

Summer Nudging: Can Personalized Text Messages and Peer Mentor Outreach Increase College Going Among Low-Income High School Graduates?

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A report released in April 2013 by Benjamin L. Castleman of Harvard University and Lindsay C. Page of the Center for Education Policy Research at Harvard University examines the implications of two forms of interventions during the summer between high school and the first year of college on college enrollment. “Summer Nudging: Can Personalized Text Messages and Peer Mentor Outreach Increase College Going Among Low-Income High School Graduates?” details findings that text message reminders and peer mentor outreach programs can be an effective way to mitigate summer attrition. The report details two large-scale randomized trials done in collaboration with three educational agencies: the Dallas Independent School District (Dallas ISD), uAspire (a Boston-based nonprofit organization focused on college affordability), and Mastery Charter Schools (a network of charter schools in the Philadelphia metropolitan area). Castleman and Page reveal the positive impact these low-cost initiatives can have on college enrollment within low-income communities during an increasingly technological era.

In the past decade, summer melt has been an increasingly documented phenomenon impacting the trajectories of many would-be college students. Summer melt occurs when students graduate from high school intending to enroll in post-secondary education in the fall, but fail to matriculate. Researchers have estimated summer attrition rates between 10 and 40 percent among college intending students, with low-income students and those from large urban districts disproportionately affected. This is particularly troubling as only 29 percent of youth from the lowest income quartile enter college by the age of 25, compared with 80 percent of youth from the top income quartile (Bailey & Dynarski, 2012). For first-generation college attendees, who may be unaware of available resources or who no longer have access to high school counselors, completing pre-college tasks can be overwhelming. Unfortunately, while ample initiatives focus on “starting early” by targeting students in elementary and middle grades, there is less of an emphasis on continuing to work with students as they navigate the transition after high school into college. In an effort to stem summer melt by supporting students as they transition to college, Harvard University researchers Benjamin Castleman and Lindsay Page conducted a study examining whether automated text messages or a peer mentor campaign increases the number of students matriculating to college.

Overview of Experiment

To measure the effectiveness of texting and peer mentoring as interventions for summer melt, Castleman and Page conducted two large-scale randomized trials in collaboration with three educational agencies: the Dallas Independent School District (Dallas ISD), uAspire (a Boston-based nonprofit organization focused on college affordability), and Mastery Charter Schools (a network of charter schools in the Philadelphia metropolitan area).

Text messaging and peer mentoring were selected as interventions for their proven effectiveness in connecting with teens. More specifically, a 2012 study by Amanda Lenhardt found while 6 percent of teens exchange emails and 39% talk via mobile phone, some 63 percent sent text messages on a daily basis. As such, students are likely more accessible and responsive to text messages than other forms of communication. Similarly, peer mentoring has been shown to have positive effects on a student's academic achievement, self-worth, and family relationships (Grossman and Tierney, 1998; Rhodes, Grossman, and Resch, 2000; and Thompson and Kelly-Vance 2001), as well as his or her sense of connection to school, social skill development, and academic achievement (Karcher, 2005, 2006; Stoltz, 2005). For underrepresented students, mentoring was found to enhance interest in college among first-generation students and increase students' access to information about college and financial aid (DuBois et al, 2002; Gandara & Mejorado, 2005). Moreover, students from underrepresented groups may lack a sense of belonging at colleges and universities if they perceive these institutions to be the domain of affluent, White students (Walton & Cohen, 2007). A mentor intervention may alleviate some of these concerns by matching students with peers from similar backgrounds or areas.

In addition to the likely responsiveness of students to text messages and peer mentors, these interventions were selected for the relative ease and cost-effectiveness of establishing texting and peer mentoring programs. Text messaging platforms can deliver automated and personalized messages to students for as little as \$.01 per message. Since the messages are managed from a computer, counselors are required to spend far less time outreaching to students and instead can focus on providing targeted assistance and guidance where needed.

For this experiment, the text message intervention was tested with students in Dallas ISD and uAspire, while peer mentoring was tested with uAspire and Mastery Charter Schools. College intentions were gauged using information on whether the student had completed/started the FAFSA as of graduation, at uAspire sites by determining whether they had at least two individual meetings with an advisor during the school year, and at Mastery sites by using information from a high school exit survey. In total, 6,196 students participated in the experiment across all three partners, with 2,524 receiving text messages, 934 receiving peer mentoring, and 2,738 assigned to the control group. Nearly all participating students were of color and qualified for free or reduced price lunch.

Intervention 1: Texting

For approximately \$7 per participant for the text message campaign, a series of eight to ten text reminders were sent to students and their parents reminding them of important tasks to complete. The personalized text messages reminded students to: log on to their intended college's website to access important paperwork, register for orientation and placement tests, complete housing forms, and sign up for/waive health insurance, if relevant. Messages also included assistance completing the FAFSA or interpreting financial aid award letters and tuition bills. The messages also included click-through web links for students to complete tasks directly from their phones. Students had the option to request follow-up assistance by simply responding to the text message to be connected with a counselor.

Text Findings

For students receiving text messages during the summer intervention, Castleman and Page found overall enrollment in 2-year institutions increased by over 3% and 4-year college enrollment rose by 4.5%. In the Lawrence and Springfield uAspire sites, the text messages had a significant impact: students receiving messages were 7.1% more likely to enroll in college than those who did not. The rate of students who responded to text messages ranged depending on site from 31% to 48%, with between 11 and 31% of students requesting a follow up meeting with a counselor. It is worth noting of the 11% of Dallas ISD students who requested a follow up meeting, only 6% actually met with the counselor. This appears primarily a result of the counselor not responding to the request for several days, at which point the student was unresponsive, suggesting immediate follow-up is critical. Interestingly, for students at the Boston and Springfield uAspire sites, more students met with counselors than requested meetings, suggesting the text messages prompted some students to simply call uAspire and request a meeting instead of responding via text message.

When the data was disaggregated, Castleman and Page found interesting results. In Dallas, students who qualified for free or reduced price lunch and fell in the middle of the achievement distribution as measured by GPA and standardized test scores were 4.9% more likely to enroll in two-year colleges than their peers who did not receive the text messages. In the Lawrence and Springfield sites, for students who only met with a uAspire counselor occasionally during the school year and had less articulated college plans upon graduation, the text message intervention impacted their enrollment by between 11% and 14%.

Less than 4% of all message recipients requested the reminders stop at any point during the summer. Interestingly, neither students nor their parents were asked to provide informed consent to receive the texts, but despite that, the number of students who cancelled the texts was extremely low. Students evidently felt the small fee was worth receiving the reminders.

Intervention 2: Peer Mentor Program

The peer mentor intervention ran for approximately \$80 per participant and matched students with college-aged peer mentors to provide a first-hand perspective and encourage them to continue with the college enrollment process. Mentors were selected based on several criteria, including being alums of the same school or program as the participants (i.e., uAspire or Mastery Charter Schools), being enrolled in college and in good academic standing, receiving financial aid, and having a good understanding of the financial aid process.

Mentors were tasked with making initial outreach to the students and completing an intake form for each student. The intake forms helped guide the initial mentor contact, and included information such as whether the student still intended to enroll in college, whether he or she had completed the FAFSA or received/reviewed a financial aid award letter, and if the student had registered for orientation and placement tests. After an initial phone conversation, mentors scheduled an in-person meeting or follow-up phone call, and were provided with information sheets about the college the student planned to attend to enable more targeted assistance.

Supervising counselors were available in the event peer mentors did not feel equipped to answer a student's question.

Peer Mentor Findings

Peer mentor outreach increased four-year enrollment by 4.5%. Across uAspire sites, and especially in Lawrence and Springfield, text and peer impacts were largest among students who were not extensively involved with uAspire advisors during high school and students who began the summer without specific college plans. The researchers found across sites, the impact of the peer mentor intervention was between 11% and 16%, with between 50% and 60% of students meeting with a mentor or advisor during the summer months. However, the report was not clear what proportion of these interactions were with mentors versus advisors, making it unclear whether students benefited from having peer advice as opposed to help from an adult. Compared to the text intervention, it is difficult to draw complete conclusions. In the Boston site, the peer mentor intervention did have a significantly larger impact on students' overall enrollment, specifically at 4-year institutions, than the text messages. However, there is no significant difference between texts and mentor impact in Lawrence and Springfield. A larger-scale trial of this experiment may yield clearer results on the differences between texts and mentorship on enrollment.

Discussion

Texting

The texting campaign had a particular impact on individuals whose plans were less defined when they graduated from high school, indicating these periodic reminders may have encouraged students to look into college and make higher education a reality. Castleman and Page hypothesize the text messages served to efficiently connect students to school counselors who helped them address obstacles to enrollment, however, this hypothesis was not largely supported by the data. A more plausible explanation is the text messages increased students' access to information about required college tasks and simplified the information. The text messages were able to have an impact on summer melt by keeping students informed and up-to-date, though the exact mechanism for how this worked is unknown.

Peer Mentors

The two researchers found evidence the peer mentor outreach resulted in substantially higher rates of interaction with students. However, this interaction did not directly translate into higher college enrollment. Peer mentors struggled with answering financial aid questions, neglected to investigate whether students had actually completed pre-college tasks, and many had trouble determining whether the students they worked with should meet with a professional advisor. While there were sites that benefited specifically from the peer mentor program as opposed to texting, such as in Boston, it is not clear whether there is an overall benefit in the mentor program over the messages.

Next Steps

The most effective way to collect student and parent phone numbers must be determined. This was a core challenge to the intervention, as only six in ten students in Dallas provided a cell phone number on their high school exit survey. School districts may also need to obtain informed consent from parents prior to offering the text intervention. A related challenge is persuading recipients of the intervention's credibility. In order to increase the program's success, recipients should be aware of the campaign's intent and understand the messages are from a reliable source. As for the peer mentor intervention, it would be useful to develop a better system to connect students to professional assistance when they need help in a timely manner. Efforts could be made to implement a more intensive training period for the mentors, as opposed to only a few days provided

during this study. Additional research will be done on student persistence and whether the interventions will have a long-term impact on student outcomes. With the rising cost of tuition, it was a concern that students receiving these interventions would enroll, but not complete their two- or four-year degree, and be left to struggle with debt.

In the end, the authors of this study find these low-cost, high-impact strategies can help low-income families select and continue along educational pathways that will prepare them for lifetime success. The text message model could be adapted and applied to many stages in students' educational decision-making, including choosing primary or secondary schools, picking classes, and applying to colleges. The authors hope this strategy will help students make better educational decisions and experience smoother transitions into higher education.

This research brief summarizes work published in “Summer Nudging: Can Personalized Text Messages and Peer Mentor Outreach Increase College Going Among Low-Income High School Graduates?” by Benjamin L. Castleman and Lindsay C. Page of Harvard University. This summary is intended for educational and informational purposes as a service to members of the National Partnership for Educational Access. All content in this brief is attributed to the authors. The National Partnership for Educational Access is an initiative of The Steppingstone Foundation. The views expressed in this brief do not necessarily reflect those of the National Partnership for Educational Access, its members, or The Steppingstone Foundation. A copy of this full report, including bibliographic information, can be found on the Harvard University website.

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