked at personality and demographic characteristics.

We found no evidence that the program worked better or worse for students based on personality 44

Mentoring works as a substitute for the potentially scarce resource of parental or school-based help in navigating the college application process.

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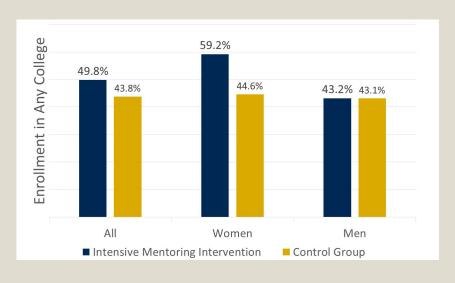
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Figure 1: High School Students in Intensive Mentoring Intervention and Control Groups Who Enrolled in Any College



The success of the intensive mentoring intervention was driven almost entirely by women, for whom college enrollment increased by 14.6 percentage points compared to the control group.

enrollment of six percentage points.⁷ Students who received information and transcript or cash bonus interventions, without the mentoring, were no more likely to enroll in college than the control group.

A closer look at our results shows that success of the mentoring intervention was driven almost entirely by women, for whom college enrollment increased by 14.6 percentage points compared to the control group. The program was also more effective for students who were less prepared and had not taken the SAT or did not have parent or counselor support during their application process. The intensive mentoring intervention increased

characteristics or demographic differences. However, the mentoring intervention was more effective in schools with limited support for students preparing for college. We concluded that mentoring works as a substitute for parental or school-based help in navigating the college application process. Given the benefits of mentoring interventions, we need to find cost-effective ways to provide support to students who need it.

Scott Carrell is Professor of Economics at UC Davis (secarrell@ucdavis.edu).

Bruce Sacerdote is Professor of Economics at Dartmouth College.

Journal: Applied Economics.

⁷Carrell, Scott and Sacerdote, Bruce. 2017. "Why Do College-Going Interventions Work?" American Economic