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Impact of Financial Literacy and Financial Capability on Students' Self-Efficacy

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Abstract

Low-income, first-generation college students experience unique obstacles in their pursuits of a college degree. One of the biggest stressors that exist within this population is financial stress which has led to money being the number one reason students do not persist to graduation. Despite this being one of their biggest stressors, many higher education institutions do not put an emphasis on financial literacy initiatives that research has shown can help alleviate this type of stress. This mixed methods study explores the impact financial literacy and financial capability has on a students' self-efficacy. This research is guided by Albert Bandura's Self-Efficacy Theory. Student participants from National Louis University voluntarily completed a twenty-six-question survey which included a question at the end inviting them to an optional ten minute follow up interview. Five themes emerged from survey and interview analysis: financial guidance, proactive financial education, student loans, effect on academics, and financial stressors. Implications for practice include the transparency and clarification surrounding the student financial aid that is awarded, promote and train students on the financial literacy tool that institutions oftentimes make available to students, and expand the visibility, outreach, and ease of implementation for students to begin using the financial literacy tool that may be available at an institution. Recommendations for future research include gaining a greater understanding of why student awareness of financial literacy initiatives is so low at many institutions and how to recreate successful practices that already exist at institutions to implement them more broadly.

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Chapter 1: Introduction

One of the most prevalent reasons low-income, first-generation college students do not persist until graduation is their financial situation (Beer & Bray, 2020; Engle & Tinto, 2008). Financial hardships within this population oftentimes exist before students enroll in higher education with the difficulties compounding when they are tasked with figuring out how to pay for their education. Students may lack financial literacy, financial capability, and self-efficacy to properly handle difficult financial situations they will likely encounter during this life stage. Financial literacy refers to an individual's understanding of financial principles while financial capability refers to an individual's ability to apply those financial principles (Mason & Wilson, 2000). A more thorough definition of each is included later in Chapter 1. Harnisch (2010) found there is a noticeable gap among the financial literacy levels of low-income individuals and those from upper income homes. This is an important finding because Gale & Levine (2010) described that individuals from low-income backgrounds are more likely to not have a checking account or emergency fund as well as more likely to make riskier debt decisions such as taking out pay-day loans, having increased loan balances, and becoming delinquent on debt payments. Hancock et al., (2013) reiterates this sentiment as they state that parents who make a household income of less than $50,000 per year are "more likely to have children who make poorer financial decisions." An individual's financial standing can also have a profound impact on the likelihood they complete their degree. According to Hancock et al., (2013), credit card debt and other financial concerns are main contributors to students dropping out of school. They state that "because of financial concerns, 60% of baccalaureate students are not finishing their education within 6 years, and over half of the students who begin college are not completing their degree" (p.1).

Another area of financial concern that exists for students is student loans. When it comes to how low-income students fund their college experience, Yu (2014) found that those students who only used grant money to fund their education were “50 percent more likely to obtain their degree than those who used only loans” (p. 54). Kezar (2010) describes the need for higher education institutions to educate their students on financial concepts, services, and products which can help better inform their choices to avoid costly pitfalls such as falling prey to predatory lenders. While there are many students who enter into higher education with little to no understanding of basic personal finance, low-income students typically lag behind their peers who come from middle- and high- income households (Kezar, 2010). This can cause a cycle of individuals from low-income homes having a lack of financial understanding which can expose them to greater amounts of debt and potential financial despair (Kezar, 2010).

Burkholder et al., (2013) explains that, as a whole, the persistence and retention at higher education institutions has remained relatively unchanged over time despite many efforts from administrators, faculty, staff, and other stakeholders to improve student outcomes. The potential effect financial literacy and financial capability can have on a students’ self-efficacy and ultimately their overall success in higher education should be recognized. The impact of these concepts is especially prevalent given the literature on low-income, first-generation college student’s stress and instability surrounding their finances. The payoff for low-income, first-generation college students completing their degree programs can create transformational change in their own lives as well as future generations. Greater levels of educational attainment generally lead to higher incomes along with lower rates of unemployment with the gap in earning potential widening between high school and college graduates over time (Engle, 2007).

This research examines the potential of financial literacy, financial capability, and self-efficacy in supporting low-income, first-generation college students' college journey.

Problem Statement

Despite money stressors being one of the main reasons many low-income, first-generation college students do not persist in higher education, there remains a lack of knowledge in higher education of how increased levels of financial literacy and financial capability could improve the self-efficacy for this population of students (Chaplot et al., 2015). Persistence and retention of low-income, first-generation college students has been an ongoing concern at many institutions. The survey conducted by Pratt et al. (2019) found that the number one factor effecting a first-generation college students' retention in higher education is their financial insecurity and financial stress. One of the ways this population of students may develop this financial insecurity and stress is when it comes to figuring out how to pay for their higher education expenses. Burd et al., (2018) outline some of the obstacles students face as it relates to how expenses are communicated to students and their families. Unclear financial aid award letters compounded with the lack of clear supports or resources for students with financial questions can contribute to their financial insecurity and stress. Eichelberger et al. (2017) expresses the need for higher education institutions to see the value in financial literacy and financial capability to institute campus wide initiatives that aim to increase students' abilities in these two areas. This research responds to this need by exploring the impact financial literacy and financial capability may have on low-income, first-generation students' self-efficacy.

Purpose

Higher education institutions have embraced other student support areas on campus focused on areas such as mental and physical health, career services, tutoring, financial aid, spiritual resources, diversity resources, and disability services. Yet, financial literacy and financial capability is overlooked as a potential influencer on a students' success in higher education. Existing literature demonstrates the concern students have when it comes to their financial situations as Eichelberger, Mattioli, & Foxhoven (2017) found that 36% of incoming freshmen they surveyed placed their own personal financial situation as their top concern as they entered higher education. Despite the large percentage of students with this concern, it was also found that less than 2% of students were taking advantage of voluntary seminars, workshops, or online videos that were focused on financial literacy and financial capability. This gap in students recognizing their concern with their personal financial situation and those taking advantage of institutional offerings, demonstrates a need to not only inform students of the financial literacy and financial capability targeted programs offered by the institution but also the benefits of engagement with these programs. Oftentimes, the financial aid office at an institution may take on this responsibility of financial literacy and financial capability, but as the analysis of financial aid award letters in Chapter 2 indicates, there is a greater need of transparency and better informing students with these basic institution documents.

Surveying and interviewing students regarding their financial literacy and financial capability will give insight into the impact the financial literacy and financial capability programs they have completed at National Louis University have on their actual ability levels in these two areas as well as gaining insight into the students' own perceptions surrounding this topic. Little to none of the existing literature looks at student perceptions on this topic and how financial literacy and financial capability can impact a more difficult to measure metric such as self-efficacy. As a result of this study, financial literacy and financial capability may be recognized as an essential component of a students' transition from high school to postsecondary education as well as their ongoing persistence towards graduation. This recognition of the importance of financial literacy and financial capability may materialize as a required component for incoming students, more resources for program implementation occurring outside of the financial aid office, better marketing of financial literacy and financial capability offerings on and off of campus, and staff whose singular focus and role is devoted to this mission.

Importance of the Study

This research study can help inform higher education institutions of the ways students' financial literacy and financial capability can impact their self-efficacy. High schools and education policy makers may also use the findings from the study for the implementation of financial literacy and financial capability programs at other levels of education. In the case of this study, financial literacy and financial capability programs can be valuable supports for low-income, first-generation college students as they attempt to overcome their most common barrier to graduation, financial challenges. Adams, Meyers, and Beidas (2016) found that only ten percent of low-income and/or first-generation college students will have a college degree by age 25 compared to about fifty percent of non-low-income and/or non-first-generation college students. The authors also found the low-income and/or first-generation college students who were involved in their study stated that four out of their top five stressors in life were personal finance related. Furthermore, it was stated that these stressors negatively affected their academic progress and performance. Implications for future work to support low-income, first-generation college students could include more resources committed by institutions to improve financial literacy and financial capability of this population of students. An encouraging example of how high levels of financial capability can provide hope and encouragement to those from low-income homes comes from Melhuish et al., (2008). Despite the financial situation low-income mothers were in from that study, they had higher levels of psychological wellbeing because of their perceived capability to deal with their finances, even with their limited financial resources. That study helps provide an example to this research for how increased levels of financial literacy and financial capability can improve an individual's self-efficacy.

Theoretical Framework

This research is based on the Self-Efficacy Theory, which was originally developed by Albert Bandura (Rothwell, Khan, & Cherney, 2016). A core tenant of this theory is people desire to have control over their lives. Bandura (1994) outlines four main sources of influence by which individuals develop a strong sense of self-efficacy. These four sources are:

- Master Experiences
- Vicarious experiences provided by social models
- Social persuasion
- Reducing people's stress reactions and alter their negative emotional proclivities and misinterpretations of their physical states (p. 3)

These sources of self-efficacy development help individuals realize their capability to overcome challenges and persist in the face of difficulties. Within the population of low-income, first-generation college students, their financial stability is typically seen as a major stressor in their life. Although a higher education institution may not have a way to immediately and directly improve an individual's financial stability in a tangible way, providing resources and support to improve their financial literacy and financial capability could have a direct influence on their financial self-efficacy by touching on each of the four sources above. In the case of this study, this researcher examined the financial aspect of individuals' lives. Bandura & Adams (1977) explain that when someone has a high level of self-efficacy, this can impact the choice of activity they make, the type of setting they choose to act in, the amount of effort they put into a task, and the persistence they maintain when they come across obstacles and aversive experiences. Mulasi & Mathew (2021) expect individuals with higher levels of financial self-efficacy would likely make better financial decisions and be more at ease when facing financial difficulties than someone with lower financial self-efficacy. This leads to the question of how financial literacy and financial capability could help increase the self-efficacy for low-income, first-generation college students?

Research Question & Research Design Overview

This researcher set out to answer the following research question: How does financial literacy and financial capability impact low-income, first-generation students' self-efficacy in higher education? Mixed methods research methodology was used to survey and interview low-income, first-generation students to collect data. The survey addressed topics within financial literacy, financial capability, and self-efficacy. Financial literacy questions addressed the individuals' understanding of interest rate on savings, investment vehicles to outpace inflation, and investing risk. Financial capability questions addressed the individuals' ability to successfully partake in the following productive financial practices: financial planning, pursuing financial goals, saving for emergency expenses, savings regularity, budgeting, and avoiding late payments. Self-efficacy questions addressed how adept individuals are at pursuing goals, accomplishing difficult tasks, obtaining intended outcomes, having a belief in oneself to accomplish anything, overcoming challenges, confidence in accomplishing different tasks, making comparisons to others, and maintaining their performance during difficulty. The analysis of the data received from the survey allowed this researcher to measure the participants' level of financial literacy, financial capability, and self-efficacy. Coding analysis of responses from the interviews with participants allowed the researcher to better understand the participants' perceptions of how their financial literacy and financial capability has impacted their level of self-efficacy.

Definition of Terms

The terms described below are used throughout the study. The definitions of each are as follows:

- Financial literacy is defined by Mason & Wilson (2000) as "an individual's ability to obtain, understand, and evaluate the relevant information necessary to make decisions with an awareness of the likely financial consequences" (p. 31).
- A students' financial capability represents their ability to "apply appropriate financial knowledge and perform desirable financial behaviors to achieve financial well-being" (Xiao & O'Neil, 2016, p. 2). Financial capability goes one step further than traditional definitions of financial literacy to include the application of the knowledge an individual receives through financial literacy.
- Low-income students will be defined by Federal Student Aid as students who qualify for the Pell-Grant
- First-generation college students will be defined as the students who come from families where neither of their parents or guardians completed a four-year college degree (Engle, 2007).
- Self-efficacy is the "feeling of being able to deal with a situation effectively" (Lim et al., 2014, p. 150).

Overview of Paper

Each chapter below supports the research that was conducted. In chapter 1, the problem statement, purpose, importance of the study, theoretical framework, research question, research design, and the terminology to know regarding this topic is outlined. Chapter 2 provides a review of the literature related to financial literacy and financial capability as well as how it applies to supporting low-income, first-generation college students. Topics described in this chapter include detailed descriptions of characteristics of low-income college students, first-generation college students, and persistence and retention in higher education. This chapter goes on to discuss existing literature on financially related topics such as financial literacy, financial capability, self-efficacy, promise programs, higher education affordability, societal stigma around financial discussions, and navigating financial products that exist today.

Chapter 3 includes the methodology and conceptual framework. The methodology section describes the research design, data collection, participants, surveys and interviews, data analysis, confidentiality, limitations, delimiters, validity, reliability, trustworthiness, and positionality statement. The visual representation of the conceptual framework is provided to display the dependent and independent variables. Chapter 4 includes the results of the survey and interviews. It also includes an analysis of the participant answers to the questions asked as well as an analysis of the five themes that were identified in participant responses. Tables showing the response frequencies of some of the most noteworthy questions are included. Chapter 5 includes the discussion and conclusion. This chapter also gives a summary of research, discussion and interpretation of findings, significance of study, implications for practice, and recommendations for research.

Chapter 2: Literature Review

Introduction

Low-income, first-generation college students face unique challenges compared to their peers in the pursuit of their degree. One of the areas of student concern that has commonly appeared in literature is how a student approaches their individual financial outlook. This can be related to how they will pay for their education, living expenses, family support, or their future financial obligations. This literature review will research common characteristics associated with low-income college students, first-generation college students, and the intersectionality of the two. It will examine the persistence and retention of low-income and first-generation college students. Acknowledging the role finances play in this population's success in higher education, this literature review will also examine the impact of financial literacy and financial capability as well as the supports many institutions have in place through Promise Programs and various other financial aid related initiatives. Lastly, it will look at the societal stigma around financial discussions and the financial products available for consumers.

Low-Income College Students

The National Center for Children in Poverty (NCCP) has used the classification of low income for families who earn a household income of less than $51,852 for a family of four. This is a little less than twice the federal poverty threshold which stands at about $26,000 for a family of four (NCCP, n.d.). The threshold varies depending on the number of children in the family. High school graduates belonging to families who fit into this category have been found to be less likely to enter as well as graduate from a higher education institution (Clotfelter, Hemelt, & Ladd, 2017).

Narratives oftentimes associated with low-income students contain a deficit discourse when discussing their potential and abilities. McKay & Devlin (2015) examines this deficit mindset and the impact it can have on the students as well as those around them. There is a plethora of literature that study the ways low-income students may fall behind their peers in terms of "lower participation rates, lower entrance scores, lower aspirations, and academic failure" (McKay & Devlin, 2015). The authors proceed to point out that oftentimes the terminology that can be associated with these students can be detrimental to their growth and progress within their respective programs. This study examined the effective approaches that individuals within higher education can take when it comes to teaching and supporting low-income students in their adjustment and recast them as potential assets to the institution rather than maintaining a deficit conceptualization of them.

McKay & Devlin (2015) conducted success-focused, semi-structured qualitative interviews with 89 low-income students from three different higher education institutions. They found these students had many of the common obstacles to overcome literature expounds on such as low support or assistance from family, financial constraints when it came to college expenses, and increased need for support when it came to the college going process. What the study also found was that many of the students exhibited a hard-working, high achieving, and determined to succeed attitude that, in many cases, were even more important characteristics to success in higher education than how much money their family makes and where they went to high school. McKay & Devlin (2015) conclude by advocating for a shift in thinking by high school and higher education personnel to recognize the contributions that low-income students can provide to an institution rather than seeing their presence as a detriment.

There is also prominent literature available that focuses on two concepts when it comes to supporting low-income college students: access and institutional supports available. Engstrom & Tinto (2010) recognize that the educational system needs to go beyond strictly providing access by thinking about what support is available after the access is provided to get into a higher education institution. The authors carried out a systematic, multi-institutional, longitudinal four-year study to look at the impact that learning communities have on the success of "academically under-prepared, predominately low-income students" (Engstrom & Tinto, 2010). The final sample size was 5,729 total students where 2,615 were students in learning communities while 3,114 students were in comparison classrooms. They utilized a survey similar to the Community College Survey of Student Engagement (CCSSE) which gauged the students' academic and social engagement as well as their perceptions and academic plans. The findings showed that learning communities had a statistically significant effect on the engagement level of participating students when it came to classroom work and engagement with classmates and faculty inside and outside of the classroom. The students involved in the learning communities also expressed experiencing significantly more "encouragement, support, and intellectual gain than did similar students not enrolled in these programs" (Engstrom & Tinto, 2010). The findings also help to bring awareness to the intentionality of the supports provided to low-income students once they are on campus rather than strictly focusing on getting them there.

Soria, Weiner, & Lu (2014) delve into how financial decisions of low-income students impact their success in their undergraduate programs. Using the Student Experience in the Research University (SERU) survey from the University of California-Berkeley, there were 31,898 respondents across six large, public universities that answered questions regarding their financial background and financial concerns. Results from the logistic regression analyses show low-income students were more likely to answer on the survey they had engaged in actions and behaviors that tend to have negative immediate and long-term effects on their well-being. The odds of skipping meals, increasing credit card and student loan debt, and taking a leave of absence were all two to three times as likely to occur with low-income students compared to those from middle/upper-class homes. The authors also note students identified the debt they did accrue throughout their college journey as being a constant source of anxiety and stress. With credit card usage specifically, it was found that students carry an average of 4.6 credit cards where about 60% were surprised at the balance they had on them. The authors go on to mention these higher than expected levels of debt certainly present current and future financial challenges which has led to the findings that low-income students are also more likely than their peers to default on their loans. The authors conclude with a call for colleges and universities to expand their use of financial literacy programs to help "build student understanding and awareness of debt and money management and support decision-making skills" (p. 15). They believe this can be instrumental in filling in the gaps that may exist with students' social capital that can be especially prevalent for low-income students.

First-Generation College Students

First-generation college students are defined as students whose parents or guardians did not attend college or may have attended but did not obtain a degree (Engle, 2007). This will be the definition that will be used for first-generation college students throughout the proceeding sections. Engle (2007) focuses on who first-generation college students tend to be, factors associated with their access and success in college, and the ways in which colleges and universities can better serve their needs. The author points out that first-generation college students are more likely to be overrepresented in the following groups: "female, older, Black or

Hispanic, have dependent children, and come from low-income families, than students whose parents have college degrees" (p. 25). These groups typically experience lower rates of college attendance and degree attainment when looked at in isolation but are compounded when combined with a first-generation college student status.

Katrevich & Aruguete (2017) point out the gap that exists between first-generation college students and those that are continuing-generation students or those that have parents that graduated from a higher education institution. The authors state "only 11% of first-generation college students earn a bachelor's degree after six years of higher education compared to 55% of continuing-generation students" (p. 40). Katrevich & Aruguete (2017) surveyed 160 students where about half were first-generation college students and half reported that either one or both of their parents had earned a degree from a university. The authors' objectives were to compare the academic and social support needs of first-generation and continuing-generation students while also attempting to identify what the best predictors of academic success and persistence would be among first-generation students. The authors found first-generation college students struggled with the academic and social integration on campus which was compounded frequently by the first-generation college students' work and family responsibilities. Katrevich & Aruguete (2017) conclude that increased financial aid and education on methods and options when it comes to paying for school could help reduce the hours that students have to work in order to satisfy their basic needs.

The support first-generation college students receive in the college going process can have a large influence on the success these students experience. Engle, Bermeo, and O'Brien (2006) describe some of the most common areas their study uncovered by conducting focus groups with 135 first-generation college students in Texas who participated in pre-college programs. The three broad support areas students in the study mentioned that the pre-college programs helped them with included: raising aspirations for college, navigating the college admissions process, and easing the initial transition to college. In order to raise aspirations for college, the authors describe that sometimes students did not consider college as an option for them prior to getting involved with pre-college programs such as Talent Search or Upward Bound. Students may have been encouraged to participate by teachers, counselors, or friends with the initial intention sometimes being the student wanted to have fun and hang out with peers. The involvement with programs such as these oftentimes opens the door to what possibilities might be available to students by pursuing higher education. The authors include many direct quotes from students who participated in pre-college programs with one student stating:

> I wanted to go to college, but I think I was afraid I wouldn't even make it to [high school] graduation because of my surroundings and the way life was portrayed around me. But once I [got into the program], it showed me there are other options (p. 19)

The participation in pre-college programs showed success in raising awareness about educational and career interests, options for paying for school, increasing academic self-confidence, and the value of attaining a college degree.

The second support area the authors mentioned that pre-college programs helped with is raising awareness. Intentional exposure to career fields that could be pursued with a college education along with the economic benefits associated with earning a college degree were eye opening for students. The authors note some of the responses students had within this support area by highlighting how students learned about how they could pay for school as well as the various options available to them for where they could go to school. This increased awareness leads into the next support area students mentioned.

The third area of support pre-college programs provided was increasing achievement. As a result of being better informed of their options, students gained a newly realized ability to achieve never before thought about dreams and goals they could have for their lives. This prompted many students to experience increased self-esteem and self-confidence which could result in improved grades and involvement in tutoring programs. Students also expressed a realization that earning good grades and establishing good study habits were both necessary for getting accepted into and succeeding while in college. The authors conclude by expressing the need to fill in these support area gaps first-generation college students commonly face to help increase the likelihood of success in higher education.

Intersectionality of Low-Income and First-Generation Status

The two risk factors of being low-income and first-generation college students drastically impact the likelihood of success within higher education (Engle & Tinto, 2008). Engle & Tinto (2008) use data from the U.S. Department of Education's National Center for Education Statistics (NCES) which is gathered from the National Postsecondary Student Aid Study (NPSAS), Beginning Postsecondary Students (BPS) Study, and the Baccalaureate and Beyond (B&B) Study. Each of the three datasets examine different aspects of the college going process including how students and their families pay for higher education, the persistence of students throughout their selected academic programs, and student educational and employment experiences after graduating. This data is examined to help describe how the combined effect of being low-income and first-generation impacts students' postsecondary characteristics, experiences and outcomes.

Engle & Tinto (2008) identified seven factors that put students at-risk of dropping out of their college or university without attaining a degree. These included:

- Delaying entry into postsecondary education after high school
- Attending part-time
- Working full-time while enrolled
- Being financially independent from parents
- Having dependent children
- Being a single parent
- Having a GED

From the data examined, it was found that on average low-income, first-generation students had three of these risk-factors. There were only 14 percent of low-income, first-generation students that did not have any of these risk factors compared to 27 percent who identified as either low-income or first-generation having no risk factor and 50 percent of those students that did not identify as either low-income or first-generation having no risk factor.

Other areas low-income, first-generation college students can experience difficulty in are their academic and social integration on campus. Engle & Tinto (2008) found that low-income, first-generation college students are less likely to be involved with participating in study groups, academic discussions with faculty or peers, extracurricular activities on campus, and utilizing support services their institution offers. The authors found that one of the contributing reasons why this population of students choose not to get involved with these types of activities is they are waiting to get their academic lives under control. This can delay their adjustment to and integration into the college environment at a time when most of their peers outside of this population are also adjusting to the college life.

Engle & Tinto (2008) also mention these low levels of academic and social integration can be linked to their finances and financial aid. Low-income, first-generation college students may have to make decisions more heavily dependent on their ability to afford it such as cutting costs by living off campus or taking on more hours working at their job. Recognizing the impact that being low-income, first-generation has on the success of students in higher education, Engle & Tinto (2008) provide recommendations for how high schools, colleges, and universities can better support their educational pursuits. These recommendations include: “improve academic preparation for college, provide additional financial aid for college, increase transfer rates to four-year colleges, ease the transition to college, encourage engagement on the college campus, and promote (re)entry for young and working adults” (p. 29).

Persistence and Retention in Higher Education

The National Student Clearinghouse Research Center (2021) describes a persistence rate as being the “percentage of students who return to college at any institution for their second year, while a retention rate represents the percentage of students who return to the same institution” (para. 1). Persistence and retention continue to be a focal point at many higher education institutions. Despite many efforts from institutions, the persistent and retention rates in higher education have remained relatively unchanged over time (Burkholder et al., 2013). This may be troublesome as the authors make the connection between persistence and retention and the “perceived value and reputation of an institution and the degrees it confers” (p. 33).

Reason (2009) notes that within persistence and retention focused studies there is a vast amount of differences for what institutions and authors are focused on as their outcome of interest. To develop a model of student persistence and retention, the author examines previous research that recognizes the multiple forces in multiple settings that impact whether a student continues in their higher education journey. The framework identified as being most inclusive of previous studies breaks down what impacts whether or not a student persists or is retained by looking at four sets of constructs: "student precollege characteristics and experiences, the organizational context, the student peer environment, and the individual student experience" (Reason, 2009, p. 662).

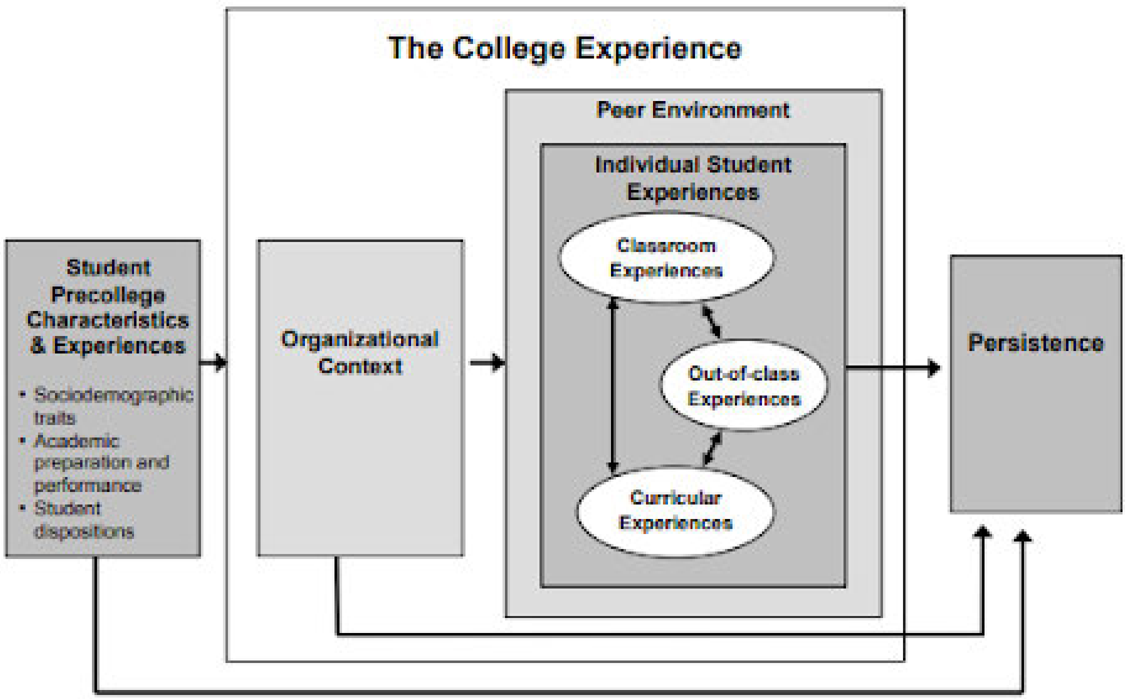


FIGURE 1. A Comprehensive Model of Influences on Student Learning and Persistence

(Adapted from Terenzini and Reason, 2005.)

This framework recognizes the impact that precollege life has on a students' likelihood to persist, the way that the institution is structured to support student needs, and the role that individual experiences can have in this important metric in student success.

Persistence and Retention of Low-Income Students

With the growing number of low-income students pursuing higher education, institutions are rethinking their strategies in helping to increase the persistence and retention of these students. Ceyhan et al., (2019) describes the impact of a wrap-around intervention aimed at supporting high achieving, low-income students in the first year of their undergraduate studies in STEM fields. The intervention which is known as the Strategic Undergraduate STEM Talent Acceleration Initiative (SUSTAIN) focused on holistic support in the areas of academic, social, and career support services. Ceyhan et al. (2019) explains that SUSTAIN was based on previous literature in the field that identified factors needed to support low-income students in their retention and persistence including more adequate academic preparation for the rigors of a STEM program, a supportive social environment, and restructuring of instructional methods used in introductory STEM courses. SUSTAIN was also based on Tino's Model of Institutional Action which focuses on four conditions that positively influence student success which are: "maintaining high expectations, academic, social and financial support, frequent feedback, and educational and social programs" (p. 250). $10,000 was also provided annually for those students involved in the program.

Based on this theoretical framework, Ceyhan et al., (2019) gathered quantitative and qualitative data from initial surveys, follow up interviews, focus group discussions, and formative assessment surveys with twenty-eight students to gain a greater understanding of how the supports provided impacted the students' experiences and success. Findings of their study suggest that faculty mentoring, early career immersion experiences, and community building were the activities students perceived as being the most valuable contributors to their success.

This can help inform future programs that aim to support the persistence and retention of low-income students by providing a plethora of wraparound services.

Many low-income students in higher education have a need to work to financial support themselves or other family members while they are taking classes. Previous studies have utilized a zero-sum theoretical approach where a student's time spent working takes away from time that can be put towards their academic pursuits (Mamiseishvlli, 2010). The author goes on to recognize that a better indicator of a students' academic success may be how they view themselves within their employment and academic settings. Whether they see themselves as primarily a student or primarily an employee could be a better predictor of academic persistence and retention than strictly the time spent devoted to a place of employment versus academic pursuits.

Mamiseishvili (2010) used a nationally representative sample of students from the Beginning Postsecondary Students Longitudinal Study data set. Data was examined descriptively to identify the samples' background and employment characteristics. Then, logistic regression was used to answer the research questions which centered around predictors of persistence of low-income, first-generation college students and how employment, specifically, impacts persistence when controlling for other background and in-college characteristics. The author's belief that the role students primarily see themselves in would be a significant indicator of the success students experience academically was found to be substantiated. "Those who viewed themselves primarily in the role of a student were 2.742 times more likely to persist through the second year in college, while all other factors held constant" (p. 71). The authors conclude with the importance of higher education institutions recognizing low-income students especially, may be trying to balance competing roles of being a student while also being an employee elsewhere.

This requires institutions to have a greater understanding of what factors can motivate or hinder students' persistence and how to help students prioritize the various commitments they may have in their lives.

Persistence and Retention of First-Generation College Students

First-generation college students face unique challenges as they contemplate and enroll in higher education. Institutions around the country have taken notice and have implemented various supports that aid in a student's persistence and retention. Pratt et al. (2019) outlines three tracks of research that has been completed on retention of these students. The first track focuses on student demographic characteristics such as their family income and family size. The second track examines the high school to college transition such as the student's personal adjustment and cultural fit. The third track focuses on a student's motivation and persistence when it comes to degree completion where psychosocial and cognitive variables also come into play. Pratt et al. (2019) go on to explain that college administrators are faced with the difficult task of helping students overcome these obstacles, even though they may not have a direct ability to influence many of the factors (e.g. family income, family size, or high school preparation).

As a part of the study Pratt et al. (2019) conducted, a survey was given to first-generation college students. Results of the survey showed that retention is mainly influenced by students' lack of confidence in their academic ability, difficulty to form relationships with other peers on-campus, and the financial insecurity and financial stress that has become commonplace among students. The financial insecurity and financial stress factor was found to be the largest factor in a student failing to persist until graduation within this survey.

First-generation college students are in the unique position of "breaking, not continuing, family tradition" (Irlbeck et al., 2014, p. 155). This can put a strain on the relationship between a student and their parents where parents may have difficulty relating to their students at this point. Parents without a college education typically also have less financial resources than those with a college education where financial support of the student is more difficult or nonexistent (Irlbeck et al., 2014). Irlbeck et al. (2014) conducted a case study with interviews from ten first-generation college students in the College of Agricultural Sciences and Natural Resources (CASNR) at Texas Tech University. Four main research questions were asked of the participants during the interviews which were centered around the students' perceived motivations and support systems that impacted their persistence and retention. Research question three focused on the types of support systems students relied on during their time in college. The authors found from the interviews that students expressed a consistent stress related to their own personal finances as well as the poor financial situations their parents often found themselves in. During one of the interviews the authors highlight, a student describes her experiences seeing her parents struggle with money as they were facing bankruptcy and foreclosure on their house. The student went on to state that she loaned her parents money occasionally and hoped her parent's poor financial situation would not impact her ability to graduate. Overall, the consistency of findings between Irlbeck et al. (2014) and previous studies were mixed. The participants of this study expressed that for the most part their parents were supportive of their decision to pursue higher education whereas other research has shown that parental support in this area can be lacking for first-generation college students. Findings from Irlbeck et al. (2014) related to finances were consistent with previous studies where financial security is seen as a concern while students are still enrolled in higher education as well as afterwards.

Financial Literacy

Results of financial literacy education programs have been mixed regarding both short-term and long-term effectiveness in influencing participants' financial behavior. Martin (2007) highlights a study showing that students who had been exposed to a financial education curriculum "on average had savings rates 1.5 percent higher five years down the road than those students not exposed" (p. 14). This effect was even greater among students who identified as having parents classified as being non-frugal which could support a notion of financial literacy education being an effective means of remedial work for those coming from homes where saving might not have been the norm (Martin, 2007).

Mandell (2009) discusses the findings from previous studies completed in these areas of financial literacy among high school and college aged students who have completed a financial literacy course, and finds these programs seem to have little positive impact on a student's financial literacy. The author does, however, highlight the positive effect these programs seem to have on some future financial behaviors; noting key concepts and takeaways when they confront the real-world application of concepts they learned. This suggests it could be premature to judge the success of a financial literacy course or session immediately if students have not yet confronted any of the topics in their personal lives.

The increasingly complex choices consumers have today increase the need for comprehensive financial literacy education. Harnisch (2010) examines many studies of consumer knowledge such as ones by the Jump$tart Coalition and United States Government studies. One conclusion the author made from the review of these studies is that there is a gap in financial literacy especially among those from low-income and minority populations which has resulted in "record-high levels of debt and record low-levels of economic security for individuals, families, and communities throughout the nation" (p. 1). Factor this in with the growing costs of higher education as well as the student loan crisis and a glaring need arises for financial literacy education to be taught in high schools and at higher education institutions (Harnisch, 2010).

Gale & Levine (2010) explore the ways in which financial literacy could benefit American households, ways in which previous policies and public entities have tried to promote this topic, and initiatives that could create real change in the future in the area of financial literacy. The authors refer to a recent unnamed consumer study which states that, "21 percent of individuals surveyed-including 38 percent of those with an income below $25,000- reported winning the lottery was the most practical strategy for accumulating several hundred thousand dollars of wealth for their own retirement" (p. 3). As individuals from low-income homes weigh the pros and cons of pursuing higher education, they face obstacles in understanding that process. Many students realize some of the financial commitment they are signing up for which can create a reoccurring fear and concern about their financial standing (Eitel & Martin, 2009). The funding of higher education can also expose them to the risks of taking out student loans which they may not fully understand. Many students at this time in their life are faced with financial decisions such as whether to use student loans in addition to other offers to accrue debt, including credit card offers. This can put students at risk who are not financially literate or aware of the consequences of mismanaging these financial products. Gale & Levine (2010) warn of this risk for those not financially literate as they describe households or individuals who are less financially literate have been found to be:

> Less likely to own a checking account, an emergency fund, a retirement plan or stocks and more likely to take pay-day loans, pay only the minimum balance on a credit card, take on high-cost mortgages, have higher debt levels, and be delinquent on debt. (p.8)

Wagner (2019) suggested that “individuals with higher incomes were more likely to acquire financial knowledge on their own while those with lower incomes found it too costly or did not have the same incentives to do so” (p. 132). The author goes on to also mention that individuals with lower incomes may lack the understanding on where or how to go about acquiring this financial information. This has resulted in some states making financial literacy education a mandatory graduation requirement for high schools and some higher education institutions have begun implementing financial literacy programs for their students as well. This still begs the question of how effective are these programs in providing students with the knowledge and skills necessary to impact current and future financial behavior?

Financial literacy programs focused on strictly providing financial knowledge in isolation have had little evidence, in most cases, to prove their effectiveness in changing consumers’ habits (Willis, 2009). Willis (2009) sets out to examine existing literature on financial literacy education and the programs available. After a critique of the current literature available, the author expresses some of the barriers that exist in the way of better research on this topic. Barriers to changing these habits could include resistance to change, lack of understanding on how to implement the financial knowledge gained. This troublesome reminder shows that any financially-focused initiative should also target the capability of the participants to integrate what they are learning into their everyday lives.

Amagir et al., (2018) consists of a systematic literature review that included 60 articles describing the components of and effectiveness of various financial literacy programs. The authors identified three financial components they believe make up financial literacy which include knowledge and understanding, skills and behavior, and attitudes and confidence. The main elements of the financial literacy programs they examined were knowledge and understanding of planning and budgeting, earning an income and careers, saving and investing, spending and credit, and insurance and banking services. Of the programs that were conducted at higher education institutions, all showed positive effects on individuals' understanding of financial concepts as well as their ability to take part in responsible credit card use, wiser budgeting, less compulsive financial decisions, and developing more positive financial attitudes. Amagir et al., (2018) caution any conclusions made as the studies only consisted of self-reported data about individuals' intention and attitudes. Findings also suggest that the format in which financial literacy programs are taught also impacts the outcome. Within secondary schools, elements of experiential learning where students felt the topic was relevant to their own lives currently or in the near future was shown to motivate students and increase outcomes. One example of this is the "Stock Market Game." Within a college or university setting, results show that financial education courses broken up into narrowly defined topics are the most beneficial for students. This can increase the relevancy and application to their own life as students may be experiencing some of these specific financial challenges at that time.

Financial Capability

An increasing amount of literature has made the differentiation between financial literacy and financial capability while recognizing the importance of both. Financial literacy focuses more on the knowledge of financial products and concepts. Financial capability expands on this definition and goes beyond focusing strictly on acquiring financial knowledge but also how individuals incorporate the application of these concepts into their daily lives (Eichelberger et al., 2017). Sherraden (2010), expresses the importance of acknowledging the institutional barriers that can exist for low-income households in which financial capability can be valuable in addressing. The United Kingdom government has also recognized the importance of financial capability of their citizens. Sherraden (2010) describes that the UK government has even adopted their own definition of the concept which is the following:

> Financial capability is a broad concept, encompassing people's knowledge and skills to understand their own financial circumstances, along with the motivation to take action. Financially capable consumers plan ahead, find and use information, know when to seek advice and can understand and act on this advice, leading to greater participation in the financial services market (HM Treasury, 2007, p. 19).

This formal recognition of the term, financial capability, helped the United States to consider and adopt a similar definition and application of the term as they challenged institutions to help address the gaps that existed. This resulted in the United States creating the "National Financial Capability Challenge" in 2009 which described that "Americans need better financial education and access to critical resources in order to make smarter financial decisions" (US Department of Treasury, 2009).

Financial capability can be broken down further into one's ability to act and their opportunity to act (Sherraden et al., 2018). The authors explain this further by stating that "financially capable people have knowledge and skills that enable them to understand, assess, and act in their best interests, but these must be accompanied by access to beneficial financial opportunities that make positive financial decision making possible" (p. 6). These opportunities to act can be as simple as banks or investment firms that many of us take for granted but are not always a part of everyone's financial plan. Some individuals who do not have the knowledge and skills that Sherraden et al, (2018) describe as a core component of financial capability may resort to using alternative banking sources such as check-cashing stores or payday lenders. Sherraden et al., (2018) estimate this to be about 20 percent or 24.5 million households using these alternative banking sources. Those who are disproportionately included in that number are racial and ethnic minorities, young households, and other individuals that would be classified as low-income (Sherraden, 2010). These are also among the populations lagging in the area of college completion. One of the contributing factors to many students struggling to persist in higher education has been a lack of financial capability.

First-generation and low-income college students make up approximately 24 percent of the students in higher education today in the United States (NCES, 2021). A study from the Pell Institute discovered that only 11 percent of these first-generation and low-income students had earned their bachelor's degree after six years compared to 55 percent of non-first generation and low-income students earning their degree within six years (Engle & Tinto, 2008). There are many factors as to why this is, but the role of financial stress cannot be understated as the U.S. Financial Literacy and Education Commission (2015) highlighted a survey found that "students at both four- and two-year institutions felt less prepared to manage their money than to keep up with coursework, stay organized, manage time, or, in many cases, find the help and resources to success" (p. 8). Many studies have found that individuals from lower socioeconomic homes tend to have a reduced financial capability because of their lack of financial knowledge and skills necessary to increase their financial well-being (Eichelberger et al., 2017). Latino and African American students have also been seen to have differing perceptions of college affordability (Eichelberger et al., 2017). This has perhaps impacted the constant focus of political figures and those in stakeholder roles within higher education to increase college access for those individuals who may be first-generation, low-income, and/or a racial or ethnic minority.

Students may have the financial means to attend college through the common use of student loans. Letkiewicz et al. (2014) expands on this sentiment as she "found students who overspend on consumer loans and have higher levels of student debt frequently experience a higher level of stress which can result in a longer path to degree completion than students with higher financial capabilities" (as cited in Eichelberger et al., 2017, p. 72). This is further shown in the study conducted by Letkiewicz et al. (2014) that found the following results:

> Students who regularly spend more than they have by using credit or borrowing have predicted odds of taking more than 4 years to complete the undergraduate degree 46 percent higher than otherwise similar students who do not regularly overspend. Compared to students who expect to have average student loan debt at graduation, the predicted odds of taking more than 4 years are 58 percent higher for students who expect high student loan debt (in excess of $50,000). (p. 364)

These statistics combined with the disadvantage students from underrepresented populations could already be at when it comes to financial resources can compound the struggles they face.

Eichelberger et al. (2017) describes that although lower-income students may not be making drastically different financial decisions than their more financially advantaged peers are, their costly financial mistakes are not as easily corrected. The financial safety net of parents or other sources of income would likely not be present. The 2015 National Financial Capability Study found that many students are looking back with regret at their financial decisions, especially their choices regarding student loan debt. According to this study, it was found that 53 percent of students who took out student loans would like to have the opportunity to change their borrowing decisions. 28 percent of study participants dropped out of the same programs they borrowed money to attend (Lin et al., 2016).

Eichelberger et al. (2017) points out the role that higher education administrators and faculty have in this matter and how they can be in prime positions to help influence a student's increased financial capability. They also go on to further this point by stating that based on findings from studies from Lee & Mueller (2014), it is recommended that "effective financial training should be campus-wide, cross-cultural, interactive, and accountability-based, and should involve staff, faculty, and students" (p. 74). This suggests the need for stakeholders from throughout an institution to see this as a responsibility and a duty to equip students with a solid financial knowledge and skill base they can then implement in their lives. Eichelberger et al., (2017) highlight an issue that currently exists with who is responsible and takes ownership over taking the lead to implement personal finance studies at many institutions. It will take individuals who recognize the need and advocate for a change in how they prepare students to succeed in the area of personal finance in order to implement "performance-based measures positively correlated with financial capability" (Eichelberger et al., 2017, p. 74).

Despite compelling cases for the recognition of financial capability as a way to see how well individuals are prepared to excel with the handling of their money, there is still the issue of how it should be measured. The National Institute of Adult Continuing Education (2007) highlight the need to define someone's financial capability "in terms of relating the skills needed to earn income with those needed to manage savings and consumption" (p. 298). Atkinson et al., (2007), meanwhile, targets five domains that encompass what it means to have financial capability. These domains are "making ends meet, managing money, planning ahead, choosing products and staying informed" (p. 298). This not only examines the ability to manage the financial resources an individual has at the moment, but also how they are looking forward to set themselves up in the best position in the future. Melhuish et al., (2008) conducted a survey with low-income mothers which covered topics such as their ability to manage their rent or mortgage payments, the number of unpaid bills they had, and items they felt they could not afford. Results from this survey indicated that those with greater financial capability, despite the limited income, exhibited higher psychological wellbeing (Taylor, 2011).

Self-Efficacy Theory

Albert Bandura's Self-Efficacy Theory stems from key constructs originating from his Social Cognitive Theory (Luszczynska & Schwarzer, 2015). The basic premise is that when individuals' perceived self-efficacy is greater, the more equipped those individuals will be to cope with difficulties or struggles. (Luszczynska & Schwarzer, 2015). The authors go on to describe that individuals can initially gauge and ultimately develop their personal self-efficacy through four main avenues of information. The first way is through performance accomplishments where individuals experience personal levels of mastery of a certain topic. The second way is for individuals to have experiences to observe others having success because of their efforts. The third way is through verbal persuasion that individuals possess the capability to achieve their desired result and cope with difficulties that may arise. The fourth way is through heightened physiological experiences where individuals can judge for themselves their levels of anxiety and current vulnerability to stress (Luszczynska & Schwarzer, 2015).

Bandura's Self-Efficacy Theory recognizes that self-efficacy is typically domain specific (Lown, 2011). For example, someone could have a high self-efficacy when it comes to academics but not with their finances. Financial self-efficacy has started to become more recognized in literature as a valuable measure of how students will handle, oftentimes, inevitable money stress. Lim et al. (2014), applied Bandura's Self-Efficacy Theory to a student's finances as they proposed that financial literacy initiatives on a campus can lead to more students seeking out financial resources and supports. The authors describe that this finding helps students become more aware of what they know and do not know when it comes to their finances so they can seek out supports that may be able to fill in the gaps. They further state this awareness is a result of increased financial self-efficacy as students believe they can overcome this financial knowledge gap to find success.

Promise Programs

Promise programs are place-based scholarships with goals to help increase access to postsecondary institutions for students, establish a college-going culture, and to help further community and economic development (Swanson et al., 2016). The number of promise programs has continued to increase as the value and need for affordable higher education becomes more evident. Promise programs present an avenue for students to see that higher education can be within their reach both academically and financially (Swanson et al., 2016). The following sections will provide greater detail behind how promise programs started, differences between them, role in higher education affordability, and details of some of the more well-known and established promise programs.

Historical Background

The history of promise programs can be traced back to early free college movements that occurred in the United States from the Truman Commission Report and the military GI Bill being implemented (Kanter et al., 2016). They were aimed to at least partially help address rising college costs and relieve students of the massive student loan debt that many were facing (Mishory, 2018). Promise programs have been closely tied to other free college initiatives based on the belief that individuals should have a right to higher education in a similar way to free public K-12 education (Perna & Smith, 2020). In 2015, then-president Barack Obama introduced the proposed America's College Promise initiative which would incentivize higher education institutions to create programs that would assist with tuition and fees for students (Perna &

Smith, 2020). Even though this proposal ultimately did not go through, there have been many state and local governments as well as many institutions themselves that have created similar promise type programs (Perna & Smith, 2020).

Differences Among Promise Programs

By 2015 there were already about 50 college promise programs in place, but there had never been such a national attention and focus on these types of initiatives (Kanter et al., 2016). Around this time there was also a renewed push to have states and local communities take on the responsibility of educating and training their residents without them having to acquire massive student loan debt to do so (Kanter et al., 2016). Promise programs set out to provide access to higher education and ongoing support for students that may otherwise have not pursued post-secondary education.

There are many different ways in which promise programs can be funded. Some programs utilize a combination of local, state, and federal funds while others only rely on private funds (Kanter et al., 2016). They can also vary in the availability to students. Some are statewide while others may only be offered to individual communities or institutions (Kanter et al., 2016). The financial awards given through the promise programs also vary. Many of the programs are structured in a way that provides full tuition and fees to the students while others may only provide a set dollar amount (Perna & Leigh, 2018). Some promise program awards are renewable over the course of the students four or eight semester long program while others may be a one-time award (Perna & Leigh, 2018). Another key difference is whether programs are granting first-dollar or last-dollar awards. First-dollar awards are given to students before any federal or state government aid or any other financial aid sources are given. Last-dollar awards are given after these other financial aid award sources are given.

Role in Higher Education Affordability

Promise programs are just one of the possible remedies that can help address financial issues especially prevalent among first-generation and low-income higher education students. Promise programs take on many different forms throughout the United States. As Perna & Leigh (2018) explain, one of the ways in which promise programs can be structured is similar to how the Kalamazoo Promise, “a place-based scholarship programs,” was aimed to “transform their communities by increasing college access and attainment, fostering a college-going culture in both the K-12 system and community as a whole, and supporting local economic development” (p.1). The authors go on to state that some other promise programs are “free college” programs spearheaded by many state governments and other similar entities (p. 1). There have been studies showing the success of these promise programs, in particular the Kalamazoo Promise, by increasing the college going habits and behaviors in K-12 education such as “reducing in-school suspensions and increasing credits earned in high school” which ultimately led to an increased “likelihood of college enrollment, number of credits attempted at the college level, and probability of bachelor’s degree completion” (Perna & Leigh, 2018, p. 2).

College promise programs often provide funding for students eligible for their program that can go towards tuition and other fees they may encounter throughout their time in higher education (Millett, 2017). Students must usually be actively progressing towards earning their certificate and/or undergraduate degree to continue to be eligible. They also may have to meet specific guidelines such as GPA requirements, minimum course load, live within a certain boundary, and have a demonstrated financial need. The requirements and guidelines can vary among programs and across states. According to collegepromise.org, there are currently 368 college promise programs in the United States.

Promise programs have the ability to make a positive difference in a student's likelihood of pursuing higher education. One of the main ways that promise programs can be beneficial for students is the way in which they impact students' financial lives. Perna (2016) suggests that when students, especially those from underrepresented populations, have the understanding and awareness of financial resources that will be available to them for college, it will "increase their aspirations to attend college, their likelihood to take rigorous academic courses, and willingness to seek out other sources of support for the college attainment process" (p. 2).

Promise programs are uniquely positioned to meet the specific needs of first-generation and low-income college students who are considering and ultimately enrolling in higher education. These programs also address concerns parents may have as they support these students. According to Millett et al. (2017), about 70% of parents of schoolchildren worry about how their child will finance their college education. This is greater than the concern about retirement which concerns 68% of respondents, or for medical expenses if they should arise which approximately 56% of the respondents worried about. Additionally, Millett et al. (2017) saw that a staggering 64% of parents they surveyed believed that their child was only "somewhat" or "not too" prepared when it came to being able to handle the college-level material they would soon be taking on.

As most promise programs have some element of students having to demonstrate a financial need to be eligible, they will consequently have students within their programs who are at a higher risk of not persisting to graduation. To help address this financial difficulty, promise programs can place a greater emphasis on financial literacy and helping their students have greater financial capabilities throughout school and after they graduate. Harnisch (2010) admits that "Historically, American state colleges and universities have had an undefined role in financial education" (p. 2). Financial literacy has been recognized as a life skill but not one very highly prioritized by administrators and faculty members at an institution (Harnisch, 2010).

Indiana's 21st Century Scholar's Program

As college affordability becomes more of a concern for many students looking to pursue higher education, the emphasis gets put on institutional administrators and government officials to come up with strategies to ensure that the cost of education is not the deterrent for bright, passionate students in their pursuit of higher education. There can be a delicate balance between the push for need based vs. merit-based aid to help address this concern as well. A prominent strategy that has continued to gain steam are promise programs. According to Kelchen (2017), promise program's rise can be partly traced back to their early success and prominence within the Midwest with two programs in particular. Indiana's 21st Century Scholars Program began back in 1990 and promises "income eligible seventh-grade and eighth-grade students up to four years' tuition and fees at an Indiana public college or university would be paid by the state as long as the student meets other eligibility criteria (Kelchen, 2017, p. 2). Other criteria include being an Indiana resident, having a family income that makes them eligible to receive free or reduced lunches, 2.5 high school GPA, has taken the ACT or SAT, complete the FAFSA each year, use a college price estimator, and complete a college visit (Kelchen, 2017). These tasks should be an instrumental part of high school counselor's routines with their upper classmen and especially their seniors each year anyway.

Kalamazoo Promise Program

The Kalamazoo Promise program was the first of its kind that originated at the local level (Kelchen, 2017). It started in 2005 and will cover the full tuition costs and fees at almost all of the institutions within Michigan as long as the students lived in and attended the Kalamazoo school district since kindergarten. For any students who would have moved into the district later on in their educational journey, the program would cover a smaller percentage of their tuition and fees (Kelchen, 2017). While Kelchen (2017) looks at promise programs on a larger nationwide scale, Bartik & Lachowska (2012) examines the short-term effects of the Kalamazoo Promise Scholarship on student outcomes. This study used administrative data from the Kalamazoo Public Schools to gather a regression sample of 9th through 12th graders from the 2003-2004 school year until 2007-2008. The authors found that the Kalamazoo Promise had positive effects on student achievement and behavior even in the first full post-Promise year.

One of the most striking positive findings were on the increase in GPA, earning of credits, and reduction of out-of-school suspensions for African American students. Another interesting finding is the idea that "paying for inputs tends to give better results than conditioning rewards on student output" (p. 28). This also feeds into the importance of students understanding what they have to do to live up to their side of the agreement within these promise programs. Bartik & Lachowska (2012) conclude that it is essential that students understand the role that their performance and behavior plays in taking full advantage of these types of scholarship programs as it can lead to improved behavior in school as well as actions that can lead to obtaining a higher GPA if they realize the possibilities that the scholarship program offers.

Paying for School

One of the resources that low-income, first-generation college students may take advantage of when enrolling and throughout their time in higher education is financial aid. Financial aid can be a great tool for them to help pay for their tuition as well as other expenses they might incur. Higher education can even seem out of reach for many students before financial aid is explained to them which can help demystify this complicated process of paying for school (Olivérez & Tierney, 2005). This is compounded by the realization that these low-income, first-generation college students may not have individuals in their life who have gone through this experience before and may not understand the process. Olivérez & Tierney (2005) express the need to involve the student's families when they state, "when students have families who view college as financially out of reach, access to accurate financial aid information is vital to convince them otherwise" (p. 5). Institutions can help paint a picture of how students can use scholarships, grants, and work study programs to avoid having to take out student loans as much as possible.

Eligibility for most, if not all, types of financial aid will be determined by a student filling out the Free Application for Federal Student Aid (FAFSA). A large consideration in the financial aid that students receive is related to family income (Olivérez & Tierney, 2005). After each student's estimated family contribution (EFC) is calculated, institutions will send out a financial aid award letter to each student notifying them of the costs of attendance and the breakdown of the forms of financial aid they are eligible for. Burd et al., (2018) goes deeper into the issues that are widespread with the format and presentation of most institution's financial aid award letter when they list out the following seven harmful findings from their study:

- Confusing Jargon and Terminology
- Omission of the Complete Costs
- Failure to Differentiate Types of Aid
- Misleading Packaging of Parent PLUS Loans
- Vague Definitions and Poor Placement of Work-Study
- Inconsistent Bottom Line Calculation
- No Clear Next Steps (p. 12)

To compound these issues, there is no federal policy that “requires standardized terminology, consistent formatting, or critical information on every financial aid award letter” (Burd et al., 2018, p. 7).

Financial Aid Terms

These inconsistencies and the overall amount of analysis that is required to fully understand what a financial aid award letter shows, can be an obstacle for low-income, first-generation college students. Their parents or guardians may not be able to help them disseminate the information on the award letter either. Despite this, these are sometimes the students least likely to ask for help from high school counselors or financial aid advisors (Olivérez & Tierney, 2005). Burd et al., (2018) found that among the 455 colleges they examined, there were 136 different ways they listed unsubsidized student loans on the financial aid award letters. The authors also found “only 18 percent of colleges listed the full and official name of the loan, “Federal Direct Unsubsidized Loan” (p. 12). The unique ways institutions listed Federal Direct Unsubsidized Loans within this study are listed below.

Federal Direct Unsubsidized Loan
Direct Unsubsidized Loan
Fed Direct Unsubsidized Loan
Federal Direct Unsub Loan
Unsubsidized Direct Loan
Federal Unsubsidized Loan
Direct Unsubsidized Stafford Loan
Fed Direct Unsub Stafford Loan
Federal Direct Loan – Unsub
Direct Unsub Stafford Loan
FED. DIRECT UNSUB LOAN
Direct Loan Unsubsidized
Direct Unsub Loan
Federal Direct Loan Unsubsidized
Federal Direct Unsubsidized Stafford Loan
Unsubsidized Stafford Loan
Federal Direct Unsub. Stafford Loan
Federal Unsub Stafford Loan
Direct Unsubsidized Loan 1
Fed Direct Loan – Unsubsidized
Fed Direct Unsubsidized Stafford Loan
Federal Unsubsidized Direct Loan
Federal Unsubsidized Stafford Loan
Unsubsidized Federal Direct Loan
Fed Dir Unsub Loan
Federal UnSubsidized Loan 01
Unsubsidized Loan
Direct Federal Unsubsidized Loan
Direct Stafford Unsub Loan
Direct Unsub. Student Loan
DL Unsubsidized Stafford Loan
Estimated Direct Loan - Unsubsidized
Federal Dir Loan - Unsubsidized
Federal Direct Unsub Stafford

Federal Direct Unsubsidized
Federal Direct Unsubsidized Student Loan
UNSUB Federal Direct Loan
Unsub Stafford Loan
Dir Unsub Stu Loan
Direct - Unsubsidized Loan
Direct Federal Unsubsidized Lo
Direct Loan - Unsubsidzd Stfrd
Direct Loan (Base) Unsubsidized
Direct Loan Unsub
Direct Loan Unsub Stafford Loan
Direct Loan-Unsubsidi
Direct Stafford Loan: Unsubsidized 1
Direct Stafford Unsubsidized Loan
Direct Unsub
Direct Unsub Stafford
Direct Unsub. Stafford Loan 1
Direct Unsubsidize
Direct Unsubsidized L
Direct Unsubsidized Ln 1
Direct Unsubsid Loan
Direct Unsubsidized Stafford
DL Stafford Unsub Loan
DL Unsub Stafford Loan
DL Unsubsidized Loan
DL Unsubsidized Loan Staffrd
DUnsub Loan
EST Fed Direct Unsub Loan
Est Fed Unsub Stafford Loan
Est Fed Unsubsidized Stafford Loan
Est. Direct Unsubsidized Loan
Est. Federal Direct Unsubsidized Loan
Estimated Federal Unsubsidized Direct Loan

Estimated Unsub Direct Loan
Estimated Unsubsidized Loan
F-Direct Stafford Unsub Loan
Fdrl Direct Unsub Stafford Ln
Fed Dir Unsub Loan 2016-2017
Fed Dir Unsubsidized Staf Loan
Fed Direct Stafford Unsub Loan
Fed Direct Student Unsub Loan
Fed Direct Unsub L
Fed Direct Unsub Loan (PENDING)
Fed Direct Unsub Loan 1
Fed Direct Unsub Stafford Loan-HR
Fed Direct Unsub Stu Loan
Fed Direct Unsubsidized Ln 1
Fed Direct Unsubsidized Loan 1
Fed Direct Unsubsidized Stu Loan
Fed Direct USub Stafford S/S1
Fed Ford Unsub Stafford Loan
Fed Unsubsidized Loan
Fed. Direct Unsub Staff. Loan
Fed. Direct Unsub
Fed. Direct Unsub. Staf. Loan
Fed. Direct Unsubsidized Add.
Fed. Staff. Dir. Unsub Loan
Fed. Unsub. Loan
Fed. Unsub. Stafford Loan
Fed. Unsubsidized Stafford Loan
Fed. Unsubsidized Student Loan
Feder Direct Unsubsidized Loan
Federal Direct Add. Unsubsidized Loan
Federal Direct Ford Unsub Loan
Federal Direct Ford Unsubsidized Loan
Federal Direct Stafford Student Loan, unsubsidized
Federal Direct Uns
Federal Direct Uns Stafford Loan

Federal Direct Unsubsidized Ln
Federal Direct Unsub
Federal Direct UnSub Staff Loan
Federal Direct Unsub Stafford Loan #2
Federal Direct Unsub Stafford1
Federal Direct Unsub1 Loan
Federal Direct Unsubsidiz Loan
Federal Direct Unsubsidized Loan_1
Federal Direct Unsubsidized St
Federal Direct Unsubsidized Stafford
Federal Stafford Loan Unsubsidized
Federal Stafford Unsubsidized Loan
Federal Unsub Loan
Federal UnSub-Direct Stafford
Federal Unsubsidized Stafford Loan-Addtl
Ford Unsubsidized Loan
Loan Direct Unsubsidized
Loan-Direct Unsub Loan
Loan-Fed Direct Unsubsidized
LOAN-Federal Unsub Direct
Stafford Loan - Unsub
Stafford Unsubsidized Loan
UG Direct Unsubsidized Stafford Loan
Un-Subsidized Loans
Uns Stafford Loan
UNSUB DIRECT LOAN
Unsub Loan Eligibility
Unsubsidized
Unsubsidized DL
Unsubsidized Fed Direct Stafford Loan
Unsubsidized Federal Direct Stafford Loan
Unsubsidized Stafford Loan (Award Only)
Unsubsidized Stafford Loan DL
Unsubsidized Student Loan

(Burd et al., 2018, p. 13).

The inconsistencies with financial aid award letters make it difficult to understand the true costs of attending an institution and the comparison between colleges. One example of this is when institutions are grouping together the different forms of financial aid a student is receiving. Burd et al., (2018) demonstrates this with two different financial aid award letters where one from The Robert Morris University separates the student's grants, which do not need to be repaid, and the loans, which do need to be repaid. The financial aid award letter from Texas Southern University not only does not separate the grants from the loans, but they also do not even spell out the word, loan, on the letter (Burd et al., 2018). This can be misleading to the student and their family if they do not recognize the other lingo included and its association with student loans such as Direct Subsidized, Direct Unsubsidized, and Direct Parent Plus. The financial aid award letter examples of both Robert Morris University and Texas Southern University are below. The examples highlight two ends of the spectrum with Robert Morris University separating the gift aid from the student loans to show students the loans will need to be repaid. Texas Southern University, however, does not list out the entire word, loan, on their financial aid award letter. This can cause confusion and misinterpretation of what they are receiving in the form of financial aid.

The Robert Morris University

Grants and Scholarships - Free Money!

	FALL	SPRING	TOTAL
Institution Grant(s)			
JUSTICE SCHOLARSHIP	$5,000	$5,000	$10,000
RMU GRANT	$1,800	$1,800	$3,600
Federal Grant(s)			
PELL GRANT	$2,883	$2,882	$5,765
State Grant(s)			
ESTIMATED PHEAA GRANT	$2,050	$2,050	$4,100
Total Grant(s)	$11,733	$11,732	$23,465

Your overall financial aid package, including grants, scholarships and loans, cannot exceed $46,096 for the 2015-16 academic year.

Student Loan(s) - Repayment Necessary

	FALL	SPRING	TOTAL
SUBSIDIZED DIRECT LOAN	$1,750	$1,750	$3,500
UNSUB DIRECT LOAN	$1,000	$1,000	$2,000
Total	$2,750	$2,750	$5,500

Don't forget to complete Entrance Counseling and sign a Master Promissory Note at www.studentloans.gov

(Burd et al., 2018, p. 18)

Texas Southern University

AWARDS: **2016-2017 Aid Year**	***FALL 2016***	***SPRING 2017***
Pell Grant	$2.908.00	$2,907.00
Sup. Ed. Op. Grant	$250.00	$250.00
Tex Pub Edu Grant (In	$500.00	$500.00
Direct Subsidized Loa	$1,750.00	$1,750.00
Direct Unsubsidized L	$1,000.00	$1,000.00
Direct Parent Plus Lo	$258.00	$257.00
Texas Grant Initial	$2,500.00	$2,500.00
Term Total	**$9,166.00**	**$9,164.00**
Grand Total	**$18,330.00**	

(Burd et al., 2018, p. 14).

Student Loans

Paying for higher education has been a topic that has been discussed at length throughout the United States. One of the main ways many individuals do this is through the use of student loans. Shireman (2017) describes the perception of student loans as being an “appropriate method of financing college expenses because they are a means for transferring wealth from a future period of relative prosperity to the present, financing an investment that pays dividends in the future” (p. 185). Shireman (2017) also points out that student loans differ from car or home loans with the risks involved. If someone takes out a car or home loan, they at least get that tangible item. With student loans, there are many other variables in play that do not guarantee the borrowers will benefit or receive anything in collateral in return (Shireman, 2017).

Federal student loans date back to around 1958 with the widespread acceptance and usage of them being gradual over the years (Berman & Stivers, 2016). The Federal G.I. Bill implementation played a key role in the federal government getting involved with higher education. Some believe this trickled down into the federal student loan system that is known today as the government has continued to take an active approach in the way students fund their education (Fuller, 2014). This opened the door for many students who may not have otherwise been able to pursue higher education because of their social class (Fuller, 2014). Never had so many individuals had access to education past high school before.

Fuller (2014), reflects on the impact various United States Presidents have had with their policy changes and laws that were enacted during their time in office. One of the most prominent periods of time for student loan expansion was during the Clinton Administration. Former President Bill Clinton helped increase the participation in loan programs by reducing the paperwork required for students as well as by easing the loan repayment process (Fuller, 2014).

The student and parent borrowing between 1993 and 1995 increased by almost $10 billion dollars. This represented an approximate 66% jump in the amount of money available for federal lending in only two years (Fuller, 2014).

The freely available funds for higher education have also sparked an increased in predatory lending practices (Fuller, 2014). One sector of higher education that has been especially under fire have been for-profit institutions. There have been questionable recruitment and lending practices surrounding these institutions that brought on investigations by congress in 2010 (Fuller, 2014). Unmet promises surrounding employment after graduation, licensure, and other returns on investment related to attending their institution were widespread (Fuller, 2014). One of the ways the institutions profited off of student loan availability was by increasing tuition costs as students neared the completion of their program. A large percentage of these tuition dollars were then put back into the institution's advertising and recruitment budgets. (Fuller, 2014). Many of these practices were criticized as targeting low-income, underrepresented youth disproportionately because of the common federal aid meant for them to benefit from (Fuller, 2014).

Societal Stigma Around Financial Discussions

Financial discussions are largely avoided in most Western societies as money is seen as a taboo subject sometimes discussed even less than sex or death (Alsemgeest, 2014). While money maintains its importance in peoples' lives, it also tends to bring up feelings of power, shame, or guilt in individuals. Alsemgeest (2014) delves into conversations about money, why they are oftentimes avoided, and the benefits of parents having financially healthy and productive conversations with their children. The author highlights literature in the field pertaining to how money conversations are seen as taboo. One of the findings is that a reason for avoidance in partaking in financial conversations is there could be pent up feelings of shame, embarrassment, and guilt if parents do not feel secure in their financial situation. Alsemgeest (2014) goes on to state this could actually end up leading to their children following in their parents' footsteps when it comes to financial decisions since they were not told any different growing up. The author concludes with recognizing parents must have a delicate balance of openness and transparency with their children while also avoiding burdening or overwhelming them with knowledge that may not be developmentally appropriate depending on their age. Financial conversations can be beneficial to prepare youth to have healthy financial attitudes while also being aware of some of the common financial pitfalls they may encounter in the future (Alsemgeest, 2014).

Navigating Financial Products

With the increasing number of financial products available to consumers today it can be difficult to navigate the pros and cons of each. Lusardi (2011) examines the question of, "how financially capable are Americans?" Within this overarching question, the author looks at how individuals choose and manage various financial products. To discover this answer, the author utilized a national survey that consisted of a sample of 1,488 individuals where African-Americans, Hispanics, Asian-Americans, and adults with less than a high school diploma were oversampled to make sure there were a sufficient number of respondents for the study. One important finding came from who decided to be banked or unbanked. Those who were banked, had at least either a savings account or checking account opened at a bank. Those who were unbanked had neither opened at a bank. It was found that as education level increased among the participants so did the percentage of the individuals who were banked, had a savings account, or had a checking account. This was also the pattern as it related to household income. As income increased, so did the percentage of individuals who were banked, had a savings account, or had a checking account. For those individuals that had an income of greater than $75,000 a year, 98% of them stated they had either a checking account or savings account open. For those individuals with an income of less than $25,000 a year, 69% of them stated they had either a checking account or savings account open.

Another interesting comparison Lusardi (2011) found was in the ways that individuals utilized high-cost borrowing methods such as payday loans, getting an advance on a tax refund, using a pawn shop, or using rent-to-own stores. For unbanked individuals, 44% of them have utilized one of these high-cost borrowing methods compared to 20% of banked individuals using one of these methods. The author reiterates that these high-cost borrowing methods have high interest rates and fee payments most commonly utilized by “the young, those with low income, those without a high school education, and African Americans and Hispanics” (p. 11). It is even more concerning that these are the individuals using these types of borrowing methods when they are the ones who can least afford them. The author cautions that these types of spending patterns can put a strain on social safety nets as more financial resources in society are allocated towards supporting lower-income individuals that tend to be drawn into these dangerous financial products.

Chapter 3: Methodology

Introduction

Student-related financial discussions at higher education institutions have become more prevalent as students become more aware and cautious about paying for school, the amount of debt they may be accruing, and what their finances will look like after they graduate (Mazhari & Atherton, 2021). This issue is magnified by low-income students navigating the unknown territory of the financial-aid system. This commonly leads to these students dropping out, accumulating large amounts of debt, or both (Kezar, 2010). Multi-faceted financial education throughout a student's life at home, K-12 education, higher education, and in the workplace could potentially improve the financial stressors individuals of all ages oftentimes experience (Gibson, Sam, and Cheng, 2022).

The research question for this study focused on how a students' financial literacy, financial capability, and student characteristics impacts their self-efficacy in higher education. It is:

How does financial literacy and financial capability impact low-income, first-generation students' self-efficacy in higher education?

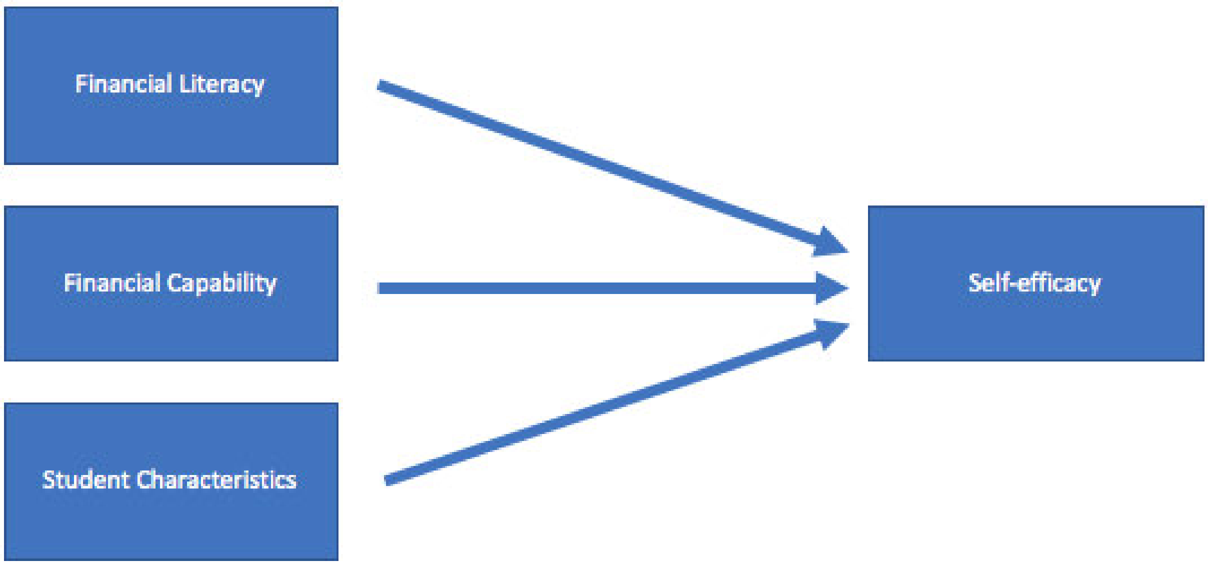
This chapter begins with an overview of the conceptual framework, followed by the research design of this study. Next, the data collection procedures are outlined along with a description of the interviews, data analysis, confidentiality, limitations/delimiters, validity, reliability, positionality statement, and a concluding statement of the chapter.

Conceptual Framework

The conceptual framework (Figure 1) of this study depicts hypothesized relationships between financial literacy, financial capability, and student characteristics and the self-efficacy of students in higher education. Financial literacy, financial capability and student characteristics are the independent variables and are displayed on the left portion of the conceptual framework diagram. Self-efficacy is the dependent variable and is displayed on the right portion of the conceptual framework. The hypothesis is that increased financial literacy and financial capability of students from particular student groups such as low-income, first-generation college students, in this study, will lead to an increased level of self-efficacy for students in higher education. Based on the literature review included in this study, more research is needed to identify a link between these factors.

Figure 1

Conceptual Framework Visual



One of the independent variables, financial literacy, is located on the left side of figure 1. Financial literacy is defined by Mason & Wilson (2000) as "an individual's ability to obtain, understand, and evaluate the relevant information necessary to make decisions with an awareness of the likely financial consequences" (p. 31). The information gain and financial awareness focus within this term has been debated in literature as it was described earlier in the literature review. This researcher hypothesizes that the financial literacy of a student impacts their self-efficacy in higher education. Therefore, it is possible that students will have financial information and an awareness of how to navigate financial products that can empower them to persist through challenges they may face in their higher education pursuit.

Another independent variable, financial capability, is located on the left side of figure 1. A students' financial capability represents their ability to "apply appropriate financial knowledge and perform desirable financial behaviors to achieve financial well-being" (Xiao & O'Neil, 2016, p. 2). Financial capability goes one step further than traditional definitions of financial literacy to include the application of the knowledge that an individual receives through financial literacy. The financial capability section earlier in the literature review mentions studies that have found the effects of increased financial capability to lead to greater overall well-being for individuals. This has contributed to this researcher hypothesizing that students' financial capability impacts their self-efficacy in higher education.

The third and final independent variable, student characteristics, is located on the left side of figure 1. This study only included low-income, first-generation college students. For the purpose of this study, low-income students are defined by Federal Student Aid as those that qualify for the Pell-Grant. First-generation college students are defined as the students who come from families where neither of their parents or guardians completed a four-year college degree

(Engle, 2007). These definitions differ slightly across literature with different limits on income or on how first-generation status is perceived. As it was described previously in the literature review, this population of students experience an increased number of risk factors when compared to their peers. The Pratt et al. (2019) survey discussed earlier highlights financial insecurity and financial stress being the two most prominent reasons for students not persisting until graduation among this population of students. Previous literature pertaining to this topic has led this researcher to hypothesize that when low-income, first-generation college students experience higher levels of financial literacy and financial capability, it can lead to increased self-efficacy in their higher education pursuit.

The dependent variable, self-efficacy, is located on the right side of figure 1. Self-efficacy is the “feeling of being able to deal with a situation effectively” (Lim et al., 2014, p. 150). When individuals experience higher levels of self-efficacy it is likely to increase their overall well-being, especially as it relates to their physical and mental health. (Lim et al., 2014). This researcher hypothesizes that when low-income, first-generation college students are equipped with higher levels of financial literacy and financial capability, their self-efficacy will also increase as it relates to their higher education pursuits.

Figure 2: *Variables and Measures*

Financial Literacy

Interest rate on savings	Suppose you had $100 in a savings account and the interest rate was 2% per year. After 5 years, how much do you think you would have in the account if you left the money to grow? (More than $102, Exactly $102, Less than $102)
Investment vehicles to outpace inflation	Imagine that the interest rate on your savings account was 1% per year and inflation was 2% per year. After 1 year, would you be able to buy more than, exactly the same as, or less than today with the money in this account? (More than, Exactly the same as, Less than)
Investing risk	Do you think that the following statement is true or false? “Buying a single company stock usually provides a safer return than a stock mutual fund.” (True, False)

Financial Capability

Financial planning	Do you currently have a personal budget, spending plan, or financial plan? (Yes = 1, No = 0)
Financial goals	How confident are you in your ability to achieve a financial goal you set for yourself today? (Very = 2, Somewhat = 1, Not at all = 0)
Emergency expenses	If you had an unexpected expense or someone in your family lost a job, got sick or had another emergency, how confident are you that your family could come up with money to make ends meet within a month? (Very = 2, Somewhat = 1, Not at all = 0)
Savings regularity	Do you currently have an automatic deposit or electronic transfer set up to put money away for a future use (such as savings)? (Yes = 1, No = 0)
Budgeting	Over the past month, would you say your family's spending on living expenses was less than its total income? (Yes = 1, No = 0)
Late payments	In the last 2 months, have you paid a late fee on a loan or bill? (Yes = 0, No = 1)

Self-Efficacy

Pursuing goals	I will be able to achieve most of the goals that I set for myself. (1= strongly disagree; 2= disagree; 3= neither agree nor disagree; 4= agree; 5=strongly agree)
Accomplishing difficult tasks	When facing difficult tasks, I am certain that I will accomplish them. 1= strongly disagree; 2= disagree; 3= neither agree nor disagree; 4= agree; 5=strongly agree
Obtaining intended outcome	In general, I think that I can obtain outcomes that are important to me. 1= strongly disagree; 2= disagree; 3= neither agree nor disagree; 4= agree; 5=strongly agree
Belief in oneself to accomplish anything	I believe I can succeed at most any endeavor to which I set my mind. 1= strongly disagree; 2= disagree; 3= neither agree nor disagree; 4= agree; 5=strongly agree
Overcoming challenges	I will be able to successfully overcome many challenges. 1= strongly disagree; 2= disagree; 3= neither agree nor disagree; 4= agree; 5=strongly agree
Confidence in accomplishing different tasks	I am confident that I can perform effectively on many different tasks. 1= strongly disagree; 2= disagree; 3= neither agree nor disagree; 4= agree; 5=strongly agree
Comparison to others	Compared to other people, I can do most tasks very well. 1= strongly disagree; 2= disagree; 3= neither agree nor disagree; 4= agree; 5=strongly agree
Performance during difficulty	Even when things are tough, I can perform quite well. 1= strongly disagree; 2= disagree; 3= neither agree nor disagree; 4= agree; 5=strongly agree

Student Characteristics

Class Level	What is your class level in school? (Freshman, Sophomore, Junior, Senior)
Sex	What is your sex? (Male, Female, Prefer Not to Answer, Other-fill in the blank)
First-generation Status	Did either of your parents or guardians graduate with a 4-year degree? (Yes, No)
Parental Income Level	Pell-Grant Status (Yes, No, I Don't Know)

Research Design

This study utilized a mixed methods approach where descriptive data was gathered from survey and interview findings from questions covering student characteristics, financial literacy, financial capability, and self-efficacy. The survey allowed for a better understanding of students' abilities to answer questions on their financial literacy and financial capability as well as their perceived self-efficacy. The interview with the selected participants uncovered more opinions of the way these factors along with their student characteristics impact their self-efficacy in higher education. Each of these aspects of the study are described further in depth in the data collection section below. The survey and interview questions are outlined in Appendix A.

Data Collection

Participants

The focus of this study is to gain a greater understanding of the impact financial literacy and financial capability has on the self-efficacy of low-income, first-generation college students. All participants were undergraduate first-generation college students at National Louis University. Participation in this study had no bearing on the student's status at National Louis University. National Louis University defines first-generation college students as those students that come from families where their parents or guardians did not complete a four-year college degree. The NLU Director of Online Operations provided a letter of support to pass along the description of the study and the survey link to other professors in her department for dissemination to students. Willing undergraduate professors sent out the survey link to their students with the description of research listed. There were 19 participants in the survey and 5 participants that opted into the follow-up interview.

Survey

An electronic survey, shown in Appendix A, containing 26 questions was sent to the potential survey volunteers via email. The survey was created using Microsoft Forms which allowed for the collection of responses. The survey consisted of four categories of questions asking about demographic information, financial literacy, financial capability, and self-efficacy. Questions from Lusardi, Mitchell, & Curto (2009), Collins & O'Rourke (2013), and Lown (2011) were used in the development of the survey. A question was included in the survey to invite participants to participate in the interview. Participants who responded that they were interested in participating in the follow-up interview were then contacted by email with the email address that they provided to schedule the interview.

Interviews

Interviews were conducted to gain more perspective on the student experience. The interview questions that were used as a guide with participants are shown in Appendix B. Five participants were interviewed. Interviews took place on the videoconferencing service, Zoom. All interviews were transcribed using the automated transcription software, Otter.ai. The transcriptions were then hand checked to ensure accuracy. Once the transcriptions were complete, they were downloaded and securely stored in an external flash drive that was password protected. These were used to analyze and compare responses from participants.

Data Analysis

Interview transcripts were analyzed to identify themes from each interviewee’s responses which assisted in the creation of codes within a codebook. The web-based data analysis program, Dedoose was used to assist in the coding. The codebook was created using common themes that were found from surveys and interview transcripts. Sub-codes were also used. The codebook assisted in the organization of data gathered from interviews. The codes and themes found, informed the conclusions, recommendations for future research, and implications for the field. This data was stored on a secured password protected external flash drive.

Survey data was analyzed using frequencies to provide an overview of financial literacy, financial capability, and self-efficacy scores from participant responses. Frequency tables were then created to display results. Triangulation was used to compare findings from survey and interview data to increase the truth value in the study (Boudah, 2020). This helped with the analyses between survey results for participants and the answers that the interview participants provided. Survey data provided a descriptive overview of where students are at in that moment in terms of their own personal financial literacy and financial capability and how that could be related to their self-efficacy. The interview questions allowed participants to self-report on their experiences and views on the Financial Avenue, financial literacy, financial capability, their own financial situations or any other pertinent information they shared during the interview process.

Confidentiality

The participant interviews were not connected to the survey results in any way. Participants provided their name and email to voluntarily commit to an interview after survey completion. Their names and emails were not be disclosed in the analysis. Any unique information that might lead to a student being identified was excluded from the reporting and writing. Data gathered from the interviews was stored securely on an external flash drive that was password protected. Finally, consent forms that participants signed included the phone number and email address of the researcher if questions arose about their participation or how the data was used.

Limitations

A limitation in this study is the limited research that has been completed previously examining the impact that financial literacy and financial capability has on a student's academic success. The previous literature that is cited in this study mainly refers to how financial literacy and financial capability could impact future financial habits and attitudes. This presents another limitation as most studies do not have the capacity to follow up years later to see how a gain in financial literacy and financial capability impacted their financial habits and attitudes down the road. Another limitation here is limited access to the financial information that could help this researcher better understand this phenomenon. The limited sample size of individuals who agreed to participate in the interviews is another possible limitation in this study.

Delimiters

This study was delimited by only conducting research at this one institution as the source for research on this topic. Students that participated in this research have likely only received financial literacy education at this institution and therefore have limited exposure to other financial literacy programs. The students are also all low-income, first-generation college students which could have impacted their responses given the intersectionality of these two identities. Another delimitation is the limited perspective that students can share at a single point in time in their life.

Validity

Boudah (2020) describes validity as the measure of the conclusions drawn from the actual study rather than from other sources. The validity measures that were taken include disclosing the researcher's positionality statement and member checking by sharing the findings from the study with the participants. The positionality statement of the researcher described the potential biases they may have and how their view and background potentially impact the study. Member checking increases the transparency of the research that was conducted to confirm with the participants that their views and responses were captured accurately.

Reliability

The reliability of a study is a measure of the extent in which it can be repeated with similar results (Boudah, 2020). Reliability measures that were taken in this study include asking the participants the same questions on the survey they take and the same questions in the interviews for those that opted in to it. There were some additional interview questions asked to some of the participants to provide clarification or additional details to their responses.

Trustworthiness

The trustworthiness of a study consists of how the researcher convinces the readers that the research was completed using techniques that the field deems appropriate, the findings are credible, and interpretations of the study are appropriate and fully detailed (Boudah, 2020). Peer debriefing strategies were utilized to talk through aspects of the research design to elicit any biases or other issues that arose during the study.

Positionality Statement

I was a low-income, first-generation college student that attended National Louis University, the same institution that this research took place at. This experience helped shape my own financial views as budgeting, short-term and long-term planning, and seeking out financial aid and work opportunities were essential to persisting through my higher education journey. I have been a high school teacher and school counselor in the Chicago Public Schools and an adult education instructor at Oakton Community College. In these roles, I have recognized that many students have an interest in learning about basic financial concepts and how to manage money through need assessments and conversations about what students desire to learn about in high school. These experiences have helped me develop a passion for the financial literacy and financial capability of young people, especially those in higher education.

It is seen in literature that the financial burden that many low-income, first-generation college students experience is oftentimes their top concern when it comes to persisting until graduation. Research on how financial literacy and financial capability impacts student success could help solidify this as another important area of needed student support within higher education.

Conclusion

This study focuses on gaining a greater understanding of participants' financial literacy, financial capability, and self-efficacy through a survey and interview. The mixed methods approach allowed the researcher to gather quantitative data of the participants' knowledge and ability to apply financial concepts in their life while also gaining individual perspectives of the participants on the concepts of financial literacy, financial capability, and self-efficacy through the interviews. Chapter 4 will provide an overview and analysis of the results.

Chapter 4 Results

Introduction

This chapter provides findings and analysis from student surveys and interviews completion. The research question for this study is: How does financial literacy and financial capability impact low-income, first-generation students' self-efficacy in higher education? DeDoose was used to code qualitative data to organize it into themes that came out of the interviews. A codebook was created by finding common themes that emerged from interviews with participants. Sub-codes were also used to help categorize participant quotes into these themes. The codebook assisted with organizing participant interview responses in order to develop analysis, conclusions, recommendations for future research, and implications for the field.

The survey garnered 25 participants with 6 of them being excluded because of their lack of first-generation college student status. This left 19 participants who provided complete survey responses useful for analysis. Of those 19 participants who completed the survey, 5 also agreed to participate in an optional follow-up interview which occurred within 2 weeks of their survey completion. There are two sections in this chapter. The first section describes quantitative survey results. The survey was grouped into questions covering demographics, self-efficacy, financial capability, and financial literacy. Tables are included to display responses from participants from some of the most notable questions. The analysis of each category of survey questions then follows the response tables. The second section describes qualitative interview findings organized by major themes that came out of the interviews. Those major themes include: financial guidance, proactive financial education, student loans, effect on academics, and financial stressors. Participant quotes from the interviews are included to help elaborate on the themes that were compiled.

The data gathered during this process aligned with the study framework by highlighting the financial perceptions of low-income, first-generation college students. The interviews, in particular, gave participants an opportunity to talk through how their upbringing, previous experiences, current mindsets, and difficulties have all played a role in how they view money. The interviews uncovered how the participants view their own financial well-being and how that has also impacted their academic progress. There were also moments during the interview responses where participants highlighted their own self-efficacy when it came to their belief in their ability to overcome obstacles they were currently facing or have faced in order to accomplish their academic and financial goals.

Survey Analysis

The survey was distributed to students in two different ways. The first way that distribution occurred was through the weekly student affairs newsletter. This newsletter was distributed by National Louis University's Dean of Students. After a low response rate from this method, alternative methods were explored. The next distribution method occurred by passing along the survey link and study description to NLU's Associate Director of Online Instruction. She distributed this information to colleagues of hers, who then passed it along to students. The students who completed the survey did so voluntarily and were not enticed in any way. Their participation also did not impact their status as a student. The participants were able to anonymously participate in the survey unless they indicated they wanted to partake in the

Table 1

Student Demographics

Variable	N	Percent
Gender		
Female	18	94.7%
Male	1	5.3%
Grade Level		
Senior	8	42.1%
Junior	9	47.4%
Sophomore	0	0%
Freshman	2	10.5%
Parents/Guardians Are College Graduates		
Yes	6	24%
No	19	76%
Pell Grant Status		
Yes	13	68.4%
No	5	26.3%
I Don’t Know	1	5.3%

optional follow up interview. In this case, an email address was requested so the researcher could follow up with them to arrange the interview details. Email addresses did not tie interviews to the survey and were used solely for communications.

Demographics

Table 1 reports student responses to demographic questions. As shown in Table 1, there was a large discrepancy in the gender of the participants as 94.7% of them were female. When it came to the grade level of participants, 42.1% of them indicated they were seniors, 47.4% of them were juniors, and 10.5% of the participants indicated they were freshmen. No participants indicated they were sophomores. Within the demographics section, there was also a question asking if either of the participant's parents graduated with a 4-year degree. This question utilized skip logic as participants who answered "yes" were moved to the end of the survey since the survey was only seeking responses from those students that were first-generation college students. As shown in Table 1, 6 students answered "yes" which eliminated them from participation in this study.

The last question in the demographics section asked about the student's Pell-grant status. As shown in Table 1, 68.4% of students answered they received the Pell-grant, 26.3% of students indicated they did not receive the Pell-grant, and 5.3% of students answered they didn't know if they received the Pell-grant or not. This question was relevant to the study as Pell-grant status is used at many institutions to also indicate low-income status for students. Literature also reveals oftentimes students who are in this low-income group are more likely to make poorer financial decisions and take longer to finish their degrees (Hancock et al., 2013). This can then perpetuate the problem where students have to take out more student loans to pay for the

Table 2

Self-Efficacy Questions

Question	Mean	Std. Deviation
Q4: I will be able to achieve most of the goals that I set for myself.	3.95	1.18
Q5: When facing difficult tasks, I am certain that I will accomplish them.	3.58	1.07
Q6: In general, I think that I can obtain outcomes that are important to me.	4.05	0.97
Q7: I believe I can succeed at most any endeavor to which I set my mind.	4.21	1.03
Q8: I will be able to successfully overcome many challenges.	3.74	1.05
Q9: I am confident that I can perform effectively on many different tasks.	3.95	1.13
Q10: Compared to other people, I can do most tasks very well.	3.79	0.98
Q11: Even when things are tough, I can perform quite well.	3.53	1.12

Table 3

Financial Capability Questions

Question	Yes	No
Q13: Do you currently have a personal budget, spending plan, or financial plan?	36.8%	63.2%
Q18: Do you currently have an automatic deposit or electronic transfer set up to put money away for a future use (such as savings)?	47.4%	52.6%
Q19: In the past 2 months, have you had to cover expenses with a credit card when you didn't have enough money in your checking or savings account?	52.6%	47.4%
Q20: In the past 2 months, have you paid a late fee on a loan or bill?	47.4%	52.6%

Table 4

Financial Literacy Questions

Question	Yes	No
Q21: Have you received any type of financial literacy education in K-12 education or higher education?	31.6%	68.4%
Q22: Are you aware of NLU's online financial literacy tool, Financial Avenue?	10.5%	89.5%

additional time in school and therefore go deeper in debt. Pell-grant amounts can vary based on many factors such as the student's expected family contribution, institution's cost of attendance, and student enrollment status. The maximum amount for the 2023-2024 academic year is $7,395 (Federal Student Aid, 2024)**.**

Self-Efficacy Analysis

A students' self-efficacy is the measure of their perceived "feelings of being able to deal with a situation effectively" (Lim et al., 2014, p. 150). Table 2 displays participant responses to the survey questions relating to self-efficacy. Participants were able to rate their responses to questions on a likert scale of 1 to 5 with 1 being a response of strongly disagree and 5 being a response of strongly agree. In Table 2, questions 5, 8, and 11 all mention going through a tough, difficult, or challenging situation or task. These were the only questions asking participants about this type of trial and their perceived reaction to them. These questions have the 3 lowest mean scores for participant responses at 3.58, 3.74, and 3.53 respectively. Generally, participants had positive views of their own self-efficacy, as shown in Table 2. For each question, the majority of participants responded with a rating of either agree or strongly agree.

Financial Capability Analysis

A students' financial capability represents their ability to "apply appropriate financial knowledge and perform desirable financial behaviors to achieve financial well-being" (Xiao & O'Neil, 2016, p. 2). Table 3 displays participant responses to the survey questions relating to financial capability. Question 13 asked participants if they currently have a personal budget, spending plan, or financial plan. The response options were yes or no. This question was designed to include broad language where even if someone did not consider what they were doing as official budgeting they may still consider themselves to have some type of financial plan, nonetheless. Of the 19 total responses, 7 (36.8%) indicated yes and 12 (63.2%) indicated no when answering whether or not they currently have a budget, spending plan, or financial plan.

Questions 18, 19, and 20 all assessed whether participants take part in what is traditionally thought of as wise or unwise financial practices. Question 18 asked if participants have any type of automatic deposit or automatic transfer set up that puts money into their savings account. 9 (47.4%) indicated yes and 10 (52.6%) indicated no. Questions 19 and 20 focused on actions that can take place if individuals do not have enough money for bills or loan payments. Question 19 assessed if participants have utilized credit cards in the past two months to cover expenses when they did not have enough money in their checking account or savings account. 10 (52.6%) indicated yes they have while 9 (47.4%) indicated no they have not. Question 20 assessed whether participants have paid a late fee on a bill or loan in the past two months. 9 (47.4%) indicated yes they have while 10 (52.6%) indicated no they have not.

These financial capability questions impact this study as the participant responses give an inside glimpse into what financial habits students have at this point in their lives. The questions included on table 3 ask about financial principles oftentimes seen as key to being successful financially such as budgeting, putting money into savings, and avoiding debt. If students responded no to questions 13 and 18 while responding yes to questions 19 and 20, then they would be demonstrating multiple risk factors as it pertains to their financial capability. There was one participant that demonstrated all of the risk factors, six participants that had all but one of the risk factors, eight had two of the risk factors, and one had none of the risk factors. There were also six participants that responded yes on questions 19 and 20 indicating that in the past two months they had both put expenses on a credit card when they did not have enough money in their checking or savings account as well as paying a late fee on a loan or bill.

Financial Literacy Analysis

Mason & Wilson (2000) describe financial literacy as "an individual's ability to obtain, understand, and evaluate the relevant information necessary to make decisions with an awareness of the likely financial consequences" (p. 31). Table 4 displays participant responses to the survey questions relating to financial literacy. The two questions that were most telling within this section were questions 21 and 22. There can be a large discrepancy between the amount of financial literacy education individuals have received going into college because of the diversity of backgrounds they may be coming from. Question 21 assessed whether participants have received any type of financial literacy education in K-12 or higher education. 6 (31.6%) indicated yes they have while 13 (68.4%) indicated no they have not. Question 22 assessed whether students were aware of the Financial Avenue, National Louis University's financial literacy tool for students. 2 (10.5%) indicated yes they are, while 17 (89.5%) indicated no they are not.

Interview Analysis

Survey participants were invited to take part in an optional 15-20 minute follow-up interview to gain additional insights into their experiences related to the research topic. Five participants agreed to participate in these interviews. Interviews were conducted using the videoconferencing service, Zoom. Interviews were then transcribed using the automated transcription software, Otter.ai. Dedoose was used in the coding of participant responses. Themes were then compiled after analyzing interview transcriptions and identifying common patterns from participant responses. Five main themes emerged from the participant interviews. These themes are financial guidance, student loans, effect on academics, proactive financial education, and financial stressors. Each of these themes are analyzed further in the following sections.

Theme 1: Financial Guidance

During the interviews, one of the most common themes that came up in discussions with participants was who has impacted their beliefs and mentality about money throughout their lives. One participant expressed the following sentiment as it related to their brother-in-law and his impact on their interest in financial topics:

> It’s my own interest as well as my brother-in-law. Like me, he is an immigrant and he actually never finished high school here. But when you take a look at where he’s at in life right now, he owns a really successful construction company along with owning multiple properties. He did it to make sure my sister and his kids were taken care of. I’m kind of like that with the drive to make it and learn a lot on my own. So I learned from him I think that was my biggest motivator.

This participant’s comments touch on their financial capability as well as their perceived self-efficacy to overcome any obstacles that may be in their way towards achieving their goals.

This theme was apparent in other participant conversations as well. It was especially true when it came to participant’s recalling memories they had relating to financial hardships or limitations. This participant recalled experiences with their family growing up and how that has translated into their current mindsets when it comes to budgeting for expenses:

> I think when I was growing up, we always struggled a lot with money. So a lot of times we would go to the store, and I wouldn’t be able to buy certain stuff I wanted. And then I started growing up, and I got a job. And now it’s really difficult for me to kind of manage it because I see something that I want, and I feel like I’m fulfilling this need or

> something, and I just buy it. And then I'm just spending a lot of money on unnecessary things, especially in the back of my head when I'm like, I have this bill coming up. And it's just hard to manage that sometimes.

When thinking back to money conversations with their parents or other family members, another participant stated, "No, we never really talked much about it. I never really had much financial knowledge. My parents were kind of just like, you know, you're strong. We know you're smart enough to figure it out, and we'll kind of just let you do that." Within this theme, in particular, there seems to be a consistent belief among some individuals that we all need to figure out the wise money habits and beliefs for ourselves. One participant mentioned, "I wasn't fully prepared for the money things that come but hey that's life."

Theme 2: Proactive Financial Education

Another theme that emerged from interviews was the participants' realization and desire to have received a solid financial education earlier on in life. Participants communicated this in a few different ways. One of the ways was expressing regret over past decisions and how receiving a financial education could have helped them avoid these past mistakes. This was evident when this participants stated, "I believe student loans are very easy to get and so if I had a chance to go back and do it all over again, I wouldn't have as many as I do now." Another participant also said:

> I feel like I tell everybody now if I were 15 and knew how to buy a house, I probably would have bought one already…..when you're younger, you don't really need to know about it. But then once you really start to open your eyes and realize like hey, money really is the way the world works. And if you have no idea how to do that, then it's like,

> you're not ready. But yeah, like I said, it's not impossible, but it's definitely hard in the beginning to try to figure it out

This leads into another way this theme was communicated. Participants noted the priorities and points of emphasis that exist at school and at home for many individuals and how they do not necessarily align with what many individuals see as the most critical skills later on in life. This participant expressed this sentiment by recalling this experience in high school:

> In high school, I feel like they gave us the necessary math classes, for example, but they never really went in depth on what to avoid if you want to get credit cards or something like that. Or how to start your credit from nothing to something. So I think just kind of pushing a little bit more on those electives would have been nice. Going to college, I did feel like I was kind of just thrown to the wolves a little bit. But again, it's not anybody's fault. It's just kind of how the system works. But that would have been nice, you know, a kind of goodbye gift to say the least.

Another participated noted how infrequent these money conversations are by saying:

> I feel like a lot of people don't give it the attention it deserves. It's kind of just like you know, kitchen talk. And it shouldn't be because it's the way that the world revolves and everyone should know how to make a good life for themselves. Especially if they're going into a career and they're paying thousands and thousands of dollars to go to the places that should also be teaching you these things,

One of the most prevalent financial topics that has been in the news and top of mind for many individuals over the years has been student loans. This was also a point of discussion for many of the participants with how they factor into their current and future financial outlook.

Theme 3: Student Loans

Student loans have become a polarizing topic in the news over the past few years with talk of student loan forgiveness being tossed around. During conversations with participants, there were a few differing viewpoints and varying levels of awareness on utilizing student loans to pay for higher education. Some were more comfortable with the idea of going into student loan debt as they saw it as an investment into their future while others saw it more as their last resort to cover remaining expenses their other scholarships and grants did not cover. Four out of five participants stated they have student loan debt with a self-reported average of $25,125 each. One of the participants expressed how they were covering their school expenses by stating:

> So my family and I have been paying out of pocket for what we can. So yes going forward. I do think that school is an investment and you get what you put in. You have to put in the work and sometimes if money is the issue, then you have to just kind of work around it if you want your dreams to flourish and stuff like that. So I think it's a good investment. It's an obstacle for sure, you know, but it's not impossible.

This participant expressed the hope they had in the student loan forgiveness plan:

> I've exceeded the maximum amount to take out. Because it's a lot, I feel that if I contribute back to what I have been given, then someone else will be given a chance to get their education. And also, I just plan on doing some fundraising to help get more money for school. And I'm also hoping that I would be able to get the forgiveness where President Biden would be giving us a certain amount that he would take off. I'm praying for that as well, but for my future I plan to basically focus on scholarships from now on.

The student loan debt relief package, as it was originally described, this participant was referring to was not passed.

Another participant had a more bleak outlook on their student loan debt situation and how they would be repaying it by stating, “I have to pay back the government for the loans. I’m not going to be able to enjoy myself and the career that I chose for myself.” One of the other participants initially stated they did not know the total of their student loan amount but later expressed they would estimate it to be around $12,000 but not more than $20,000. This participant initially said, “Honestly, I don’t really know the total of my debt, but I know that I don’t have to pay it back for now.”

Theme 4: Effect on Academics

Another theme that emerged from participant interviews was how their finances impacted their academic performance. Some participants shared that this stemmed from decisions they had made earlier on when they first enrolled at NLU while others attributed this to their current work life balance or financial stress they were experiencing. The one interview participant who has not taken out any student loans expressed this sentiment when it comes to the connection between their financial situation and academic performance:

> I applied for a full tuition scholarship here, and I got it. And that was a big weight lifted off, because I wasn’t going to have to worry about the money. So I do prioritize school because of that reason. I just want to get in and get out as soon as I can, and still have the scholarship I wanted to get. And, yeah, right now I’m just doing my best. Money has never been…impacting my schoolwork because I’ve prioritized it.

This is a stark contrast to another participant’s struggle to balance work, finances, and their academic workload. This participant shared their mindset with this balance:

> Money impacts school a lot. So I actually haven’t been in school for about the past five weeks. I started the semester feeling really confident and feeling like economically I was

> fine. But then I kind of had some whirlwinds with jobs and stuff like that. So I do want to push to be in school next quarter. But again, I have to figure out kind of where I stand to not dig a bigger hole.

Another participant also noted the work and school balance was difficult early on in their education. They stated, “I had to take a year off of school because I just couldn’t do it. I had to work full time and then I had to take full time classes. It was just too much.”

Theme 5: Financial Stressors

Most participants described the stress they feel surrounding money and being able to support, not only their own endeavors, but also providing financial support to their parents. Low-income, first-generation college students are in a unique position where they may feel guilt and a responsibility to assist their parents/guardians and families with their finances (Covarrubias et al., 2019). This was a common topic during discussions with participants as they navigated giving back to their family while also trying to make sure their bills paid. When describing the stressors present in their life at the moment, one participant stated:

> I think the main ones right now are making sure my parents are taken care of as they’re both older and retired. They bought their house many years ago and we moved here and they have a wonderful mortgage payment but I’m kind of finding the balance and making sure that they’re taken care of while I’m doing what I want to do.

Another participant shared a similar sentiment as they described the typical bills they have to pay:

> I still do work on the side just to cover expenses such as my car insurance and helping out with the bills for my mom. But I really try to focus mostly in the long run, that getting my

> degree is going to be more worth it than working like a $15 minimum wage job right now.

Another participant shared that their siblings also have a similar mentality when it comes to putting money aside for their parents:

> I think that financial stress probably on a scale of one to ten is like an eight for me. I want to make sure my parents are taken care of now but also my siblings and I are working to make sure that we still continue to put money aside for them so that they can enjoy their retirement.

Literature highlighted this as a common theme among low-income, first-generation college students as many still feel financially responsible to still help their parents or guardians (Covarrubias et al., 2019).

In terms of where financial stressors ranked compared to other stressors individuals may be feeling, participants ranked financial stressors at or near the top. One participant described the connection between money and the current issues they are facing by stating, "I think it (my main stressor) definitely is money. I know people say, money can't buy happiness, but if I had money, most of my problems would go away." Another participant came to the conclusion that the most prevalent stressor in their life was also related to their finances:

> I guess the biggest one is just trying to be okay financially and learning how to be more responsible and having assets that will help my financial life. I try not to stress too much on money because, again, it's school and I enjoy school, and I do think it'll pay off in the future. But I think overall, just trying to figure out how to make money work, you know

The responses by participants highlight a theme that could persist even after they graduate and leave higher education. The burden some may feel to financially take care of parents/guardians or siblings may last throughout the rest of their adult lives. This feeling could be compounded if they also have student loans to pay back, other debt payments or if they are living paycheck to paycheck among other potential financially stressful scenarios.

Chapter 5

Discussion and Conclusions

This study examined the potential connection between financial literacy, financial capability, and self-efficacy among low-income, first-generation college students at National Louis University. Through a literature review as well as survey and interview analysis from current NLU low-income, first-generation undergraduate students, this researcher was able to compile findings and draw conclusions about improvements that can be made at colleges and universities to support students with improving their financial literacy and financial capability. The final chapter in this dissertation will discuss the following: summary of the research, discussions and interpretation of the findings, significance of the study, implications for practice, recommendations for future research, and the conclusion.

Summary of Research

The research question for this study was: How does financial literacy and financial capability impact low-income, first-generation students' self-efficacy in higher education? This study was based on the Self-Efficacy Theory that was developed by Albert Bandura. The Self-Efficacy Theory framework focuses on the idea that people desire to have control over their lives. Bandura (1994) describes the ways individuals develop a strong sense of self-efficacy through master experiences, vicarious experiences provided by social models, social persuasion, and reducing people's stress reactions and alter their negative emotional proclivities and misinterpretations of their physical states (p.3). This mixed methods study included survey participation from 19 individuals with 5 of them also agreeing to participate in an optional follow-up interview. DeDoose was used to code this qualitative data. Participant interview analysis compiled five themes that were formed from participant answers to interview questions.

These five themes were the most prevalent talking points the interview participants had during our discussions. A summary of those five themes along with survey data are included below to expound on study findings.

Discussion and Interpretation of Findings

The discussion and interpretation of findings section is organized by themes that were compiled from survey and interview results. The five themes are: financial guidance, proactive financial education, student loans, effect on academics, and financial stressors. Interpretations of each theme and the contents of participants' responses are discussed for the reader. .

Theme 1: Financial Guidance

Participants frequently discussed their past and how that relates to their financial habits and financial views today. A key part of this was who was or was not speaking into their main financial belief building events they vividly remember that influence how they still make financial decisions today. Oftentimes it was a parent or guardian speaking into these beliefs but other times it was an extended family member or friend. One participant recollected frugal spending habits that their mom and dad had while they were growing up and how that has now impacted their desire to spend money on "unnecessary things" as they put it. Another participant witnessed their brother-in-law have wise money management habits and strived to emulate him. There was also a common sentiment among participants that despite these influences on the way they handle their money, they still believe it is fully up to them to navigate how to make wise financial decisions.

One of the most eye-opening aspects of this theme in particular, can be summed up by one of the participants stating, "But hey that's life." They were referring to feeling the need to figure things out on their own in life especially when it comes to money. Some of the participants even stated their parents told them that as well despite never having any conversations about money at home. Their parents were confident they would get it figured out somehow. It probably is true that certain topics such as money are ones we do learn a lot by actively doing or participating in ourselves but that does not necessarily mean conversations cannot still be taking place leading up to financial independence. There can still be a lot of learning and growing by hearing about what aspects of money older generations may have gotten right or aspects they wish they could go back and change. Wisdom can be gained by hearing both positive and negative examples of how to handle money.

Theme 2: Proactive Financial Education

Another frequent talking point from participants was their desire to have received financial education previously to potentially avoid some of the financial mistakes they have made. Only about 32% of the survey participants reported they have received any type of financial literacy education previously. Only 10.5% of the survey participants reported they have heard of National Louis University's financial literacy tool, Financial Avenue. This theme also brought up many feelings of regret as participants realized that certain decisions they made with money in their past were not wise and were often made without the knowledge or understanding necessary to make better informed decisions. One participant mentioned how infrequent money conversations are despite how prevalent financial stressors are in our lives. They went on to say the world revolves around money and "everyone should know how to make a good life for themselves."

Being proactive with financial education can help students avoid certain financial pitfalls individuals commonly fall into. This is especially true with individuals planning to pursue higher education if they are the first in their family to go to college. Their family may not have a lot of margin within their budget to assist financially if the student experiences financial hardship while in school. Planning for and getting out in front of these types of obstacles the best they can will help them not end the pursuit of their degree or prolong the time they are in school. One of the participants noted they found it curious why high schools required all of the different math classes but did not include any type of personal finance class. This participant felt like a personal finance class would have proved a lot more valuable to their past and future than the math classes they already forget the contents of. This participant also stated that when they went to college it felt like they were "getting thrown to the wolves" when it came to the financial decisions they then had to make all of a sudden.

Theme 3: Student Loans

Student loans were top of mind for many participants. Four out of five interview participants still have student loans with a self-reported average balance of $25,125. This debt balance impacts the way they view their financial outlook for the future by having to consider how they will make enough money in their career field to afford the monthly payments. Despite this, participants did not describe a plan they had when it came to paying off their student loan balance. One participant described their hope in the loan forgiveness plans that have been discussed by the United States government. When one of the participants was asked about their student loan balance, they initially stated they were not sure how much student loan debt they had accumulated but they knew they did not have to pay it back for now. Another participant expressed that "student loans are very easy to get and so if I had a chance to go back and do it all over again, I wouldn't have as many as I do now."

The first three themes mentioned all combine together to provide an even more glaring need when it comes to support for low-income, first-generation college students. Financial literacy in general can be overwhelming but when considering the financial aid process in particular there is a large knowledge gap when it comes to understanding this process of paying for higher education. Terminology is often not clear to students and the ramifications of taking out student loans and paying them back with interest may not ever be explicitly explained. It may be even more difficult if students are taking out large student loans to pursue majors that do not traditionally produce very large income earners early in their career. One participant summarized this bleak outlook on their student loan situation by stating: “I have to pay back the government for the loans. I’m not going to be able to enjoy myself and the career that I chose.”

Theme 4: Effect on Academics

Participants discussed the impact their finances have on their academic success with a noticeable difference between the participant who had not taken out any student loans and those that have. The participant who has not taken out any student loans described prioritizing their coursework and making sure nothing is getting in the way of succeeding in that area. This resulted in not having to take a break from classes in order to finish their program on time. Two other participants who have student loan debt described how they had to take a break from their classes to focus on improving their financial situation. One of them took an entire year off to focus on working full time to save up money to go back to school. The other participant shared they have not been attending their classes for the past five weeks due to financial struggles. This participant stated: “I started the semester feeling really confident and feeling economically I was fine. But then I kind of had some whirlwinds with jobs and stuff like that.”

These types of situations can create even more financial strain if students are not taking breaks from their coursework appropriately. Students may not realize they are still signed up for classes and therefore still being charged tuition but they are just not showing up to class as was the case with the participant mentioned previously. This can increase their student loan debt without progressing in their academic program. Another issue students run into within this theme is when they drop out of their program before finishing their degree. Not only do students then potentially have student loan debt but they do not have a degree that could potentially earn them a higher salary in their job.

Theme 5: Financial Stressors

The final theme that came out of the interviews were the specific financial stressors participants felt along with where financial stressors ranked in terms of the participants' overall stressors in their lives. One of the major stressors that were discussed by participants is the burden they felt to take care of their parents/guardians financially. Three participants specifically mentioned they were still actively financially contributing towards paying their parents/guardians monthly bills. Two participants mentioned, along with their siblings, they were putting money towards their parents/guardians' retirement to pay for everyday living expenses and healthcare costs. One participant said they are "finding the balance and making sure that they're taken care of while I'm doing what I want to do." All participants interviewed ranked financial stressors at or near the top of the overall stressors that were present in their lives. Whether it was stress related to day-to-day expenses and making sure they were able to afford those costs or thinking long term and how they were setting themselves up for the larger financial milestones that usually come later in life such as buying a house, becoming debt free, and retirement, participants made it clear their finances were top of mind. One participant stated: "I guess the biggest one (stressor) is just trying to be okay financially and learning how to be more responsible and having assets that will help my financial life."

Most of the participants described this financial stress as also trickling into all other types of stress in their lives. As it was mentioned earlier, financial stress led to academic stress. It could lead to relational stress with siblings, parents, or spouses if animosity built up towards each other for differing viewpoints when it came to the level of support that one was willing to provide for someone else such as a parent. Financial stress could also lead to a strain on your physical body if there is a need to work multiple jobs or extended hours over a prolonged period of time to keep up with payments and supporting family members.

Significance of Study

The period of time where young adults start to make financial decisions and become more financially independent from their parents/guardians can have lasting ramifications for the rest of their lives. The shift that has to take place inside of these young people is drastic as we oftentimes just expect everyone will catch on and learn as they go when it comes to their finances. What this does not take into consideration is the grave consequences that lurk behind some of these life altering decisions our society has come to expect and accept from individuals in their late teenage years to their early twenties.

This study aimed to gather data around student perceptions of how financial literacy and financial capability could impact their self-efficacy. Financial education related initiatives are lacking at colleges and universities around the country and conversations with the participants in this study showed the interest and willingness to engage with such programs is there. Colleges and universities could consider the ideas in this dissertation to revamp their financial education tools to promote and legitimize these student supports as being on the same level as other similar student services that exist. With financial stress and financial insecurity being the number one factors in lower retention rates in higher education for first-generation college students, there needs to be more of a focus on how best to support students with this area of their lives (Pratt et al., 2019)

Implications for Practice

Implications for practice this research highlighted are areas high schools and higher education institutions can address when it comes to providing an impactful financial education program as a student support service. Administrators, student support service personnel, and instructors can put forth the following strategies and ideas to improve the financial education experience for students so they feel more equipped to navigate financial products and put wise financial practices in place in their own lives: transparency and clarification on student financial aid awarded, promote and train students on the financial literacy tool chosen by the institution, and expand visibility, outreach, and ease of implementation.

Transparency and Clarification on Student Financial Aid Awarded

The financial aid process can be confusing for students as there are typically no uniform structures of how the financial aid award letters are broken down for students as it was discussed in the literature review above. With a more structured, uniformed approach to financial aid letters, students could more easily compare financial aid awards from institution to institution and know exactly what they are being awarded in gift aid and what their net price of attending would be. This may be a more extensive process where an overseeing entity would need to structure this more straightforward financial aid award letter and require institutions to all go by the same format.

A more easily obtainable step in the direction of transparency would be to require school counselors in high school and financial aid advisors/academic advisors in colleges and universities to have an in-depth review with students of their initial financial aid award letter.

This should include a description of what the difference is between scholarships, grants, loans, and work study and how these different forms of financial aid are shown on the student's financial aid award letter. These reviews should make it very clear to the student what their net price is before loans are considered and after all of their other gift aid is factored in. During these conversations, the return on investment of the student's chosen major, job outlook, expected starting salary, and total amount of student loan debt they would be on track to accumulate by the end of their degree should all be discussed.

Each year, there should also be a review process where a financial aid advisor or someone in a similar position should have a conversation with students about what their financial aid package looks like for that year. This could be a time where they see if there have been any changes from the previous year's financial aid package and, if available, bring up work study and scholarship opportunities. This could help inform students of what their financial aid package looks like each year to help avoid any confusion or lack of clarity on what they are actually paying each year and how much student loan debt, if any, they may be accruing.

Promote and Train Students on the Financial Literacy Tool

Most higher education institutions offer some type of financial literacy tool for their students to use. Many times, however, the institutions do not promote the tool or help students understand how or why to use it. This could help expand the use of the tool amongst the students as well as help warrant the need for the institutions to continue to pay for the tool's service and availability to their students. The financial literacy tool that was mentioned in this study was the Financial Avenue, which National Louis University makes available to their students. This study's survey results showed only 10.5% of participants knew this financial literacy tool existed. This percentage would be likely even lower if participants were asked if they have used the tool before.

Institutions could promote their financial literacy tool during different events on campus such as orientation and campus tours as well as student events throughout the year. Student affairs or financial aid departments could include information on certain timely and relevant financial information on emails or newsletters that students need to be aware of that could be assisted by using the financial literacy tool. This could include tax filing season, reviewing financial aid awards, paying tuition, and retirement account workshops especially for graduating seniors who most of them will be going on to earn income allowing them to have the opportunity to open their first retirement accounts.

Expand Visibility, Outreach, and Ease of Implementation

The financial literacy tool or other related initiatives an institution offers should be highlighted in the same way other student support services are mentioned around campus. Students know to go to the gym or recreation center for their physical wellness or the student health center for medical care or mental health services. They may, however, only see the financial aid office as where their tuition money goes and not think much more about other types of financial support services an institution offers. Making financial literacy education and overall financial wellness a focal point on campus can begin to break down the stigma that oftentimes exists with financial topics.

There are a lot of opportunities around a campus both in-person and virtually to integrate financial literacy education and financial wellness into courses, clubs, and overall student life. One approach Indiana University instilled was to train undergraduate and graduate students who have an interest in financial wellness to become peer mentors/advisors who other students can schedule time to meet with to talk about financial questions or to seek general financial advice (Indiana University, n.d.). These student mentors/advisors could be students who have work study eligibility or graduate assistantships to keep the cost to the institution low. Institutions could also explore embedding aspects of financial literacy education into already existing classes. This is happening at Purdue University where all students who are receiving the Purdue Promise scholarship must take a 1-credit seminar course during their freshman year and senior year that has an embedded financial literacy component to them. All students who receive the Purdue Promise scholarship are low-income students from Indiana and many are also first-generation college students (Purdue University, n.d.). This would be another opportunity where financial literacy support services could be directly provided and the institution wide financial literacy support services could also be explicitly described.

The ease in which students are implementing and utilizing the financial literacy tool at an institution should be prioritized. If there are many hoops and obstacles students have to jump through to get signed up for or to access the tool, the less likely students are to regularly use it. Institutions should think through how they can streamline the process to be seamlessly integrated into their other institution applications that oftentimes utilize single sign on capabilities. They should also consider how mobile friendly the financial literacy tool may be to increase the usage by students. Shorter video segments or modules covering specific types of financial advice or financial product information could be more appealing to students.

Recommendations for Research

The current literature that exists highlights the burden students feel when it comes to managing their finances, especially those that are low-income, first-generation college students. As much of the focus is on financial education in high schools, more work can be done to expand financial literacy and financial capability teaching offerings across K-12 schools and higher education institutions. Within this study's survey, only 10.5% of participants were aware of National Louis University's financial tool, the Financial Avenue, which is available for students. Low rates of student awareness and usage of the Financial Avenue resource should be evaluated further at NLU. Other higher education institutions should also see how aware students are of their financial education offering as well as how many students actually utilize it in some way.

Further research should also be conducted on institutions already implementing successful financial education programs such as Indiana University and their MoneySmarts program. According to program statistics, MoneySmarts has contributed to a reduction of $158.2 million in student bowering over the past ten years and a 24% decrease in student borrowing across all Indiana University campuses (Indiana University, n.d.). Student utilization rates and campus promotion efforts should be examined to see how strategies could be replicated elsewhere. The idea of proactive financial education came up as a main theme in interviews with participants in this study and is a main focus of the MoneySmarts program. Helping students learn more about wise financial principles can and should be a resource institutions offer to students before, during, and after their time enrolled.

Conclusion

The research question this study addressed examined the relationship between financial literacy, financial capability, and self-efficacy for low-income, first-generation college students. This researcher hypothesized that students with higher levels of financial literacy and financial capability would have higher levels of self-efficacy which would therefore help them overcome obstacles and challenges that arise during this oftentimes tumultuous period of life. Due to the limitation of a small sample size, there was not enough evidence in this study to support this hypothesis.

All interview participants expressed regret with not receiving some type of financial literacy education earlier in their education journey. They all expressed the belief that learning about financial principles they are now faced with would have better prepared them for the challenges they have endured. With more states passing mandates requiring financial literacy to be taught at the high school level is promising to help close the gap that exists with financial literacy education but more can be done in this area. According to Next Gen Personal Finance, as of March 2024, there are 8 states that have a fully implemented standalone personal finance course requirement for all high school students to have taken in order to graduate. There are 17 additional states that have passed legislation to require a standalone personal finance course but the implementation is still in progress. There were no higher education institutions found that have a financial literacy education requirement for their students. With this gap in students receiving some type of financial literacy education, there is still a need for higher education institutions to proactively provide financial literacy education opportunities for their students.

Many of the conversations that have been ongoing about the student loan crisis are based on reactive measures where there is outrage about the total amount of student loans an individual has taken out and how long it will take for them to pay it off. It is this researcher's hope that we begin to think proactively about this problem on how we can set students up for success before the problem is so big and daunting that this debt burdens individuals for much of their lives. Equipping students with the knowledge and skills to make informed decisions about funding higher education as well as navigating financial products early in their careers should be explored further. As much of the United States is still in the early stages of implementing financial literacy education, there is still much work to be done to improve outcomes and long-term behavioral change.

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Appendices

Appendix A: Survey Questions

Demographic Questions

1. What is your class level in school? (Freshman, Sophomore, Junior, Senior)
2. What is your sex? (Male, Female, Prefer Not to Answer, Other-fill in the blank)
3. Did either of your parents or guardians graduate with a 4-year degree? (Yes, No)
4. Are you eligible or have you ever received a federal Pell Grant as part of your financial aid package? (Yes, No, I don't know)

Self-Efficacy Scale Questions- Chen, Gully, & Eden (2001):

1= strongly disagree; 2= disagree; 3= neither agree nor disagree; 4= agree; 5=strongly agree

5. I will be able to achieve most of the goals that I set for myself.
6. When facing difficult tasks, I am certain that I will accomplish them.
7. In general, I think that I can obtain outcomes that are important to me.
8. I believe I can succeed at most any endeavor to which I set my mind.
9. I will be able to successfully overcome many challenges.
10. I am confident that I can perform effectively on many different tasks.
11. Compared to other people, I can do most tasks very well.
12. Even when things are tough, I can perform quite well.

Financial Capability Questions – Collins & O'Rourke (2013):

13. Do you currently have a personal budget, spending plan, or financial plan? (Yes = 1, No = 0)
14. How confident are you in your ability to achieve a financial goal to save $50 in the next 2 weeks? (Not at all = 0, Somewhat = 1, Very = 2)
15. How confident are you in your ability to achieve a financial goal to save $100 in the next 2 weeks? (Not at all = 0, Somewhat = 1, Very = 2)

16. How confident are you in your ability to achieve a financial goal to save $200 in the next 2 weeks? (Not at all = 0, Somewhat = 1, Very = 2)
17. If you had an unexpected expense or someone in your family lost a job, got sick or had another emergency, how confident are you that you could pay your regular bills in the next month? (Not at all = 0, Somewhat = 1, Very = 2)
18. Do you currently have an automatic deposit or electronic transfer set up to put money away for a future use (such as savings)? (Yes = 1, No = 0)
19. In the past 2 months, have you had to cover expenses with a credit card when you didn't have enough money in your checking or savings account? (Yes = 1, No = 0)
20. In the past 2 months, have you paid a late fee on a loan or bill? (Yes = 0, No = 1)

Financial Literacy Questions - Lusardi, Mitchell, & Curto (2009):

21. Have you received any type of financial literacy education in K-12 education or higher education? (Yes= 1, No= 0)
22. Are you aware of NLU's online financial literacy tool, Financial Avenue? (Yes= 1, No=0)
23. Suppose you had $100 in a savings account and the interest rate was 2% per year. After 5 years, how much do you think you would have in the account if you left the money to grow?: more than $102, exactly $102, or less than $102?
24. Imagine that the interest rate on your savings account was 1% per year and inflation was 2% per year. After 1 year, would you be able to buy more than, exactly the same as, or less than today with the money in this account?
25. Do you think that the following statement is true or false? "Buying a single company stock usually provides a safer return than a stock mutual fund."

Interview Participation

26. I agree to participate in an interview lasting approximately 30 minutes with follow up questions with the researcher virtually at a mutually agreed upon time. (Yes or No)

Appendix B: Interview Questions

1. How familiar are you with NLU’s online financial literacy tool, Financial Avenue?
2. To what extent have you been involved with Financial Avenue?
3. What were your main takeaways from your involvement with Financial Avenue?
4. What type of financial changes, if any, have you implemented since participating in Financial Avenue?
5. What impact, if any, has that had on your finances?
6. What are the most prevalent stressors in your life at the moment?
7. Where do financial stressors rank in terms of overall stressors that you experience?
8. How do any existing financial stressors, if at all, impact your attendance in your classes?
9. How do any existing financial stressors, if at all, impact your academic performance?
10. How do you feel you compare to your peers with your current financial outlook for the present and future?
11. How optimistic do you feel in terms of financial stability for your future?

Appendix C: Initial IRB Approval (March 2023)

NATIONAL LOUIS UNIVERSITY

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ACCESS. INNOVATION. EXCELLENCE.

Office of the Provost
122 South Michigan Avenue
Chicago, Illinois 60603-6162

www.nl.edu
P/F 312.261.3121

March 21, 2023

[redacted]

Dear Darren Scott:

The Institutional Review Board (IRB) has received your application for your research study "*Impact of Financial Literacy and Financial Capability on Students' Self-efficacy*" IRB has noted that your application is complete and that your study has been approved by your primary advisor and an IRB representative. Your application has been filed as Expedited in the Office of the Provost.

IRB: ER01214

Please note that the approval for your study is for one year, from **9-Feb-2023 to 9-Feb-2024**.

As you carry out your research, you must report any adverse events or reactions to the IRB. At the end of your approved year, please inform the IRB in writing of the status of the study (i.e., complete, continuing). During this time, if your study changes in ways that impact human participants differently or more significantly than indicated in the current application, please submit a Change of Research Study form to the IRB, which may be found on NLU's IRB website.

All good wishes for the successful completion of your research.

Sincerely,

Shaunti Knauth

Shaunti Knauth, Ph.D.
Chair, IRB

Appendix D: Amended IRB Approval (November 2023)

NATIONAL LOUIS UNIVERSITY
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Office of the Provost
122 South Michigan Avenue
Chicago, Illinois 60603-6162

www.nl.edu
P/F 312.261.3121

November 2, 2023

[redacted]

Dear Darren Scott:

The Institutional Review Board (IRB) has received your application for amendment of your research study "*Impact of Financial Literacy and Financial Capability on Students' Self-efficacy*". The amendment is approved.

IRB: ER01214
Amendment approved 2-Nov-2023

Please note that the approval for your study is for one year, from **9-Feb-2023 to 9-Feb-2024**. As you carry out your research, you must report any adverse events or reactions to the IRB.

At the end of your approved year, please inform the IRB in writing of the status of the study (i.e. complete, continuing). During this time, if your study changes in ways that impact human participants differently or more significantly than indicated in the current application, please submit a Change of Research Study form to the IRB, which may be found on NLU's IRB website.

Please also ensure that your Human Subjects Research (HSR) certification stays active throughout any amendments to your research period.

All good wishes for the successful completion of your research.

Sincerely,

Shaunti Knauth

Shaunti Knauth, Ph.D.
Chair, IRB

Appendix E: Survey Participation Request

Hello all!

My name is Darren Scott and I am a doctoral student at NLU. I am seeking undergraduate, first-generation college students to take part in my research study: *Impact of Financial Literacy and Financial Capability on Students' Self-efficacy*, occurring from November 1st until February 8th. The purpose of this study is to gain a greater understanding of how colleges and universities can better support first-generation college students with the financial stressors that may be present in their lives.

As the first method of data collection, I have chosen to use a voluntary 5-minute survey. There will also be a question in the survey asking for volunteers to participate in a subsequent optional interview with me via Zoom. This interview is expected to take approximately 10 minutes. I welcome your valuable participation and the opportunity to hear about your experiences.

To access the survey, use the following link: [redacted]
Please let me know if you have any questions or concerns at my email address or phone number below.

Thank you for your consideration!

Darren Scott
Email: [redacted]

Appendix F: Interview Participation Request

Hello again!

Thank you for volunteering to participate in the interview portion of the data collection for my research study: *Impact of Financial Literacy and Financial Capability on Students' Self-efficacy.* I am excited to learn more about your experiences and perspective on this topic.

Please let me know your availability for an interview lasting approximately 10 minutes in the next few weeks at this link: _______________

After a mutually available time and day is found, you will receive a Zoom meeting invite link for the interview via email. Interviews will be recorded and audio transcribed so that I can go back and accurately depict our discussion. You will have the opportunity to view and approve the recorded interview as well as the audio transcription.

If you have any questions or concerns about your involvement prior to our interview time, please let me know at my email address or phone number below.

Thank you for your consideration!

Darren Scott
Email: [redacted]

Appendix G: Informed Consent Online Survey

You are being asked to participate in an online survey for a dissertation research project being carried out by Darren Scott, a doctoral student at National Louis University. The study is called **"Impact of Financial Literacy and Financial Capability on Students' Self-efficacy",** and is occurring from November 1, 2023 until February 8, 2024. The purpose of this study is to understand how financial literacy and financial capability may play a role in being another student support in higher education and how they may impact students' self-efficacy. This study will help researchers develop a deeper understanding of how higher education can better support students with their financial stressors and difficulties that they may encounter. This information outlines the purpose of the study and provides a description of your involvement and rights as a participant.

Participation in this study will include: Completion of the following online survey, expected to take approximately 5 minutes. Optional interview follow-up that you may opt in at the end of the survey, expected to take approximately 10 minutes. Participation in this study will have no bearing on your status as a student at National Louis University.

Your participation is voluntary and can be discontinued at any time without penalty or bias. The results of this study may be published or otherwise reported at conferences but participants' identities will in no way be revealed (data will be reported anonymously and bear no identifiers that could connect data to individual participants). To ensure confidentiality, the data file of compiled results will be kept on a password protected flash drive and all data will be destroyed three years after completion of the study. Only the researcher will have access to data.

There are no anticipated risks or benefits, no greater than that encountered in daily life. Upon request you may receive summary results from this study and copies of any publications that may occur. Please email the researcher, Darren Scott at [redacted] to request results from this study, ask questions, or to request additional information.

If you have any concerns or questions before or during participation that has not been addressed by the researcher, you may contact the researcher's committee chair: Dr. Jaclyn Rivard; email: jrivard@nl.edu or the cochair of NLU's Institutional Research Board: Dr. Carla Sparks; email: csparks3@nl.edu; phone: (183) 928-6889. Co-chairs are located at National Louis University, 122 South Michigan Avenue, Chicago, IL.

Consent: I understand that by checking 'Agree" below, I am agreeing to participate in the study. Completion of an online survey taking approximately 5 minutes to complete. If I would like to participate in the interview portion of the study, I will do so by answering "Yes" on question number 26 on the survey. By doing so, I am agreeing to an approximately 10 minute interview consisting of questions over similar financial literacy and financial capability questions.

ELECTRONIC CONSENT: Please select your choice below. You may print a copy of this consent form for your records. Clicking on the "Agree" button indicates that

• You have read the above information
• You voluntarily agree to participate in the survey
• You voluntarily agree to participate in the interview if you selected "yes" on question 23.
• You are 18 years of age or older

○ Agree

○ Disagree

Appendix H: Survey Link Distribution Request to Professors

Hello,

My name is Darren Scott, and I am a doctoral student at NLU. I am seeking undergraduate, first-generation college students to take part in my research study: *Impact of Financial Literacy and Financial Capability on Students' Self-efficacy*, occurring from November 1st until February 8th. The purpose of this study is to gain a greater understanding of how colleges and universities can better support first-generation college students with the financial stressors that may be present in their lives.

I am seeking interested and willing professors to pass along my survey link with my short write up explaining the research being conducted to their students. This is included below. Your role in distributing my survey link to students does not require you to screen students for their first-generation college student status. The survey does this screening with the questions that are asked.

If you have any questions or concerns about your involvement please let me know at my email address or phone number below.

Thank you for your consideration!

Darren Scott
Email: [redacted]

Appendix I: Study Overview to Be Sent to Students

Hello all!

My name is Darren Scott and I am a doctoral student at NLU. I am seeking undergraduate, first-generation college students to take part in my research study: *Impact of Financial Literacy and Financial Capability on Students' Self-efficacy*, occurring from November 1st until February 8th. The purpose of this study is to gain a greater understanding of how colleges and universities can better support first-generation college students with the financial stressors that may be present in their lives.

As the first method of data collection, I have chosen to use a voluntary 5-minute survey. There will also be a question in the survey asking for volunteers to participate in a subsequent optional interview with me via Zoom. This interview is expected to take approximately 10 minutes. I welcome your valuable participation and the opportunity to hear about your experiences.

To access the survey, use the following link: [redacted]
Please let me know if you have any questions or concerns at my email address or phone number below.

Thank you for your consideration!

Darren Scott
Email: [redacted]