

College-Going and College Choice:

An occasional paper on student decision-making



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Decision-Making and College Attendance

Decision-making is a necessary component of everyday human life. Some decisions, like what to eat for lunch, are simple, but others, like whether to go to college, are more complex. People make decisions based on a number of factors, some that are logical and others that seem irrational. Economists have traditionally assumed people make financial decisions, including the decision to attend college, based on thorough cost-benefit analyses. But in practice, this is simply not true. A cost-benefit analysis requires access and awareness of complete information. It also assumes that people are rational decision makers.

In terms of the decision to attend college, the cost-benefit theory assumes students and their families are rational decision makers and it would posit that the vast majority of students choose postsecondary options that maximize short and long term benefits related to the costs of college (Castleman et al., 2015). Not only do most students not have access to complete information with regard to college, including college costs, but lower-income students and families are also more likely to overestimate the cost of college and decide that the opportunity costs of going to college outweigh the benefits and not enroll. Students, particularly lower income, first-generation students are not attending college, even though it would benefit them financially in the future (Castleman et al., 2015). “Even among academically talented, lower-income students who do matriculate, as many as half do not even apply to, let alone enroll at, selective colleges and universities that they appear to have the academic credentials to attend” (Castleman et al., 2015, p.3).

How Do Students Make Decisions?

All students have decisions to make regarding college attendance. Some students have help in this matter from caring, present, adults who can guide them to finding the best-fit postsecondary option. Unfortunately, many lower income and first-generation students lack the guidance necessary for them to make an informed decision about college. All students operate in distinct cultural and social environments that influence their goals and ideas around college as well as “...their perceptions of the types of higher education institutions they can access, long before they begin exploring specific college options” (Castleman et al., 2015, p. 5). Thus peer networks, educational environments, community culture, and family life can all influence whether a student feels that college is right for him, which has a direct effect on whether he attends college or not.

Additionally, adolescents have different brain functioning than adults do, which can affect their decision-making skills. Achieving a long-term goal, like graduating from college is challenging for all adolescents because their executive functioning is still developing. “Adolescents are highly responsive to immediate and enticing stimuli, like video games, and cognitively less capable of undertaking the type of careful reasoning that is often essential to get to and through college” (Castleman et al., 2015, p.10). It’s even more of a challenge for lower-income students who are trying to meet immediate needs that middle-income peers don’t face. Castleman et al. (2015) argue that this cognitive imbalance is more present in disadvantaged student populations because they often have to spend more time and energy addressing immediate and everyday stressors, like supporting their family financially.

Humans have developed behavioral strategies to synthesize complex information. When we are overwhelmed by the enormity of a decision, our brains may employ strategies that lead to poor decision-making as a defense mechanism (Castleman et al., 2015, p.14). All of these neurological impulses can lead to distorted decision-making that does not accurately consider long-term

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Castleman, 2015

consequences or benefits. Some of these behavioral responses are described in more detail in the chart below.

Distorted Decision-Making

Behavioral Response to Complex Information	Definition	Example
Anchoring	Tendency to base decisions on the first piece of information presented on the available options.	"Families... frequently anchor their estimates of how much they'll have to pay for college to the frequent media reports about the soaring cost of tuition"
Availability Bias	Propensity to base judgments on highly publicized and recent information, which can lead to flawed conclusions. The availability of certain information generates an incorrect awareness of the frequency with which they occur.	"People may be more concerned about dying from a lightning strike than from excessive heat exposure, despite the fact that the latter claims sixteen times as many lives each year"
Loss Aversion	Inclination to prefer avoiding losses more than they prefer gaining something new	Loss aversion may contribute to a student's unwillingness to give up a steady paycheck to attend college; particularly when the potential benefits associated with college are less defined and primarily amassed far in the future.
Path of Least Resistance	When faced with too many choices or complexity, people may go with the default option or the option that is the easiest/most clear	Borrowers who don't actively choose their federal student loan repayment plan are automatically placed in the standard 10-year fixed payment plan. "If lack of action instead put people into a plan that limited payments based on earnings, many more would end up having the advantage of that protection.
Procrastination	The tendency to put off complex decisions or actions	"For example, prospective students may put filling out the financial aid application in the 'tomorrow pile' and never get around to completing it"

DEFINITIONS AND EXAMPLES FROM CASTLEMAN ET AL., 2015

Adolescents are also generally cognitively more impulsive and less likely to consider long-term advantages and consequences of their decisions. This can lead to procrastination of difficult tasks in

exchange for immediate gratification (Castleman, 2015). **Young people, particularly those from lower-income and first-generation backgrounds, need help synthesizing intricate information and understanding the connections between college attendance, persistence, and future opportunities** (Castleman, 2015). As illustrated, students struggle to make decisions when faced with complexity. The decision to attend college is incredibly intricate, weaving finances, interests, support, culture, and community influences. Communicating with students in an informative, engaging, personalized way with specific supports and assistance is the best way to encourage college going (Baum and Schwartz, 2015).

How Students Access Information

Access to simplified, easily actionable information is one way to combat imprecise decision-making. Students and parents must first know that a resource exists and then, they must set aside time to explore the resource (Castleman, 2015). Access to information is one thing, but without time to actively explore and process the information, it is of no use. The medium through which information is presented is also important or: "...The effectiveness of the information depends on the source of the information. The wrong messenger can make the right information ineffective" (Baum and Schwartz, 2015 p.42)

Only 6% of teenagers exchange emails on a daily basis, but 63% send texts every day.

Castleman, 2015

For many students, their cell phone is the only way they can access the Internet at home. Thus, organizations wishing to distribute information to this population must have a mobile-friendly site. Text messaging is also highly used by this group. Only 6 percent of teenagers exchange emails on a daily basis, but 63 percent send texts every day (Castleman, 2015).

Peer networks that encourage college going have been shown to support college going in under-resourced populations. Advertisements and campaigns that use social networks are a highly successful way to harness the power of peer networks and shift student perceptions of their identity to one of a college-ready student (Castleman, 2015). Specifically, social networks, such as Instagram, can be used to highlight college student profiles that are relatable to lower income, first-generation students. This may increase a student's propensity to attend college by inducing a feeling of belonging.

"In the same way that for-profit companies use this information to target people with customized product-oriented advertisements, policy makers or researchers could target adolescents with advertisements that encourage them to register for college entrance exams, complete the FAFSA or search for college. Ad clicks could bring users to web pages that provide simplified information about college and financial aid" (Castleman, 2015 p. 96).

Effectively Communicating With Students: To Influence College-Going

There are 3,026 four-year, degree-granting colleges in the United States (National Center for Educational Statistics). Even if students know that they are interested in attending college, the sheer number of schools available can cause cognitive overload. Vast college search sites like College Navigator provide so much information that students and their families may be paralyzed by the complexity (Castleman, 2015). "As a result, search tools that were intended to equip students with the information necessary to make fully-informed college choices may ironically lead them to base their decisions on a small and superficial set of factors" (Castleman, 2015, p. 84). Castleman (2015) suggests that students are provided with a more personalized set of colleges to review and apply to based on their academic profiles and geographic residence. It also may be important to stagger the release of

information in a timely, sequenced structure so families can gradually learn more about college instead of attempting to comprehend massive amounts of information up front. Castleman (2015) also suggests college search engines prioritize and personalize the most relevant considerations in the college search process so that students understand that information should be weighted differently. Personalization, simplification, and prioritization of information paired with active prompts to trigger student awareness may improve the internalization of information and promote college-going behaviors.

To Influence Persistence and Success

Messaging can also positively influence college persistence and success. Walton and Cohen (2011) conducted a randomized control trial on an intervention that reframed social adversity. The intervention was delivered to two groups of students, one African American group and the other white, during their first year at a selective college (Walton and Cohen, 2011). The short intervention required the participants to read survey responses from senior students at their school about their difficulties

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Walton and Cohen, 2011

fitting in and making friends in the freshmen year. One survey respondent said “Freshman year even though I met large numbers of people, I didn’t have a small group of close friends... I was pretty homesick, and I had to remind myself that making close friends takes time. Since then...I have met people some of whom are now just as close as my friends in high school were” (Walton and Cohen, 2011). Walton and Cohen (2011) designed the survey questions to represent the transition to college as challenging, but eventually overcome, for everyone. Through this, concerns about belonging were seen as commonplace and temporary. Freshman participants then wrote essays about how they related to the survey responses and turned them

into video responses that would be used for future incoming students. This component of the intervention promoted an internalization of the message, allowing the study participants to be benefactors, as well as beneficiaries (Walton and Cohen, 2011).

“The intervention provided students with a narrative that framed social adversity in schools as shared and short lived. This message encouraged students to attribute adversity not to fixed deficits unique to themselves or their ethnic group but to common and transient aspects of the college adjustment process” (Walton and Cohen, 2011 p. 1448). The participants were given daily surveys in the first week post-intervention and an end of college survey. The entire campus was used as a control group. The results from the intervention are astonishing. The achievement gap (represented by grade point average) between African American students in the study and white students was halved, and by the students’ senior year the gap was cut by 79 percent (Walton and Cohen, 2011). “The results suggest that inequality between marginalized and non-marginalized groups arises not only from structural factors but also from concern about social belonging” (Walton and Cohen, 2011, p.1450).

The Message and the Medium

The way an intervention is presented to students can be an important determinant in the effectiveness of the program. As previously stated, the primary way many students connect to the Internet is via their mobile phone. In addition, students are more likely to communicate through text messages than other technologies. Text messaging and mobile devices are cost effective, programmable ways to foster positive behaviors among difficult to reach populations (Frankfort et al. 2015). “In an era when college advisors are responsible for hundreds if not thousands of students, mobile technology can reach a much wider population at risk for not completing college, including students who do not typically seek help” (Frankfort et al. 2015).

Research on the message and the medium

Researcher(s)	Interventions	Findings	Examples
Castleman and Page 2014	Targeted text messaging, peer mentoring, and proactive outreach aimed at students enrolled in college and implemented the summer before their freshman year to combat summer melt.	Interventions successful at reducing summer melt, with costs as little as \$7, and no more than \$200 per student served. Additionally recommends using social media to establish a community of students before matriculation	<p>“The messages reminded students to: log on to their intended college’s web portal... register for orientation and placement tests, and sign up for or waive health insurance” (12)</p> <p>“Most messages included web links that allowed students with smartphones and data plans to complete tasks directly from their phone” (12)</p>
Frankfort et al. 2015	Persistence Plus interventions enabled students to receive personalized and interactive daily “nudges” through text messages or mobile apps to promote college success.	<p>Case 1: Participating cohort had a 17 percentage point higher fall-to-spring retention rate than the general student population</p> <p>Case 2: STEM pass rates for participating students ranged between an average of 12-17.5 percentage points higher for participants, than among non participating students. GPA’s for participants ranged between an average of 0.39-0.54 points higher than non-participants.</p>	<p>Example nudge with text box for response: “Knowing where and when you are going to study makes it easier to do so. When are you going to study for your math test?” (160-161)</p> <p>“... A student who has indicated they are not doing well (2 stars out of 5) is informed that such feelings are universal, thereby aiming to intercede before doubts about their social belonging may ensue” (161)</p>

Common Themes of Successful Student Messaging

Successful student college-going and persistence messaging are based in psychology, predominantly stealthy, and brief. Stealthy delivery is important to note because it could indicate that indirect approaches may be more effective than obvious interventions (Walton and Cohen, 2011). Stealthy interventions do not stigmatize or victimize students, perhaps leading to more positive results. Additionally, the interventions that required students to actively participate or create result in more internalization. Interventions must include some sort of information, but the most effective interventions include some sort of internalization component to make it stick. This could be a student teaching what he learned or interacting with others in similar situations.

Summary

The decision to attend college is a significant and socially influenced choice. Subsequent persistence in college is also highly related to the messages students receive regarding their social belonging in higher education institutions. Students often do not have access to complete information when deciding to enroll in college, which can result in seemingly unreasonable decision-making. The complexity surrounding financial aid, admissions, student supports, academic programs, and other factors prompt varied behavioral responses in adolescents, who do not yet have the cognitive ability to process such intricate decisions. Lower-income students may face even more adversity because they are often trying to balance this difficult decision making with day-to-day concerns that middle-income students don't experience. Students need support when making complex decisions about their future, and specific information and positive messaging can impact student's college going and persistence.

Access to simplified, systematic, and actionable information through student-utilized mediums is one way to combat unfocused decision-making regarding college attendance and persistence. Staggering access to information in the admissions process may also prevent students and parents from feeling overwhelmed and defaulting to a simplifying behavioral response. The presentation of the information is just as important as the information itself. For many students, their cellphone is the only way they can access the Internet at home. Organizations wishing to communicate to these students need to make their information accessible and concise for mobile sites. Text messaging "nudges" may be another way to increase student engagement in the college search and admissions process, and has also been found to assist with student retention (Frankfort et al., 2015).

In addition to providing clear information, positive messaging can be vital to encouraging students to attend and persist in college. The creation of social networks among incoming students via Facebook and the use of Instagram to highlight relatable college student profiles may increase a student's likelihood to attend college by creating a feeling of belonging before ever setting foot on campus. Simple interventions related to social adversity and belonging have also been found to increase underrepresented student achievement in college (Walton and Cohen, 2011). Simply communicating that difficulties associated with finding a social niche in college is normal and temporary through a brief internalization exercise can increase feelings of belonging in college and positively impact academic achievement and persistence.

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