The University of Chicago

Money Matters: Financial Constraints among Low-Income Students at Selective Colleges and Universities

By

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Abstract

This study explores the ways in which financial constraints and financial distress structure the college experience for low-income students at selective colleges and universities. Drawing on data from both surveys and interviews, I find that limited financial resources impacted nearly every aspect of the college experience from one's social life to their future job connections. Even with generous financial aid packages, students reported their financial situation affected the clubs and extracurricular activities they took part in, the social groups they joined, the quality of the apartments they lived in, the internships they could take, the friends they made, and the classes and majors they chose. These findings have important implications for understanding and addressing barriers to success that low-income students face when they arrive on campus. Further, this study adds to the growing literature on the social-class achievement gap in higher education by focusing on the role of economic capital.

Part I. Introduction

The American educational system is often conceptualized as an engine for social mobility. Yet, background characteristics such as family income, place of birth, and parental educational level remain powerful predictors of educational achievement (Gofen 2009). Further, over the past thirty years, the value of a college degree has skyrocketed (Collier and Morgan 2007). Over the course of a lifetime, on average, college graduates earn nearly one million dollars more than high school graduates (Kuh et al. 2006). But this income gap is not the only difference—education level increasingly divides American society on a number of crucial measures, including community participation, social engagement, family stability, and even optimism (Fischer 2006).

In recent decades, as the value of a college degree grew, so too did income-based gaps in college completion (Clotfelter, Hemelt & Ladd 2018). Compared to their more affluent peers, low-income students are less likely to enter college (Stephens et al. 2012). If they do enroll, low-income students attain lower grades, take fewer credits, have higher dropout rates, are less likely to participate in extracurricular activities and are less likely to develop close relationships with their classmates and professors (Stephens et al. 2012).

Low-income students are also far less likely to attend highly selective, elite institutions, which despite relatively small enrollments, wield disproportionate influence and funnel graduates into lucrative careers and positions of power (Bennett, McCarty & Carter 2015). Importantly, low-income students who attend more selective colleges greatly increase their likelihood of graduation, as well as future career prospects (Landers 2018). While college graduates can expect to earn an average of one million dollars more than high school graduates over the course of their lifetime, this number is even higher for those who graduate from elite colleges and universities (Landers 2018:17). Moreover, graduates from elite colleges wield enormous power in business and government with 54% of America's corporate leaders and 42% of government leaders having graduated from just 12 elite schools (Landers 2018:18). In fact, all nine Supreme Court Justices, as well as the last four American presidents are alumni of highly selective institutions (Landers 2018:18).

Today, elite schools are confronting their lack of socio-economic diversity through initiatives, such as "no loan" and "need blind" financial aid policies, which seek to address some of the financial barriers that prevent low-income students from applying (Landers 2018). In 1998, Princeton became the first U.S. university to guarantee all incoming undergraduate students with family incomes less than the national median financial aid packages without loans (Hillman 2013). Soon after, Harvard, Yale, Stanford, and several other elite private institutions followed Princeton's lead. By 2011, 69 programs were in operation (Hillman 2013).

However, after decades of serving predominantly upper-middle-class students, elite schools are unaccustomed to serving the needs of an economically diverse student body (Landers 2018). As elite universities enroll more students from diverse SES backgrounds, a better understanding of students' level of financial distress is necessary. There exists a dearth of

research regarding how financial constraints structure the college experience for low-income and working-class students, particularly in environments where students are surrounded by high levels of wealth. In fact, much of the literature about first-generation and low-income students at elite colleges focuses on the role of social and cultural capital rather than economic capital.

While there exist many factors, including social and cultural capital, that arguably contribute to the achievement gap between low-income students and their more affluent peers, the role of economic capital cannot be overlooked. Low-income, working-class, and first-generation students often lack the financial means to afford higher education and all of its concomitant costs (Soria, Weiner and Lu 2014). Therefore, these students are often faced with "ongoing financial decisions that are substantially different from their peers who have sufficient economic capital to afford their education" (Soria, Weiner and Lu 2014:4). For instance, it is well established that, compared to traditional college students, first generation students spend twice as much time working jobs during the school year and are often unable to spend summers doing unpaid internships that may lead to future job opportunities (Stephens et al. 2012).

Therefore, my project aims to explore the ways in which financial constraints and financial distress structure the college experience for low-income students at selective colleges and universities. To what extent do comprehensive financial aid programs designed to reduce price barriers actually succeed? And to what extent do financial concerns remain key factors which constrain available options and structure the experiences of low-income students? Through survey and interview data, I aim to explore how low-income students are spending their money, the financial decisions they are faced with, the strategies used by students to limit costs, and students' levels of financial distress throughout the school year.

Part II. Literature Review

Low-Income and First-Generation Students

Despite the deeply rooted American belief that education provides the possibility of mobility for all, college is a primary system through which privilege is passed from one generation to the next (Berg 2010). Parental education level, and in turn, socioeconomic status, is often transmitted from parents to children (Berg 2010). A first-generation college student is commonly defined as a student whose parent(s) or legal guardian(s) have not completed a bachelor's degree. Today, one in six college students at four-year universities are the first in their families to attend college (Stephens et al. 2012). These students tend to come from working class backgrounds, have less financial resources, attend lower quality high schools, and choose less selective colleges than their continuing generation peers (students who have at least one parent with a bachelor's degree) (Stephens et al. 2012; Orbe 2004). First-generation college students are disproportionately represented among racial and ethnic minority groups and are more likely to be female, to be older, and to have dependents (Stephens et al. 2012).

Low-income is typically defined as the bottom quintile by family income, and previous studies have used Pell Grant eligibility to determine low-income status. While low-income and first-generation students are not necessarily one and the same, these identities often overlap due to the relationship between education and income (Stephens et al. 2012). Therefore, low-income students are often the first in their family to attend college and most first-generation college students come from low-income or working-class backgrounds (Stephens et al. 2012). Compared to their higher-income peers, low-income students tend to be less academically prepared for college, are more likely to go to vocational schools and community colleges, are more likely to drop out of college, and once they earn a degree, make less money (Berg 2010:1).

Being Low Income at an Elite School

Elite colleges in the U.S. have a long history of serving students from predominantly affluent family backgrounds (Berg 2010). Beginning in the 1920s, in response to a rapidly increasing enrollment of low-income Jewish students, Harvard, Yale, and Princeton created a deliberately complex admissions system in order to better hide what was, in essence, "an ethnic and class stratification process" (Berg 2010:1). In order to exclude certain students, these schools limited the number of "intellectuals," used a subjective criterion of "character, manliness, and athleticism," and gave preference to legacies. In the 1960s, when faculty and the public began objecting to this system, schools began to use SAT and National Merit programs for admission criteria (Berg 2010). While admissions appeared more open and meritocratic, the number of poor students admitted to Ivy League schools actually fell from ten percent in 1954 to five percent in 1996 (Berg 2010:2). As Berg (2010) writes in Low Income Students and the Perpetuation of Inequality, "admissions to elite universities in America have never been truly open and are not so today" (2).

Stratification within higher education persists, in part, because of factors like students' access to academic or social capital, information about the college admissions process, and institutional need for "reputation and prestige maximization" (Hillman 2013:807). Wealthy and well-connected students have numerous advantages when it comes to the admission process, such as private tutors and educational consultants. During the admission process, schools often favor legacies and students whose families they can expect donations from (Bennett, McCarty & Carter 2015).

Due to factors such as exclusionary admission policies, in the early 2000s, 74% of students at the most selective colleges came from families in the highest SES quartile (incomes

over \$95,000), and only about 10 percent came from the bottom two SES quartiles. Despite a changing focus towards more inclusionary policies, including generous financial aid packages and "no-loan" programs, the past decade has seen little change in the percentage of low-income students at highly selective colleges (Landers 2018:2). As of 2014, the College Board reported that only six percent of students at the country's 193 most selective colleges came from families earning less than \$35,000 (Landers 2018:20). Using federal government data, Raj Chetty and colleagues recently found that Ivy League colleges have more students from the top one percent of the income distribution than from the bottom 50% (Landers 2018:2).

Since elite institutions have served predominantly middle- and upper-class students for so long, campus culture tends to be organized around middle- and upper-class cultural norms or "rules of the game," making it difficult for students who are not from these backgrounds and who have limited financial resources to navigate the practices necessary for college success (Stephens et al. 2012). Moreover, "one's economic and cultural capital take on meaning within a social context" (Aries & Seider 2005:421). After conducting interviews with low-income students at both a small elite college and a large state university, Aries and Seider (2005) found that compared with students at the state university, lower income students at the prestigious private college dealt with more class-related challenges. In other words, the greater disparity of wealth at the elite college heightened awareness of social class and made the absence of economic capital more salient for low-income students. Students at the prestigious college were more likely to feel that they were outsiders and that they lacked a set of common experiences shared by other students (Aries and Seider 2005).

Financial Scarcity

In their new book *Scarcity—Why Having Too Little Means So Much*, Mullainathan and Shafir (2013) argue that the dynamics of scarcity, or of having less than one feels they need—be it social connection, food, time or money—create a similar psychology, which orients the mind "automatically, powerfully, toward unfulfilled needs" (7). When individuals experience scarcity, the mind becomes more attentive and efficient at dealing with pressing needs to the detriment of everything else (Mullainathan and Shafir 2013). Poor individuals experience pressing financial concerns in their day-to-day life and are often forced to "juggle expenses and make difficult tradeoffs" (Mani et al. 2013: 976). The cognitive system has limited capacity, meaning that pressing financial concerns leave poor individuals with less bandwidth for other aspects of life.

Mullainathan and Shafir argue that poverty impedes cognitive function—that poor individuals are dealing not just with a lack of financial resources, but also a lack of cognitive resources. Importantly, it is not that poor individuals are less capable due to inherent characteristics, but that poverty itself diminishes bandwidth, making individuals "less insightful, less forward-thinking, less controlled" (Mullainathan and Shafir 2013:13). Their findings are "not about poor people, but about any people who find themselves poor" (Mani et al. 2013:980).

Numerous studies provide evidence for the effects of scarcity on cognitive capacity. In one such study, Mani et al. (2013) examined sugarcane farmers living in Tamil Nadu, India across the planting cycle. These farmers earned over 60% of their income from sugarcane and thus found themselves considerably poorer immediately before the harvest as compared to after. Mani et al. (2013) compared the farmers' fluid intelligence and cognitive control pre- and post-harvest, finding that farmers performed significantly better on these tests post-harvest. This was

the tests twice, and nutrition.

Like the sugarcane farmers who receive the bulk of their income in one lump sum, most colleges distribute financial aid refunds just once at the beginning of each semester. For many students, financial aid is meant to assist with some living expenses, but does not come close to covering the entire cost (Weissman et al 2017). This system of disbursement may leave students struggling to make ends meet, particularly as the semester draws to a close. One MDRC study, Aid Like a Paycheck, issued financial aid refunds in bi-weekly installments (like a paycheck) at two community colleges in Houston, Texas. Preliminary results indicated that biweekly disbursements reduced student loans and debt after one semester (Weissman et al. 2017).

Further, at one college (but not the other), students receiving their aid like a paycheck had enrollment rates six percentage points higher than students receiving aid traditionally (Weissman et al. 2017).

If scarcity does indeed reduce cognitive bandwidth, attention, cognitive ability, and self-control—all of which play key roles in academic achievement—then it seems probable that one potential pathway through which background characteristics may impact educational achievement is via financial scarcity.

Financial Stress

Financial stress has been defined as "difficulty in meeting one's financial obligations" (Robb 2017:515). Prior research has found a consistent relationship between increased financial stress, greater levels of psychological distress, and decreased subjective well-being (Sturgeon, Zautra & Okun 2014). Compared to their more affluent peers, financially stressed students

consider leaving college more often, have higher levels of psychological problems, worse living conditions, more college adjustment problems, higher rates of unhealthy behaviors and interpersonal issues, and poorer academic outcomes (Britt et al. 2016). These relationships are better understood through the lens of Pearlin, Aneshensel and LeBlanc's stress proliferation model.

Pearlin, Aneshensel and LeBlanc's (1997) stress proliferation model, in which stressors in one life domain spill over and exacerbate stressors in other domains of functioning is well documented. For instance, numerous studies have found a link between financial stress and interpersonal conflict. Using data from daily journals, Sturgeon, Zautra, and Okun (2014) found a significant positive relationship between the number of negative financial events per day and the number of negative interpersonal events on the same day. These findings highlight the interconnected nature of social and financial stress and are consistent with Pearlin, Aneshensel and LeBlanc's stress proliferation model.

Given the proliferation of stress from one domain to another, it is unsurprising that researchers have found a statistically significant link between financial stress and academic performance (Bennett, McCarty & Carter 2015). In fact, the American College of Health Association (ACHA) has recognized stress as a major cause of academic difficulty (Robb 2017). Bennett, McCarty, and Carter (2015) found that students who were worried about paying for college scored an average of 4.5 percentage points lower in class grades than those students who were not worried about paying for college, and students who told the researchers their financial stress impacted their academic performance scored an average of 6.6 points lower than students who were not financially stressed (29). Similarly, Keels (2015) found financial distress to be significantly associated with GPA. However, this relationship was entirely mediated via

depressive symptoms. In other words, after controlling for depressive symptoms, the relationship between financial distress and GPA became non-significant.

The detrimental effects of financial stress on psychological well-being are well documented (Robb 2017). However, recent studies have found subjective perception of financial strain to be a more accurate predictor of mental health than one's objective financial situation (Asebedo & Wilmarth 2017). Along these same lines, Britt et al.'s (2016) study found that "financial stress is largely determined by feelings of needs not being met, feeling inferior based on peer comparisons of adequacy, having low mastery, managing a large number of financial stressors, and having high student loan debt and little savings" (180). Financial stress, then, is determined both by one's objective financial situation and by one's perception of their financial situation. Low-income students generally have low levels of financial security, making them especially vulnerable to financial stress when expenses or unforeseen issues arise (Fosnacht & Calderone 2017). When low-income students attend prestigious universities, though, they may be doubly vulnerable to financial stress as their perceptions of their financial situations change due to peer comparisons.

In recent decades, research has consistently shown that parental education level, and in turn, socioeconomic status is often transmitted from one generation to the next and that college is a primary mechanism through which privilege is passed from parents to children. There exists a growing consensus that the American educational system, rather than promoting social mobility, solidifies socioeconomic status and perpetuates inequality. However, much of the existing research on low-income students focuses on social and cultural capital, rather than financial resources. While the role of social and cultural capital in college student success deserves extensive attention, so too does the role of economic capital. Existing research indicates both that

financial scarcity impedes cognitive function (Mullainathan and Shafir 2013) and that financial stress affects academic performance, psychological distress and subjective well-being (Bennett, McCarty & Carter 2015).

Given the links between financial resources, cognitive functioning, and health and well-being, I argue that economic capital plays a crucial role in the college student experience.

Therefore, a more comprehensive understanding of the financial situations of low-income students is needed. My project aims to fill this specific gap in the literature. In particular, I aim to explore how low-income students are spending their money, the financial decisions they are faced with, the strategies used by students to limit costs, and students' levels of financial distress throughout the school year.

Part III. Methods

Sample

I used a non-random purposive sampling of young adults who were currently in college or who had graduated from college within the past three years and who self-identified as low-income students. For this study, I define a selective college or university to be those who rank 100 or above in the 2018 U.S. News and World Report College rankings. I define highly selective colleges and universities as those who score higher than 50. My sample was restricted to students who had attended or were attending selective or highly selective institutions.

Study Design and Data Collection

In the present paper, I employed a combination of survey and interview approaches. The survey data allowed me a larger sample of individual responses, while the interviews allowed for

a deeper exploration into the meaning behind the survey results. Further, the interviews provided insight into the experience of low-income students across different types of prestigious colleges and universities.

Survey Data

Survey questions were based, in part, on the Student Experience in the Research University (SERU) survey based at the Center for Studies of Higher Education at UC-Berkeley. In addition to basic demographic information, the survey included questions about students' financial aid packages, strategies for making ends meet, perceptions of financial stress, and overall attitudes regarding how class background impacted their college experience. Survey questions can be found in Appendix A. The survey was sent to two student groups at a highly selective mid-sized research university in the mid-West. The median family income of a student at the university was \$134,500 and 58% of students came from the top 20% of the income distribution. Another ten percent of students came from the top one percent, whereas only 5.5% of students were from the bottom 20% of the income distribution (Aisch et al. 2017).

The first student group I recruited from is an advocacy organization which seeks to make campus an inclusive place for low-income and/or first-generation students. The second group is composed of students who were admitted to the university through a national scholarship program for low-income students. Thirty-seven students completed at least part of the survey, and 30 students completed the survey in its entirety. Table 1 provides details about the gender, racial and SES composition of the sample, which was primarily female, white, and low-income.

Table 1 Survey Participant Demographics

	n	%	
Race			
White	12	33.3%	
Black or African American	9	25.0%	
Asian	1	2.78%	
Native Hawaiian or Pacific Islander	3	8.3%	
Other	5	13.9%	
Prefer not to answer	6	16.67%	
Hispanic or Latino			
Yes	19	51.35%	
No	18	48.65%	
Gender			
Male	8	21.6%	
Female	29	78.38%	
Education level of most-educated parent	,		
Did not complete high school	3	8.1%	
High school/GED	11	29.7%	
Some college	7	18.9%	
Bachelor's degree	12	32.4%	
Master's degree	3	8.1%	
Advanced graduate work or Ph.D.	1	2.7%	

For the purpose of this study, I define a first-generation college student as a student whose parent(s)/legal guardian(s) have not completed a bachelor's degree. The parental education level of my sample varied greatly. Of my survey respondents, only 56.7% were first generation students. In fact, 10.8% of students had parents with graduate degrees. However, another 30% of students had at least one parent who had not completed high school.

Semi-structured Interviews

I interviewed a total of eight low-income students, seven of whom were also first-generation college students. Two students had attended selective liberal arts colleges (both on the East coast). Five students had attended or were attending highly selective research universities

(one in the Midwest and another in the mid-Atlantic), and one student was currently attending a highly selective public university (also in the Midwest). All students were of traditional college age and my sample skewed both female and white. Of the students I interviewed, three were Hispanic or Latino and the rest were white. Only two students identified as men.

Interviews were conducted either in person on a college campus or via Skype. Interviews were open-ended and broadly structured, lasting anywhere from 30 minutes to one hour. My interview guide can be found in Appendix B. By using semi-structured interviews, I hoped to better understand how financial constraints structured the college experience of participants and how they thought about their socioeconomic status while attending selective schools. This type of qualitative approach is common, especially among researchers who focus on educational inequality (Aries & Seider 2005). By allowing students (or graduates) to reflect on the ways their class background impacted their experiences in college, I hoped to come up with major themes and to provide context for my survey data. All interviews were tape recorded, transcribed, and coded. I used NVivo qualitative coding software to code data into emerging and key themes.

Part IV. Findings

Financial Aid and Loans

Nearly all respondents described their financial aid as generous and were extremely grateful for the opportunities they had been given. All indicated that the vast majority of college tuition and concurrent costs were covered by financial aid. When asked how he had paid for college, Max explained, "I didn't pay for college. My college paid for my college." Three of the students I interviewed had been admitted through a national scholarship for low-income students, meaning they were guaranteed a full four-year scholarship to cover the cost of attendance,

including room and board. None of the participants I interviewed reported paying any significant amount of money out of pocket to their schools.

Survey results indicated that, on average, 78% of college expenses were met with scholarships or grants. An average of seven percent of costs were met via parental contributions and roughly 20% were met from students themselves (i.e. job, savings, etc.). Seventy-seven percent of surveyed students reported receiving Federal Pell grants, which are awarded only to undergraduate students who display exceptional financial need. Two students were unsure if Pell Grants were part of their financial aid package, and five students were not receiving Federal Pell Grants (however, even these students had extremely low expected family contributions indicating high levels of financial need).

Four of the interviewed students had taken out loans to help cover the costs, yet the amount of debt varied widely. Jessica, for example, had graduated with \$60,000 in student loans, while Chelsey, Rebecca, and Michelle had graduated or were expecting to graduate with about \$20,000 of loans. Survey results indicated that only about one percent of total college expenses, on average, were met with loans. One survey question asked, how much student loan debt do you expect to graduate with? Of the 31 students who answered, nearly three-quarters expected to graduate debt-free, and of the eight people who expected to graduate with student loan debt, the average anticipated amount was only \$3,500. Compared to the national student loan debt average of \$37,172 for Class of 2017 graduates ("A look at the shocking student loan debt," 2018) these numbers are exceedingly low. However, all survey respondents were attending an institution with a commitment to meeting 100% of demonstrated family need in the form of grants instead of loans (University Website).

Previous research indicates that high levels of student borrowing can result in considerable stress (Robb 2017) and that low-income students are more likely to default on their loans compared to their more affluent peers (Soria, Weiner & Lu 2014). Therefore, the fact that most students expected to graduate debt free is promising in terms of both current and future well-being. However, students who did graduate with considerable debt expressed both regret and substantial concerns about their future. Jessica, who graduated with \$60,000 in student loans, told me:

I wish I had done something else...probably either get gen eds out of the way at like a community college and then go to regular college for two years or look at like a less expensive school. Or, if it was an option, go to school while living at home, but that wasn't really an option because I didn't live near any colleges.

Jessica not only regretted her decision to attend an expensive college for four years, but questioned her entire decision to get a bachelor's degree:

I feel like everyone lied to me. Like I would go to college cause that's what's best and then you'll get a job. Nope. Should've just went to trade school for like two years and been an anesthesiologist and made like 80K at twenty. Like I wish I had considered that kind of thing or like had it even presented as an option to me...instead of everyone pushing for college. Cause you can always go back to school, but you can't get out of the student debt you're already in.

Student loan debt also structured the way students thought about their options for the future. For example, when Michelle told me about her post-graduation plans to apply for a Fulbright scholarship and study abroad, she immediately followed it with, "And that would defer my loans another year which would be pretty cool."

For the most part, students were receiving generous financial aid packages and expected to graduate with little student loan debt, indicating that comprehensive financial aid programs did succeed at reducing price barriers associated with tuition. The students I spoke with were

grateful for the financial resources they received. The last question of my survey asked students if there was anything else I should know about their experience, to which one student replied, "shout out to [name of scholarship program] for that full ride!" Other students, too, spoke about being grateful for the opportunity to attend their dream schools:

I loved [name of university]. The academics and the style of the school, but also the financial component was a really big part. So yeah, I ranked it as my top choice for [name of scholarship program] and like got in and it was a binding decision so you know, but I was happy with it! That was my dream school and it ended up being the best thing that could ever happen, like being able to go to my dream school and then also like be able to have peace of mind and pride to be like I went to college and I didn't have to be a burden to my parents. They wouldn't have seen it like that, but I would've.

Despite generous financial aid policies and students' immense gratitude, though, finances and one's ability to pay for costs associated with college remained barriers to full participation and caused significant financial stress for students.

Financial Stress

If the financial aid (scholarships, grants and loans) applied to an individual's student account exceeds the amount due, colleges and universities disburse those funds back to students in the form of a check. For many low-income students, especially those who have moved off campus and must pay rent each month, the school refund is a substantial component of making ends meet. While 35.5% of students surveyed reported that they did not receive a financial aid refund, all 11 of those students had been living in dormitories or other on-campus housing options during the school year. For these students, their entire financial aid package was going straight to the school to cover the added expense of housing and meal plans. That said, students living in dorms generally do not have high expenses since their housing and food are already paid for.

Of the 20 students receiving a refund, seven (22.58%) said they generally received their check a week before the quarter began, two (6.5%) said they received it when the semester began, five (16%) said a week after the quarter had begun and another five (16%) said at least two weeks after the quarter had begun. The timing of refund disbursement matters because the start of each quarter means students must buy costly course materials. Further, students may be particularly low on funds at the end of one quarter and start of another as last quarter's refund runs out. Due to the variation in survey responses, it seems reasonable to assume that students are unable to accurately predict when they will receive their refund. This uncertainty likely makes financial planning more difficult and may cause financial stress for some students. For example, it is hard to plan for buying costly textbooks if you're unsure whether your check will come a week before the quarter starts or two weeks after the quarter has begun. However, only about half of surveyed students (53%) said they would prefer financial aid refunds to be distributed more regularly (like a paycheck as opposed to a lump sum).

Roughly a third of students (32%) reported being most stressed about money near the end of the quarter, while another third said they were most stressed about money randomly throughout the quarter. Twenty four percent of students said their financial stress was worst around holidays and birthdays. The other 13% of students felt that financial stress was worst at the start of the quarter or around the middle of the quarter. Some of this variation may be due to differences in timing of refund disbursement. For instance, students who received their refunds two weeks into the quarter may have been most stressed at the beginning of the quarter. Additionally, financial stress may differ between schools with quarter systems (and three refund disbursements) compared to those with semesters (only two disbursements). Rebecca, who attended a university with a semester system, told me she always felt very financially secure

when her refund dropped early in the semester, but by the end of the semester she was generally running out of funds. She explained the impact of financial strain on her academic achievement:

Near the end, I would be running out of money and would have to cover rent out of my pay checks. Finals would have been the ideal time to be taking off from work so that I could study, but I could never—I couldn't call out of work near finals period because that's when I needed money the most.

Other students told me their financial concerns changed, not as each quarter progressed, but from year to year throughout their four years of college. Martha, for one, said she was particularly stressed during her freshman year as she learned how to manage money and became more conscious about her financial decisions. Martha's job provides her with far more hours in the fall than the rest of the year. When I asked her whether she was stressed about money during the spring, she shared, "I learned my lesson first year. So, for this year, I was a bit more prepared where I just kind of saved up from first quarter to transfer over to spring." Along those same lines, Martha told me she had also chosen to de-affiliate from her sorority during her second year of college due to the cost, and that this decision had decreased her financial strain considerably: "This year was a lot better because I de-affiliated for one and I—yeah, I also wouldn't go out as much. Like I learned to kind of make it last."

On the other hand, students also told me their financial stress had gotten worse during their last year of college as they were faced with expensive graduate school applications and senior year social events. Jessica explained, "I think it [financial stress] was worst at the end of my senior year just because you try to do so much stuff and I was also sending out applications which cost money." David echoed this sentiment:

When I was applying to med school because that was a lot of money so that was kind of scary. And the summer before that, I was saving up money because I knew med school apps would take up a certain amount of money so I couldn't—at first, I couldn't stay in [Midwestern city] cause I'd have to get an apartment and I couldn't afford cause I wanted

to save up ... to help pay for ... flying out to places. But I got a friend of mine who had an apartment that she was trying to sublet. She couldn't find anyone so she just let me stay in it. But that was the scariest chunk of time when I was most concerned about money.

Despite the timing of and reasons for financial stress, a considerable portion of low-income students experienced financial difficulties. Of the students surveyed, 63.3% reported having experienced financial difficulties while enrolled in college. Probably due in large part to the generous financial aid policies at the university I sampled from, only about a third of students worried about having enough money to pay for tuition. However, 56% of students worried about meeting their monthly expenses, and 77% were stressed about their personal finances, in general. About half of students (53%) were running out of money by the end of the quarter, and slightly less than half of the surveyed students (47%) agreed that financial stress impacted their academic success. Only about a third of students felt that there was enough financial support available to students and 87% thought about money often. Given the relationship between financial stress, psychological distress, and academic achievement, as well as scarcity's effect on cognitive functioning, these levels of financial distress are concerning.

Even apart from the link between financial stress and well-being, students' financial concerns impacted their academics in more explicit ways. Previous research has shown working class students often think about their college experience in career terms, while affluent students are more likely to conceptualize college as a place for personal or intellectual development (Soria, Weiner & Lu 2014). Similarly, Aries and Seider (2005) found low-income students "felt greater powerlessness relative to affluent students in determining their own futures" since wealthier students could plan to pursue graduate degrees without worrying about future costs.

Like these studies, a number of students I spoke with discussed how their financial concerns had impacted their choice of major. For the open-ended survey question, one student wrote:

There was some pressure to pick a major that would ultimately be profitable. I have a friend who was a fundamentals major and couldn't get a job upon graduating so his dad just took him on as an employee in his consulting company. I wouldn't be able to do something like that.

Another student wrote about a number of privileges that affluent students have compared to lower-income students, one of which involved being able to "choose majors that are more personally self-fulfilling because they may not be as concerned with gearing their major choice toward income prospects."

While major choice was the most obvious way financial constraints appeared to impact academics, other ways included being unable to drop classes, to participate in study abroad programs, and to retake classes for a better grade. Of the 31 students who responded, roughly a quarter (22.6%) had decided against study abroad for financial reasons, and three students had chosen not to retake a class to improve their grade due to costs. Because most financial aid awards are dependent on students taking a certain number of credits, taking a lighter course load is often not an option available for low-income students. For example, one student wrote about the stress associated with their decision to withdraw from a class:

When I had to withdraw from a class, I was stressing a lot about whether that would affect my financial aid. I wonder whether that kind of information could be spread out more, because it could be pretty overwhelming not knowing whether or not you would have to pay back thousands of dollars for a dropped class.

Another student even incurred a \$3,000 penalty for taking a medical leave of absence—something which she was unaware would happen, despite having checked with the financial aid office to determine whether there would be any financial consequences associated with taking a medical leave of absence

Financial Decisions and Strategies to Limit Costs

In addition to the negative impacts of financial stress, low-income students often use numerous money-saving strategies, which are themselves stressful, and which take time and energy away from school-related activities. Soria, Weiner & Lu (2014) examined the financial decisions of 147,170 undergraduate students across six large, public universities and found that students commonly used strategies, such as purchasing fewer textbooks or buying cheaper used books, to meet their college expenses. However, low-income and working-class students were far more likely than their middle- and upper-class peers to rely on credit cards and take out loans. Students also resorted to more serious financial decisions, such as skipping meals or taking time off from school (Soria, Weiner, and Lu 2014). Soria, Weiner and Lu's (2014) study demonstrates the need for greater awareness of the day-to-day financial decisions made by low-income and working-class students.

Similar to previous studies' findings, my respondents used a number of strategies to limit costs. Many individuals reported searching for cheaper class materials, choosing inexpensive apartments, forgoing costly social events and entertainment, and saving money by grocery shopping and cooking. Students' strategies ranged from simple choices to time consuming ordeals, however, the cumulative effects of engaging in a variety of money-saving strategies may cause greater stress and decrease the time and energy students have to devote towards academics and social life.

Class materials

Almost none of the students I interviewed had ever gone without class materials they needed. Given their acceptance into selective colleges, it is unsurprising that they took their

schoolwork extremely seriously and made comments such as, "I'm really paranoid about being unprepared for things," and "I'm a nerd so I got all the books that they requested." However, all spoke of methods they had used to decrease the costs of course materials, such as looking for the pdfs online, buying e-books rather than hard copies "even though they were a huge pain," borrowing books from friends who had taken the class, buying cheaper previous editions, and walking to the library to use the textbooks on reserve. Some students described being too nervous to depend solely on the library reserve books. Many courses only have one or two books available (copies which often must remain in the library), and often students can only check these books out for a couple of hours at a time. Jessica told me, "I know the library had copies that you can use but that was too scary. What if someone else is using it?" Chelsey though, spoke of her experience using the reserve textbooks:

Senior year, I took a statistics course and the book for that—the textbook was like \$300, and I didn't buy that. I actually every single week would have statistics homework due on like Wednesday and Tuesday night. I would always go to the library and like rent the book out from reserves. So, I'd have to physically go down to the library to do my stats homework whereas everyone else could do it anytime at their dorm.

It seemed that the vast majority of students I spoke with though, relied on electronic pdfs for the bulk of their required books and this saved them a considerable amount of money.

Throughout my interviews, the disparity in class material costs between STEM and other majors came up often. For example, Chelsey told me she was lucky to be a sociology and French double major because she could find most of her books for a dollar or two on half.com and would have to pay only for shipping. Similarly, Ann explained:

It's not too much of an issue for me as a social science person. I know STEM majors have a super hard time with that, and I can't imagine what that would be because a lot of the times you have to just—you have to buy the textbooks and you have to pay a ton of money.

Textbooks, though, weren't the only expense. Ann, in particular, talked about professors who required students to read numerous journal articles for class but who wouldn't allow computers, which essentially forced students who wanted to come to class prepared to print pages of reading (which at Ann's university costs \$0.13 per page). These costs add up quickly for low-income students, which Ann emphasized when she described talking to her professors about it:

I just say like sorry, no power on this earth is gonna' make me print all these readings because it's so expensive! But again, even if you get the professor's permission to be able to use a computer, you're still *that kid* who didn't want to print their things and wanted to use their computer and there's like this stigma because...it's not necessarily that they're like "oh yeah we know that's the low-income kid," but it's like "why didn't you wanna print it? Do you wanna be on facebook?"

While expensive course materials forced students to use strategies like asking the professor for special allowances and pirating pdfs online, the price of materials also prevented a small number of students from taking particularly costly classes all together. Eleven survey respondents (8.7%) reported they had chosen not to register for classes that required expensive course materials in the past quarter. In this way, the cost of materials structured both how students could prepare for class (e.g., reading on a screen versus highlighting in a book), their experience in class (e.g., being the only student using their computer), and the courses that students were able to take (e.g., students opting out of classes with expensive material lists).

Housing

Of the students surveyed, 19 were living in a dormitory or other campus housing, whereas 17 had moved off campus. These numbers correspond well with the number of lower and upper-classmen in the sample, which makes sense because it is far more common to move off campus during junior and senior year. In fact, only four of the students living in campus housing were upperclassmen. Of those students who I interviewed, most expressed price was a significant factor when choosing an apartment. For instance, Martha described the factors that

went into her housing decision: "a lot had to do with price and location." However, after living in a building that ended up getting bedbugs the previous summer, Martha was also cautious about options that were too cheap. Other students, too, expressed how saving money on housing impacted apartment quality in big ways. Michelle spoke of both past and future apartments, noting, "it was just a generally gross apartment and a pretty small room. There was a hole in my wall. The apartment that I'm moving into in the fall, I think has roaches.... But it's cheap, you know?"

Max, too, described picking an apartment despite some red flags in terms of quality:

The school told me that they were gonna give me \$9,000 for housing and food, right? So, I had to divide this by 12 to know how much I'll be able to spend on rent and such. So, I came up with a number—350. That's the money that I could afford for rent and with this budget there are not many apartments that will take you up around there. So, I was looking at these row houses and found this and it was so cheap and would fit my budget. But I also got the shitty room for that reason...if it weren't for the fucking rats, I would've liked the house.

Other students, however, had more luck finding quality apartments at affordable prices.

Ann described finding a nice apartment for cheap by starting her search early:

Most people don't really look until Spring quarter or late winter quarter so finding it in Autumn was crazy and then, yeah, it was really easy. We just needed to find one more roommate which was simple because it was a really great apartment and really well priced.

Chelsey also lived in a nice apartment, but for very different reasons: she didn't want to miss out on living with her friends, all of whom were upper-middle class and could afford the higher rent. Her story highlights some of the tough decisions that can arise for low-income students when surrounded by wealthier peers. In this case, Chelsey had to decide between living with her friends and saving money on housing. She explained:

Sophomore year, we lived on campus, but it was like an apartment-style dorm and that was really just my group of friends from freshman year asked me if I wanted to room

with them, and I said sure, and that's the style that they wanted to be in. And that was a lot more expensive than the regular dorms, but I just wanted to be with my friends.

When Chelsey's friend group later moved into an off-campus apartment a year later, new tensions arose, with her friends unable to understand why Chelsey occasionally struggled to make rent:

Mark was the one who was in charge of finances and he would hand in the rent every month. And there were a couple of months where I needed like an extra one or two days to give him the money because my paycheck would be on Thursday and he wasn't very understanding of that. He didn't understand why I couldn't immediately go to the bank and withdraw the cash and, of course, his parents were paying his part of the rent so he didn't see why I needed like a day or two—or why I couldn't predict that it was coming or something. And it wasn't that I was being irresponsible. It was just like my paycheck comes on Thursday and the first of the month is Wednesday this month.

Chelsey expressed the strain this put on her and Mark's friendship: "That really affected our relationship, and after I moved out of that apartment, we actually didn't talk for like a year and that was mostly the reason why."

Unlike Chelsey, the majority of my interview respondents chose cheaper housing options, which, in many cases, meant poorer quality and cramped quarters (one student described how she and her three roommates rented a two-bedroom apartment and each shared a bedroom).

Food Costs

One of the most popular strategies for limiting costs was grocery shopping and cooking. Thirty-five percent of students surveyed (13 total) reported grocery shopping and cooking to be a strategy they had used during the previous quarter to save money. This number seems low when considering the whole sample. However, only fifteen students were living in non-campus housing at the time of the survey. Of the students interviewed, all told me they limited how often

they ate out at restaurants or ordered food delivery. Given that 75% of surveyed students ranked food as one of their top two monthly expenditures, it is unsurprising that strategies to limit food costs were so common.

While students on the meal-plan had fewer options for saving money on food, they still described being conscious of their spending, especially compared to wealthier peers. Until last year, the University in question closed their main dining halls on Saturday nights, which meant students on the meal plan had to either pay out of pocket for their food or spend Campus Dollars at several of the cafes and shops on campus. Freshman, for example, are given \$100 in Campus Dollars each quarter as part of their meal plan, and most students use this money on snacks, coffee, and other incidental food purchases. David though, explained how the Saturday night dining hall closure impacted him differently than many of his peers:

So, in the past, we used to not get meals on Saturdays so people would generally go out on Saturdays. Like the dining halls would close on Saturdays as if to say, "explore the city!" So, they'd give you—every quarter they gave us like \$100—it was called [Campus] Dollars. You can only use it in cafeterias and stuff so people used to blow through that money like buying coffee or ice-cream or stuff, and I would save that money and buy food with that. Now it's different. So now—I think starting last year, they started a Saturday night meal option.

While students like David had to save their Campus Dollars for Saturday night meals rather than coffee or snacks, students who were not on the meal plan had more options to limit food costs.

Rebecca, who moved off campus after her sophomore year, explained that despite the convenience of eating at the dining places on campus, she tried not to do it because "without the meal plan all of the options were overly pricey." Like Rebecca, the majority of respondents discussed this trade-off between convenience and price. Michelle, described the food situation in her college town: "[The college town] is technically a food dessert so like everything is expensive and out of the way." She told me there was a small market similar to Whole Foods

near campus, which was very expensive. Instead, Michelle explained, "I shop at Meijer, which is a bit of a commute." Without a car, Michelle was dependent on friends or the bus to get there. She told me, "I go shopping about every two weeks, and I spend about \$40 every time I go."

Ann, too, described strategies for saving money that required considerable time and energy:

I go to HPP and Target mostly just cause I live on [street name] so it's right there. But I sometimes go to TI if—because it's a little further and I have to ride my bike over there, I'll like check the weekly ad and see if anything's on sale or something and I'm like oh okay, I'll go there instead. Because I have a pretty good idea of what prices are at HPP and Target so I'll compare. There's certain things I buy at different places like just wherever it's cheaper really.

When asked if comparing prices and going to multiple stores took time away from her academics, Ann replied:

It takes time away from something so I guess it could be from academics, you know? Because yeah, it would be really easy if I could just—like I have friends who just order stuff on whatever the Amazon grocery thing is or those—like Blue Apron and the different companies that send food to you. There's plenty of really convenient options for getting groceries and not having to worry about it but none—or not many of those are very financially minded. It's more like convenience. So, it's definitely a thing that takes more time cause I have to go to like two places or three places versus just one.

Other respondents described using coupons or buying cheaper foods. Chelsey told me she tried to buy the cheapest groceries possible— "I would eat a lot of ... they're like canned tuna but it's not tuna it's like chunk chicken. I would use that to do like quesadillas." While none of the students I interviewed brought up skipping meals to save money, my survey data indicated this was a strategy used by a substantial portion of students. In fact, of the 31 respondents who answered the question, 12 (39%) had skipped meals during the previous quarter in order to save money.

Social Life and Entertainment

The students I spoke with expressed wide variation in the class backgrounds of their friends. For example, Rebecca told me, "Obviously, I knew a lot of rich kids, but I tended to click with those who were not. While my five closest friends and I didn't have identical backgrounds, none were rich." Chelsey, though, told a vastly different story:

My immediate friends were all like pretty upper-middle-class, if not upper-class people. Like one of my friends, he—I remember freshman year, he came in and he was talking about how he spent the summer backpacking in Paris with his girlfriend [laughs]. And they rented an apartment right on the Champs-Elysees for like a whole month, and I was just like, "who are you?"

Similar to previous studies' findings, the lifestyles and preferences of affluent students required resources that low-income students didn't have (Aries & Seider 2005). Therefore, students with wealthier friends generally had to make tougher choices about spending money on entertainment and social outings. Chelsey, in particular, shared missing out on a number of social experiences due to money. She explained, "I had a lot of friends who would like to go out a lot and eat at restaurants and I hardly ever went to that because I knew it was going to be like twenty or thirty dollars." Chelsey continued:

I missed out on doing a couple things. You know? Like, one night I was invited to go skiing with them, and I had never been skiing in my life. And to get the pass is like forty dollars, and then you'd have to rent the equipment for additional and whatever. So, I remember being excluded from that just because I couldn't afford that.

While costly social events like skiing trips often excluded low-income students from taking part in the full social experience of their peers, financial concerns also impacted small every-day moments. For instance, one student wrote: "it is often in the small moments that I am impacted by my financial situation, like when friends want to take an Uber and I really don't want to." While some students chose to skip social activities that were too costly, this was not

the strategy used by all. When I asked Max whether there were ever times he couldn't afford to do the things his friends were doing, he told me, "That day was the day I got a credit card." He explained:

Most of the times, it felt like I was able to do the majority of the stuff that my friends did. Sometimes I wasn't, and I didn't do it, and sometimes I wasn't able to afford it, and I still did it.

For Martha, who joined a sorority her freshman year, these pressures were only exaggerated. According to both the National Longitudinal Survey of Freshman and the Online College Life Survey, Greek members are from higher SES families compared to non-Greek members (Hamilton & Cheng 2018). Moreover, Hamilton and Cheng (2018) argue that campus class segregation "would not occur as efficiently and effectively without the presence of Greek organizations" (981). Although Martha is no longer a member of Greek life, she reflected on her experience trying to keep up with other sorority members:

I remember one of the hardest parts of being in the sorority was like not only spending so much money on dues, but also my friends there tended to be better off so they'd always like want to do brunches on the weekend or like different things to go out and I'd just—I couldn't keep up. Yeah, and it was hard to tell them like I can't afford to do this when obviously they could, and I didn't know if they'd actually understand.

Despite the many mixed-class friendships, students gravitated towards individuals of similar class backgrounds due, in part, to their interest in less expensive activities. Ann said she felt lucky to have had so many individuals of a similar background in her dormitory house during freshman year:

I was very fortunate that I had a lot of low-income first-generation students in my house and around me so it was really easy to be like "oh, I don't really want to go out" and then other people were like "yeah, we don't either" and then we would like, you know, do something fun and not spend a lot of money.

For the most part, students found creative ways to have fun and be social without spending excessive amounts of money. Jessica and her friends, for example, did a lot of campus activities, like attending sporting events, in order to reduce costs. Ann elaborated on some alternatives to expensive nights out in the city:

I definitely go out less. Or just like making more plans to do things in. You know, like cook in the apartment or make fun drinks—like not necessarily *not* spending money *at all,* but like finding alternative ways to cheaply have fun and do things with friends but yeah, not spend a ton of money.

Work and Internships

Low-income students who need additional money for campus activities or school fees are commonly advised to work more hours (Landers 2018). However, working more hours can negatively impact grades, decrease sleep, and take time away from socializing and campus activities (Landers 2018). According to my survey results, a third (32%) of respondents didn't work any hours during the time that school was in session. Another third (32%) worked at least 15 hours per week during the school year. Students worked an average of 8.5 hours per week and the median hours worked per week was 10. About a quarter (23.3%) of students said their job didn't interfere with their school work, 30% said their job takes some time from their school work, and 10% said their job takes a lot of time from their school work.

All but one of the interviewed students had worked a job during the school year.

Common jobs included working as a teaching assistant (TA), tutoring, and working at the library or gym, and many students started working nearly upon arrival on campus. David told me he started working the first week of freshman year because he "desperately needed a job to pay for books." Martha also began working early, even before the quarter had officially begun (her job as a student first responder required working practices during football preseason).

There was quite a range in the numbers of hours and types of jobs that students worked. Max, for example, told me he had definitely worked less than 10 hours a week at the school library, while Chelsey had worked a minimum of 20 hours a week for the entire four years of college. She explained her experience of working off-campus:

Yeah, all four years I had a job, which was kind of weird because none of my friends at [college name] had part-time jobs or if they did, they worked in the library or something...But yeah, I worked probably like 20 hours a week for the whole four years and at first it was for my dad's company, like freshman year. And then sophomore, junior, and senior year, I worked at a distributor for a supermarket so I was the person in the pick lines, and I would get the order and put everything into boxes and stuff.

Not all on-campus jobs, though, are created equal. While many students described working in libraries, residence halls, and gyms (where they were allowed to do some school work while working for pay), other jobs were not so great. David explained:

So, officially I started working like the first week of Freshman year, but it was a really bad job. I was essentially—I worked in the lab as an animal caretaker ... which it translates to janitor. So, I was just cleaning up—it was a bird lab, so I was cleaning up bird poop, and it just took way too much time out of my day.

Most of the students were confident in their ability to manage the demands of both school and work. In particular, students told me they had been working since a young age and were used to working while in high school. Martha told me: "I've kind of found balance—I've been working since I was 14 so by now, I've been able to balance it pretty well." Similarly, Ann excelled in school even while working the maximum number of hours per week allowed by the Office of Student Employment:

I had one quarter that I worked the maximum amount of hours [20 per week] that they let a student work because—I don't even know why. I think I was just—I mean, I wanted the jobs and I was like well, you know, money is good and always needed. And that quarter, I had fine grades and I got Dean's list so I was like alright this is fine. I mean, it definitely took a toll on my mental health, which came in later, but academically, I was—I've always been fine.

The ability of these students to balance work and school, especially in very challenging academic environments, is testament to their hard work and talent. However, it is not to say that working while in college doesn't impact some (or even most) students academically. Further, just as Ann discussed the impact working ultimately had on her mental health, students expressed how working had impacted other non-academic areas of their life. David, for instance, explained that working had impacted his ability to participate in extracurricular activities.

I think where it impacted most was in extracurriculars. I feel like as long as you allocate enough time to classes and stuff, it's fine. And I can see that being a concern if you had to work multiple jobs. Which I have a friend of mine who had like three or four jobs, who like—that would take out a lot of time from classes. But thankfully, I never had to do that.

Having to work for pay also hindered students' ability to intern and gain important career experience. The majority of students I interviewed explained that they didn't even bother to look for unpaid internships because working for free simply wasn't an option. Students at one university frequently spoke of an internship program, which provides students with paid, substantive internships during the summer and academic year. For instance, Ann described the value of the program, as well as the importance of knowing about paid internship opportunities:

So, I guess because I knew about the [internship] program, I didn't look for internships outside of that really. And I knew—like I found really great [internships] that I really wanted so it worked out nicely. And I guess, I'm of the positive mindset so I know that you can apply to get [internship program] funding for like unpaid internships and that sort of thing. Because I know that and I've worked at career advancement, I'm very familiar with those types of things...it hasn't been a deterrent. But I mean, I've definitely been in situations where I've had friends or something talk about like "oh man, I wish I could do this, but I can't afford it" ... and then I'm like "hey, did you know that this is a thing?" And they didn't know. So, it's like—knowing is good.

As Ann described, access to information about how to find paid internships or fund unpaid ones is crucial, and a number of students I spoke with seemed unaware that programs like this may have existed at their schools.

Unlike students from the university with the well-known funded internship program, students from other schools had made tougher choices related to internships and work. Jessica, for example, had chosen to forgo internships in order to work for pay, while Michelle had chosen to go without the extra income of a paid job because she believed interning would be more useful in the long run. She told me, "I'll intern during the school year, but I won't get paid for it so I'm not making up the difference very well." Rebecca, too, felt that internships were a necessary experience because she "wasn't sure which career path to take and wanted to try out a number of fields." That said, Rebecca knew her weekly paycheck was an integral component of making ends meet. Therefore, throughout much of college, Rebecca juggled academics, internships and paid work. During her junior year, in addition to a demanding course load, she worked 15 hours a week at the recreation center and interned at the city aquarium on Saturdays.

David shared how his inability to work for free constrained his options regarding research opportunities, as well as internships:

I could never do actual research of my own. Like all the research projects I did were paid projects which basically just needed...they would hire like twenty people to go out interviewing people cause they just needed a large amount of people to do like group work. But as far as like lab work, where you sit at a bench and pipette and like do cool stuff with science, I could never do that cause generally that was all unpaid. Like people were desperate to get those and so many people wanted those jobs that they could afford not to pay them. And again, I just couldn't dedicate my time to something that was unpaid. And that kind of carried over to the summers. In the summers, I felt like I had—like I can only apply to stuff that was paid. Like I couldn't do cool unpaid internships in D.C. or something—like some other people.

David, who will be attending one of the top medical schools in the country this fall, didn't feel that his inability to participate in extracurricular activities or do lab-based research had negatively impacted his medical school applications. However, while reflecting on his career path, he told me:

Maybe if I were to have done lab work, maybe I would have fallen in love with—I don't know—something more traditionally bio-chem-y and gone like an MD-PhD route or something. So that's one thing. If you want to do—if you want to apply MD-PhD, you need a lot of lab experience so I just couldn't do that, but I don't think I would've wanted to do that anyway.

While David wouldn't have wanted to do an MD-PhD anyway, this passage highlights an important theme which came up consistently throughout my conversations with low-income students: even at schools with some of the most generous financial aid policies in the nation, financial resources continued to constrain the options available to low-income students.

Part V. Discussion

As highly selective colleges and universities increase their socioeconomic diversity through admissions and financial aid policies, they must prepare to meet the needs of the low-income students who show up. This study adds to the growing literature on the social-class achievement gap in higher education by focusing on the role of economic capital. Using both survey and interview data from low-income college students and recent graduates, my findings mainly confirm prior research suggesting that even when low-income students have the opportunity to attend an elite school, they don't necessarily have the resources to "participate fully in the college experience" (Landers 2018:61). My project also sheds light on both the day-to-day and long-term financial decisions students are faced with, and my results indicate that the timing and amount of financial aid disbursement matters greatly. Above all, my findings highlight the need for greater attention to the impacts of financial scarcity and stress on academic achievement.

In addition to navigating an array of unfamiliar decisions associated with emerging adulthood, low-income students must also deal with numerous financial issues. Limited financial

resources impacted nearly every aspect of the college experience from one's social life to their future job connections. Even with generous financial aid packages, students reported their financial situation affected the clubs and extracurricular activities they took part in, the social groups they were able to join, the quality of the apartments they lived in, the food they could buy (and the time spent shopping), the internships they could take, the research they could do, the friends they made, and even, in some cases, the classes and majors they chose. Further, at elite schools, low-income students were surrounded by wealthy peers, making it even harder for students to "keep up" financially.

My survey data indicates that a substantial portion of students were stressed about their finances, that wealth and status impacted their experiences in college, and that low-income students engaged in a number of strategies to lower costs that took time and energy away from school-related activities. Due to the type of data I was able to collect, it is beyond the scope of my paper to examine how financial stress and scarcity impacted students' mental health, cognitive bandwidth, and academic achievement. However, my findings suggest that a third of students were most stressed about money during the end of the quarter—a time where students are also taking final exams and must perform at their best academically. Further, over half of students (56%) were worried about meeting their monthly expenses and nearly two-thirds (63%) reported financial difficulties while enrolled in college.

Such high levels of financial distress warrant more research to better understand the link between financial stress, psychological distress, and GPA, as well as scarcity's impact on cognitive functioning. Given the number of students who were struggling to make ends meet throughout the year and because financial scarcity negatively impacts attention, cognitive ability, and self-control, it seems likely that scarcity may negatively affect academic achievement.

However, future research is needed to explore this potential pathway through which one's SES may impact educational achievement.

The vast majority of students I spoke with were excelling in school despite the financial barriers they faced and, for the most part, seemed able to juggle rigorous academic programs with their financial obligations. While previous research often conceptualizes low-income and first-generation students as "lacking" in economic, cultural or social capital, the traditions of adult, worker, and feminist education have long discouraged this way of thinking (Clegg 2011). There exists extreme value in exploring the social resources and resilience that non-traditional students do bring, rather than simply conceptualizing them as lacking. For example, one student I interviewed, took overnight greyhound buses to medical school interviews because flying was too expensive. After travelling to multiple interviews via bus, this student was accepted into one of the top medical schools in the country. Cases like this warrant greater attention and highlight the value in exploring forms of resilience associated with disadvantaged backgrounds (Clegg 2011).

That said, focusing solely on individual stories of hard work and success can obscure the role of higher education in the reproduction of inequality. As crucial as it is to better understand the experience of low-income and first-generation college students at highly selective colleges, the vast majority of non-traditional students are not attending these types of institutions (Berg 2010). Low-income students disproportionately attend community colleges and one half of all low-income students live at home throughout college to reduce costs (Berg 2010). As Berg (2010) writes in his book *Low-Income Students and the Perpetuation of Inequality: Higher Education in America:*

While it is inspiring to tell stories of individual struggles and success through education, as we often like to do in higher education, it deludes us into thinking we are more

successful than we plainly are. Most importantly, it prevents us from confronting our clear failings in serving the needs of low-income students. The hard fact of the matter is that college is a primary way that wealthy families transfer privileges to their children, while at the same time functioning to certify the inadequacy of the disadvantaged." (119)

In the present study, my focus on low-income students who are attending or have attended selective colleges and universities is intended to highlight the class-based disparities that exist even at institutions with generous financial aid policies and comprehensive student supports. However, this case should be placed within the broader context of social mobility within higher education where affluent students outnumber poor students in high school graduation, college attendance, and college graduation rates (Berg 2010).

Limitations and Directions for Future Research

While my sample consisted entirely of low-income and/or first-generation students, it will be increasingly important to understand the distinct experiences of middle-class and upper-class students. To fully grasp how the experiences of low-income students differ from their more affluent peers, a better understanding of how wealthier students spend and think about money is necessary.

Given the small sample size of respondents and colleges, my results may not be generalizable to all institution types. Importantly, my sample also skewed white, which is not representative of the low-income student population in general. Further, race plays a crucial role in one's college experience and identity formation, especially at predominantly white institutions, such as the schools attended by my respondents. More research is necessary to address how the intersection of race and class may differentially structure the college experience for low-income students.

Additionally, all data was self-reported, and I was unable to verify whether and how frequently students engaged in the financial strategies they reported. Survey and interview data was also retrospective which likely introduced reporting errors. Future studies should utilize daily journals or other strategies for more accurately collecting small day-to-day micro decisions about daily spending.

Part VI. Conclusion

The American educational system often reproduces inequality rather than generating social mobility. Even among students who gain entry into elite institutions, financial resources impact students' academic achievement, social activities, and health and well-being. My findings indicate that students make serious financial decisions, such as skipping meals and taking on credit card debt, but also engage in numerous micro-decisions on a daily basis, such as making trips to multiple grocery stores or skipping out on dinner with friends. For low-income students at selective colleges, "money creates and restricts freedoms of choice in powerful ways and in doing so, influences how people relate to others and make day-to-day decisions" (Fosnacht & Calderone 2017:119).

Access to college should be understood not only as admission to college, but as access to "the full range of college experiences and to the personal, social, and economic benefits to which those experiences and degree completion lead" (Pascarella et al. 2004). Past research suggests universities could more effectively increase the academic achievement of students if they helped students to increase their financial resources, especially for basic needs (Britt et al. 2016). A better understanding of how financial constraints structure the college experience for low-income and first-generation college students provides important policy implications. Changes to

financial aid and campus culture may be one key avenue through which policymakers can close the class-based achievement gap. Institutions which seek to address economic diversity by enrolling higher numbers of non-traditional students, must also commit to understanding and addressing the barriers to success that low-income students face when they arrive on campus.

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APPENDIX A

Survey on Student Finances

Q1 Age:	
Q2 Sex:	
O Male (1)	
O Female (2)	
Other (3)	
Q3 Are you of Hispanic, Latino or Spanish origin?	
O Yes (1)	
O No (2)	
Q4 What is your race?	
○ White (1)	
O Black or African American (2)	
O Native American or Alaska Native (3)	
O Asian (4)	
Native Hawaiian or Pacific Islander (5)	
Other (6)	
O Prefer not to answer (7)	

Q5 What is the highest level of education completed by your mother/parent 1?
Olid not complete high school (1)
O High school/GED (2)
O Some college (3)
O Bachelor's degree (4)
Master's degree (5)
Advanced graduate work or Ph.D. (6)
Other/unknown (7)
Q6 What is the highest level of education completed by your father/parent 2?
Olid not complete high school (1)
O High school/GED (2)
O Some college (3)
O Bachelor's degree (4)
Master's degree (5)
Advanced graduate work or Ph.D. (6)
Other/unknown (7)

Q7 Where do you now live during the school year?
O Dormitory or other campus housing (1)
Residence (house, apartment, etc.) within walking distance of the institution (2)
Residence (house, apartment, etc.) within driving distance of the institution (3)
Fraternity or sorority house (4)
Other (5)
Q8 With whom do you live during the school year? (Fill in all that apply)
No one, I live alone (1)
One or more other students (2)
My spouse or partner (3)
My child or children (4)
My parents (5)
Other relatives (6)
Friends who are not students at the [University] (7)
Other: who? (8)
Q9 How far away from the [University] does your family live? (in miles)

Q10 Growing up, did you live in a single-parent household?	
○ Yes (1)	
O No (2)	
Other (3)	
Q11 I am a:	
Freshman/first-year (1)	
O Sophomore/second-year (2)	
Unior/third-year (3)	
Senior/fourth-year (4)	
Fifth-year (5)	
O Sixth-year or more (6)	
Q12 Do you have access to a computer that you can use for your school work?	
○ Yes (1)	
O No (2)	
Q13 What is your current GPA?	
Q14 What is your major or anticipated major?	

Q15 How many courses did you take last quarter?
Q16 How many hours a week do you usually spend outside of class on activities related to your academic program, such as studying, writing, reading, lab work, rehearsing, etc.?
5 or fewer hrs/week (1)
6-10 hrs/week (2)
11-15 hrs/week (3)
16-20 hrs/week (4)
21-25 hrs/week (5)
26-30 hrs/week (6)
More than 30 hrs/week (7)
Q18 Are you receiving any of the following? Select all that apply.
Need-based financial aid (grants, scholarships, or loans) from the [University] (1)
Scholarship from a third party outside the [University] (National Merit, Rotary Club, etc.) (2)
Merit-based scholarship from the [University] (3)
Receiving aid but not sure what the source is (4)
None of the above (5)

O Yes (1)					
O No (2)					
O Not sure (3)					
20 What is your Expected Family Contribution (EFC)? If yank.	you're not	sure, please	e feel free to	leave this o	question
21 How do you meet your college expenses? Drag the slide ch of the various sources.	er to indic		entage of su		eceive fro
	0	25	50	75	100
Self (job, savings, etc.) ()					
	_				
Parents ()			÷		
Parents () Spouse or partner ()					
					:
Spouse or partner ()	,				
Spouse or partner () Scholarships and grants ()					:

Q23 If you have a job, how does it affect your school work?
I don't have a job (1)
My job does not interfere with my school work (2)
My job takes some time from my school work (3)
My job takes a lot of time from my school work (4)
Q24 Please estimate how many times you have called or visited the Financial Aid Office for questions or issues about financial aid for the 2017-2018 academic year.
O 0 (5)
O 1-3 (1)
O 4-6 (2)
O 7-9 (3)
O 10 or more times (4)
Q25 Excluding rent and utility bills, what is your average weekly expenditure during the school year?
Q26 Do you currently have an emergency fund?
○ Yes (1)
O No (2)

Q28 How much did your parent(s)/guardian(s) teach you about managing money?
Taught me specific ways or managing money (1)
Taught me general ways of managing money (2)
Helped me learn through example (3)
Olid not teach me how to manage money (4)
Other (5)
Q27 What is your biggest monthly expense during the school year? Rank areas of spending from most to least. Food (1) Transportation (2) School supplies (3) Rent (4) Clothes (5) Helping out family/friends (6) Entertainment (7) Other: (8) Q29 How much student loan debt do you expect to graduate with?

ease check all that apply)
I haven't been in need of quick cash (10)
Parents (1)
Bank (2)
Employer (3)
Friends (4)
University (5)
Credit card (6)
Online money making (7)
Gambling (8)
Other (9)

Q45 In the future, where would you turn in an emergency when you're in need of quick cash? (Please check all that apply)
Parents (1)
Bank (2)
Employer (3)
Friends (4)
University (5)
Credit card (6)
Online money making (7)
Gambling (8)
Other (9)

Q31 During the last quarter, which of the following strategies did you use to save money/lower costs? (Please check all that apply)
Budgeting (1)
Grocery shopping and cooking (2)
Not buying class materials (like textbooks) (3)
Not registering for classes that require expensive materials (4)
Taking public transportation instead of Uber, Lyft, or a taxi (5)
Skipping meals (6)
Taking action to graduate more quickly (7)
Increasing the number of hours worked (8)
Increasing the debt I carry on my credit card (9)
Other (10)
None of the above (11)
Q42 While in college, which of the following strategies have you used to save money/lower costs? (Please check all hat apply)
Decided against study abroad (1)
Increased my annual student loan amount (2)
Did not retake a class to improve a grade (3)
Took a quarter/semester off (4)
Other (5)
None of the above (6)

Q32 Are you able to stick to your budget?
○ Yes (1)
O For the most part (2)
I struggle to stick to my budget (3)
O I don't make a budget (4)
Q33 When do you typically receive your financial aid refund?
I don't receive a refund (1)
At least 2 weeks before the quarter begins (2)
A week before the quarter begins (3)
When the quarter begins (4)
A week after the quarter begins (5)
At least 2 weeks after the quarter begins (6)
Q34 I am most stressed about money
At the start of the quarter (1)
Around the middle of the quarter (2)
Near the end of the quarter (3)
Randomly throughout the quarter (4)
Near holidays, birthdays, etc. (5)
Other (6)

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Q36 For the following statements, please indicate your level of agreement.

	Strongly disagree (1)	Somewhat Disagree (2)	Neither agree nor disagree (3)	Somewhat agree (4)	Strongly agree (5)
Wealth and status impact my experience with academic offerings (e.g., major selection, study abroad, service based learning) at the University of Chicago (1)	0		0	0	0
Wealth and status impact my experience with social life at the University of Chicago (2)	0	0	0	0	0
Wealth and status impact my experience with career services and opportunities at the University of Chicago (3)	0	0	0		0
I have experienced financial difficulties while enrolled in college (4)	0	0	0	0	0
I worry about having enough money to pay for school (5)	0	0	0	0	0
I worry about paying current monthly expenses (6)	0	0	0	0	0
I feel stressed about my personal finances in general (7)	0	\circ	0	0	0

I have enough money to participate in most of the activities I enjoy (8)	0	0	0	0	0
I have enough money to participate in most of the same activities as my peers (9)	0	0	0	0	0
By the end of the quarter, I am running out of money (10)	0	0	0	0	0
Financial concerns impact my freedom in choosing classes (11)	0	0	0	0	0
Financial concerns impact my freedom in choosing a major/majors (12)	0	0	0	0	0
Financial stress impacts my academic success (13)	0	0	0	0	0
I would prefer financial aid refunds to be disbursed more regularly (like a paycheck as opposed to a lump sum) (14)	0	0	0	0	0
There is enough financial support available to students (15)	0	0	0	0	0
I think about money often (16)	0	0	0	0	0

I struggle to fall asleep at night (17)	\circ	\circ	\circ	\circ	\circ
Q37 Is there anythin this year?	g else I should know	about how your fir	nancial situation has	s impacted your aca	demic experience

APPENDIX B

Interview Guide

- Q1: First, can you tell me a little bit about your decision to attend college.
- Q2: What were some of the first things you noticed when you arrived on campus?
- Q3: Why did you choose your current major?
- Q4: How are you paying for college?
- Q5: Tell me about any strategies you use to save money?
- Q6: Given that financial aid is commonly disbursed at the beginning of the semester, how do your financial concerns change as the semester progresses?
- Q7: Who on campus are you close with?
- Q8: Tell me about your living situation.
- Q9: In what ways (if any) have financial constraints impacted your experience at [University]?
- Q10: How could the [University] better support you?
- Q11: What are your plans after you graduate/What did you do after you graduated?
- Q12: And finally, given our topic, what else is important for me to know about your college experience?