

Finances and Future Health: Understanding Barriers to First-Generation Student Utilization of Federal Work-Study

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Abstract

First-generation college students often experience disproportionate levels of stress, anxiety, and an overall lack of preparation for undergraduate education in comparison to their multi-generational peers. This can include differing levels of financial support and literacy. These differences can have a significant impact on these students' levels of resiliency, physical and mental well-being, academic success, and levels of attrition. Concurrently, these disparities can lead to adverse outcomes on their health and well-being not only in the present but also in their health and career trajectory in the future. Using a 2-phase approach, researchers collected both quantitative and qualitative data related to how first-generation college students who are participating in the New Jersey Educational Opportunity Fund (EOF) think about the role of financial literacy, and in particular, Federal Work-Study, as a component of their current and future health status and their overall academic success. The qualitative analysis gave rise to 3 major themes related to student feelings of stress, pressure/obligation, lack of preparation, and uncertainty about the role of college education in their current and future lives. Research findings are shared to better inform and guide higher education institutions on how to best educate and support their first-generation students, particularly in how to aid these students in improving their financial literacy and financial support to improve resiliency, well-being, and academic success.

Keywords: financial literacy, federal work-study, first-generation students, determinants of health

Introduction

National data suggest that as of 2020, approximately 54% of undergraduate students in the United States self-identified as first-generation college students, meaning that they did not have a parent or direct family member who had a bachelor's degree (RTI International, 2024). The journey through higher education often presents unique challenges for first-generation students, particularly those from lower socioeconomic backgrounds. Among these challenges, financial literacy and security stand out, often creating a barrier to academic success and future health outcomes. How financial stress and concerns can impact student wellness and success are numerous, including greater levels of family distress, academic distress, lower GPA, and overall higher levels of distress and anxiety (Cadaret & Bennett, 2019). Financial literacy, the ability to appropriately seek out, understand, and utilize information related to finances and financial decisions, is an important factor as well. Lower levels of financial literacy in students have been associated with risky credit behavior, which can exacerbate levels of stress undergraduate students experience (Liu & Zhang, 2021). Considering the already increased risk for stress, burnout, and anxiety first-generation students experience, particularly those coming from lower socioeconomic positions, it becomes all the more important to consider financial literacy and overall financial stress in general when working to increase student well-being and academic success during their undergraduate careers, with the goal of supporting and encouraging student resilience.

Concerns about financial literacy are found throughout incoming first-year undergraduate students. To date, only 21 states require that high school students take some form of personal finance course or education prior to graduation, with only 17% of all high schools in the United States having such a required course (NASPA, 2022). Among students from lower socioeconomic backgrounds, an even lower percentage may complete any kind of financial literacy education. The consequences of this lack of financial literacy education are numerous. 44% of high school juniors, for example, did not know what the Free Application for Federal Student Aid (FAFSA) was, with first-generation students having an even greater lack of knowledge and awareness coupled with overall less financial self-efficacy, poorer optimism about their financial status and future, and lower financial knowledge scores (Study on Collegiate Financial Wellness, 2020). Part of this gap may be due to the fact that first-generation students are coming from families with lower median incomes, who are less comfortable navigating financial systems. Teens primarily learn about personal finances and financial decision-making from their parents, which makes the deficit in financial literacy among low-income first-generation college students all the more concerning (RTI International, 2024). The Federal Work-Study Program (FWS) was created in 1964 through the Economic Opportunity Act of the Department of Labor. Its original intent was to create jobs in academically relevant positions for low-income students in order to provide them with assistance to pay for a college education (Scott-Clayton, 2017). FWS allows students to focus on

developing professional skills and increase opportunities for participation in a professional work environment while attending classes (Marx et al., 2020). The financial assistance provided by FWS has been shown to offer students the time and opportunity to think more about their career development. This makes the program an effective high-impact practice (Leonard et al., 2023), particularly for students who may not have a substantial level of familial and community experience and support. FWS can, therefore, be relevant in decreasing the financial debt first-generation students take on while also increasing financial literacy and providing overall support in understanding and completing the financial aid process. All of these factors can have a positive impact and lead to positive social change for first-generation students (Coleman, 2023). Given the additional burden first-generation students experience regarding the financial stresses of engaging in undergraduate education, supporting student participation in financial support programs like FWS becomes all the more vital.

In addition to FWS, other support programs have been developed to support first-generation and low-income students as they begin their undergraduate college education. In New Jersey, the Educational Opportunity Fund (EOF) was designed to provide financial assistance, counseling, tutoring, developmental coursework, and other support services to assist students coming from educationally and economically disadvantaged backgrounds (Educational Opportunity Fund, 2024). Since EOF is a campus-based program, each participating college or university is responsible for student recruitment, retention efforts, and other support services. Those students who participate receive educational support grants of up to \$3,000 annually based on their financial need and the type of institution they are attending. However, while programs like FWS and EOF offer financial and other supporting benefits, many students do not utilize the various financial support services these programs offer. For example, estimates suggest that 16% of higher education institutions in the United States award FWS to every eligible student (U.S. Department of Education, 2000). At the same time, higher-income students at private four-year colleges are more likely to receive FWS awards than a low-income student at a public four-year college in spite of the fact that lower-income students at public institutions are the ones who derive the greatest benefits from FWS programs (Scott-Clayton, 2017). This gap in the utilization of financial support services is concerning in terms of a student's overall ability to pay for their undergraduate education. Not having the proper financial knowledge or support has been shown to lead to insecurities in meeting even basic needs like access to food, shelter, and safety. As Robbins, Spence, and Steeves (2022) state, "...students experiencing elements of basic needs insecurity have been reported to have difficulty concentrating and completing courses and degree tracks. Given that scholarly and creative work are often considered hallmarks of the college experience, basic needs insecurity could be particularly problematic for college students."

To address this worrisome disparity in basic needs security, and to better understand the impact financial concerns have on student well-being, it is important to gain a clear understanding of the

knowledge base students have (or do not have) about financial support programs like FWS. Particularly, those of low-income, first-generation status must be more knowledgeable about available support programs as well as their levels of financial literacy as they attempt to navigate the complex environment of higher education. By understanding student knowledge, beliefs, and attitudes, institutions of higher education may be better able to support and encourage students to more successfully utilize FWS programs to support their academic and overall well-being and success during their undergraduate education. Engaging directly with student knowledge, beliefs, and attitudes is key. For over a decade, the U.S. Department of Education has shared the importance of including student views on important issues related to their learning experiences (Šteh & Kalin, 2012). The research discussed in this article seeks to contribute to gaining greater awareness of first-generation EOF students' knowledge, beliefs, and attitudes. It is our hope that this study can, therefore, provide actionable insights for universities and policymakers. The question that guided this research was: How do first-generation EOF students think about the role of financial literacy and Federal Work-Study in terms of their contributions to students' current and future health and well-being and their overall academic success?

Literature Review

It is well known that first-generation college students are burdened with additional impediments to their overall academic success when compared to their multi-generational peers. Research by Choy (2001) with the U.S. Department of Education from over two decades ago first highlighted a disparity gap in academic preparedness that has not narrowed significantly in the intervening years. Part of the underlying factors related to the lack of student readiness and success of first-generation college students may be due to the reduced familial support that these students receive. One particular area of reduced support may be in the form of financial support in terms of actual dollars provided and the lack of education and preparation regarding college finances that these students receive from their families. LeBouef and Dworkin (2021) report that first-generation college students receive less family financial support, informational support, and overall effective social support, along with higher levels of family achievement guilt.

First-generation college students, therefore, need several forms of unique support in order to close the preparedness and achievement gap and be on equal footing in terms of their personal and academic success as multi-generational students. One area that can be easily overlooked is financial literacy. Financial literacy refers to the ability of a person or a group to seek out, understand, and properly utilize information and resources related to financial and other monetary considerations. In a study by Taylor & Bicak (2020), 752 prospective first-generation college students were assessed on their familiarity with a variety of financial terms such as FAFSA, Master Promissory Note, Entrance Counseling, and other terms related to college finances. Results showed that first-generation students have significantly less familiarity and understanding of these terms, possibly contributing to lower rates of successful completion of

FAFSA, leaving Pell Grant dollars unclaimed, and experiencing higher levels of stress pertaining to financial preparation for their undergraduate careers.

One important tool for student financial success during their undergraduate career is the Federal Work-Study Program. Federal Work-Study (FWS) helps students find hands-on opportunities to work both on and off campus. These experiences, skills, and levels of personal and professional development are important tools in aiding students to succeed after graduating from college and entering their careers. Students' ability to achieve career readiness and college completion is important for utilizing federal work-study. De Anda (2018) provides valuable insights into the experiences of first-generation college students of color in the FWS program. The author notes that students' involvement and a sense of connection allow for more persistence and resilience related to collegiate engagement, "Student employment, when intentional and effectively managed, can provide the student with a sense of involvement and connection to the campus community. This sense of connection to the campus community through involvement in turn promotes student persistence."

This would suggest that first-generation college students who participate and utilize programs such as FWS benefit from financial support and the support, guidance, and financial literacy they may not receive from their families or other social networks. This is important, as this lack of support, particularly regarding financial support and literacy, can significantly impact student well-being. A Study on Collegiate Financial Wellness (2020) found that, when compared to their multi-generational peers, "first-generation students had significantly higher financial strain scores, but had significantly lower financial self-efficacy, financial optimism, and financial knowledge scores." These are all significant contributors to stress, anxiety, and a reduced sense of well-being. Palmer et al. (2010) highlight how financial stress for students who are already at risk for being less supported during their undergraduate education further contributes to lower academic performance, lower levels of wellness, and higher rates of attrition. Coupled with the findings by Lyons (2004), which showed that lower-income students are more likely to drop out of college for financial reasons and due to the lack of a financial safety net, financial stress seems to be an even more potent risk for first-generation college students who wish to be successful in completing their degrees and advancing their current and/or future careers.

Predictors of financial literacy and financial well-being are important for emerging adults and professionals, and participating in programs like Federal Work-Study, which allows students to engage in work opportunities related to career readiness and academic learning, has been shown to be an important predictor in how emerging adults develop their financial literacy and well-being over time (Sorgente & Lanz, 2017). Additionally, participation in FWS has been shown to increase student persistence, degree obtainment, and resiliency, which can counteract some of the stressors and burdens felt by first-generation students (Nguyen et al., 2019).

Despite the benefits provided by financial support programs like FWS, those students most in

need of these programs often do not take full advantage of them when beginning their undergraduate education. In the limited qualitative research that has been published on this subject, those students who are living with financial insecurity, housing insecurity, and food insecurity, all of which are tied to financial support and financial resources, experience high levels of shame and stigma and often find themselves in situations where they must make difficult choices between their academic success (i.e., attending classes, purchasing textbooks), and their well-being (i.e., food, shelter, clothing) when attending institutions of higher education (Robbins et al., 2022).

These financial stressors are only expected to increase as the cost of attending a college or university in the United States continues to rise. The cost of college in the U.S. has increased by approximately 31% over the past decade (U.S. Department of Education, 2018). The 2018 Healthy Minds Survey found that 59% of college students reported that their financial situation was "Stressful" or "Often Stressful" (American College Health Association, 2020). A great deal of this stress was linked to the student loan and financial aid process, the anxiety related to paying back these loans, high cost-of-living expenses, and the need to work full-time or part-time during their undergraduate career (Moore et al., 2021). These stresses and concerns are further exacerbated in students who are the first in their families to attend a college or university (Cadaret & Bennett, 2019).

In an effort to support the personal well-being and academic success of first-generation students, it is imperative that they take full advantage of the support services that are provided to reduce the stress and burden caused by the financial realities of higher education. However, many students are unaware of or not taking advantage of such programs. First-generation students often experience significant barriers in navigating the financial aid process, particularly students of color. This includes communication difficulties, uncertainty on how to seek assistance and aid, and lack of awareness of programs on their campus that exist to support them in financing their college education (Graves, 2023). This should raise serious concerns amongst institutions of higher education, as financial assistance programs, and especially FWS, were designed to stimulate part-time employment opportunities for students of low-income families to support students' academic studies (Campus Compact, 2016). This is what makes FWS a unique and important form of financial support to students: it is a combination of support services and employment that provides students with the guidance and institutional support they need while also gaining hands-on employment and work experience that can aid them in developing greater levels of financial literacy and awareness.

Lastly, it is crucial to understand the qualitative and narrative insights and experiences of students beyond what can be shared and understood via quantitative methods. LeBouef and Dworkin (2021) encourage using qualitative methods unconstrained by the more closed-ended constraints of quantitative data to understand the unique realities of study participants. Hurst,

Baranik, and Daniel (2013) additionally bring light to the necessity of understanding qualitative and narrative findings when seeking to understand the student experience. Themes that have emerged from this qualitative research have focused on how factors like a sense of relationship, community, and the importance of diversity can influence feelings of anxiety and stress. These influential factors go beyond what quantitative measures can predict. Moore, Nguyen, Rivas, Bany-Mohammed, Majeika, & Martinez (2021) further highlight the role of qualitative research when seeking to understand specifically how students experience and interpret the undergraduate education experience. Qualitative methods allow the student to be the driver of what is deemed important and relevant, while quantitative research generally puts the researcher in the driver's seat of determining influential factors, thus making the researchers the gatekeepers of what is deemed important and relevant data.

In summary, first-generation college students face significant issues that can negatively impact their success as undergraduate students, as well as their overall state of well-being. Financial stress and the lack of financial literacy appear to be particularly important factors. Financial aid, FWS, and other support programs can be beneficial in reducing students financial stressors, however, they are often misunderstood and underutilized by first-generation students. Obtaining information about student perceptions, thoughts, and ideas related to financial literacy, FWS, and their overall state of well-being as they begin their undergraduate careers is, therefore, a pivotal step in understanding how institutions of higher learning can better support and guide first-generation student populations.

Methods

To answer the research question that guided this study, researchers utilized a 2-phase approach to collecting data. Purposive convenience sampling was used to contact the EOF program directors and coordinators at universities in the Southern New Jersey region, specifically at Stockton University, Rowan University, and Rutgers University-Camden. This region and these specific universities were chosen since the research was supported by a grant from the South Jersey Institution for Population Health, which aims to improve the health and well-being of citizens of the southern region of the State of New Jersey. Stockton University, Rutgers University-Camden, and Rowan University are the three four-year, public, comprehensive institutions that are located in the southern region of New Jersey. They were, therefore, selected to be the specific focus of this study.

Theoretical Framework

Brookover, Hanley, Boulden, and Johnson (2021) describe the factors that can greatly influence the actions, anxieties, and motivation of first-generation students entering the higher education environment. The desire of "being first" and how this desire to be the first in their family to

attend a college or university plays out can profoundly impact students' well-being, decisions, choices, beliefs, and attitudes. First-generation students tend to feel they must prove themselves worthy and ready for the college experience. The theoretical framework described by Brookover, Hanley, Boulden, and Johnson formed the foundation for the study design reported in this article. The framework was chosen since it provides a particularly helpful and much-needed lens through which first-generation students' perceptions and actions can be viewed as they move through their undergraduate experience.

Inclusion Criteria

For a student to be a participant in this study, they had to meet the following four criteria:

- Be 18 years or older.
- Be admitted as an incoming first-year student to Stockton University, Rutgers University-Camden, or Rowan University.
- Be enrolled in the Summer 2023 EOF Program at one of the aforementioned universities.
- Be an active participant in the Summer 2023 EOF Program.

No exclusion criteria were utilized beyond students not meeting these four inclusion criteria components. Based on these criteria, 200 students between the three campuses were eligible to participate in this study.

Phase 1

Phase 1 took place at the beginning of the Summer 2023 term when students began their Summer EOF program at Stockton University, Rutgers University-Camden, and Rowan University. All students enrolled and participating at their respective university's EOF program were invited to participate in the study by completing a brief online survey via Qualtrics (Appendix A). This online survey consisted of both quantitative and qualitative questions that asked students about their intentions of working during the academic year, whether they were looking for on-campus or off-campus work opportunities, their awareness and knowledge of FWS, whether they applied for financial aid, and whether they planned to utilize FWS funds during the academic year. After this survey component of the study, students were invited to participate in an in-person focus group interview if they wished to participate further. No demographic data was collected from study participants. The decision to omit collecting demographic data was made since such data was not used as screening or filtering criteria. In addition, data sets were not divided into subgroups or segments for index comparison purposes. Since the goal of this study was to better understand the first-generation EOF student population of the three participating campuses, and since the research question that guided this study was not exploring demographic differences in student experiences or perceptions, collecting demographic data was not deemed significant.

Phase 2

Phase 2 of the study took place at the end of the Summer 2023 term and included those students at each of the three campuses who agreed to continue to participate at the end of Phase 1. Focus group interviews were semi-structured in nature and were focused on three key questions:

1. Do you feel any stress over how you are paying for your college education?
2. What does financial literacy mean to you?
3. Do you think of yourself as being financially literate?

These focus group questions were developed after reviewing the relevant literature on how first-generation students conceptualize the role of federal work-study and finances in their undergraduate education and after identifying current gaps in relevant questions and explorations on these topics. In identifying the focus group questions, the work of Moore, Nguyen, Rivas, Bany-Mohammed, Majeika, and Martinez (2021) was especially influential as they are among the limited number of researchers who take a qualitative approach. Specifically, key questions the focus group moderator asked in their 2021 study were used to inform the above-mentioned key questions for this study. However, their 2021 study did not delve into student perspectives and thoughts pertaining to financial literacy, and the key questions asked seemed more leading in nature. Therefore, this study aimed to adjust the questions to be more open-ended so that participating students could interpret and answer the questions based on their own understanding and reactions to what was being asked.

Additionally, the qualitative questions for this current study were crafted to best capture and understand student beliefs, ideas, and perspectives. Work by LeBouef and Dworkin (2021) notes that personal experiences and perspectives are rich contributions to empirical research and provide insight into the fact that "...there are multiple realities, and these realities are constructed through our lived experiences and interactions with others...(and)...that this reality is co-constructed between the researcher and participants and is shaped by individual experiences." Lastly, the work of Brookover, Hanley, Boulden, and Johnson (2021) influenced the development of the focus group questions for this study and, particularly, the more general nature of the questions. The goal here was to provide students with the opportunity to share more about their larger and more holistic life experiences while still maintaining the particular focus on the topic of financial literacy and financial stress. For this reason, the three questions were kept intentionally general versus asking direct questions about FWS or other specific financial support and assistance programs. The goal was to see to what extent the students were considering FWS as a way to address their financial plans and concerns without guiding them too directly, thus allowing the students to share their insights and understanding with less direct interference from the researchers.

Data Collection Methods

After receiving Institutional Review Board (IRB) approval (IRB Approval #2023.082) from the researchers' university to ensure that proper research ethics were applied at all stages of this study, each researcher contacted the respective EOF program director and staff at each of the three participating universities. Each EOF program director was informed of the nature, purpose, and goals of the study, and EOF program directors at all three institutions agreed to have their students participate in the study. The researchers then provided the directors and coordinators with a letter to be delivered to the students to inform them about the nature, purpose, and goals of this study and to ask them to review an Informed Consent form before agreeing to participate in the study. Once the students reviewed and signed the Informed Consent forms, those who agreed to participate received a link to the web-based survey described earlier. Those who consented to participate in the full study were given information about the in-person focus group interviews on their respective campuses. The researchers then conducted 60-minute focus group interviews at the end of the Summer 2023 term as participating students were completing the end of their EOF summer program. All interviews were digitally recorded to allow for transcription and qualitative analysis.

Data Analysis

For Phase 1 of the study, descriptive statistics of the data were generated to show overall findings from the quantitative and qualitative responses obtained through the Qualtrics Survey. All data from Phase 1 was deidentified and collectively analyzed to gain insight into the incoming EOF student population of the three participating universities. The analysis did not separate results from the three campuses, as this study aimed to understand the experiences of incoming EOF students more broadly throughout the southern New Jersey region.

For Phase 2 of the study, the qualitative responses from all study participants were analyzed using a grounded theory approach (Glaser & Strauss, 1967). All qualitative data was coded and analyzed using NVivo 14 (NVivo 2023). After the recorded interviews were transcribed into text by the research team, they were reviewed to check the accuracy of the text. Additionally, the researchers verified the validity of the responses. Researchers began by reading all transcribed text and data repeatedly to fully immerse themselves in the responses and obtain greater insight into the totality of shared experiences. Next, researchers read the transcripts word-by-word to begin the coding process by highlighting words and phrases in the transcripts. Researchers then generated notes of their initial thoughts and insights regarding codes, which were combined into unique themes. As themes emerged, further groupings and categorizations were developed to find the major overarching themes. This process continued until the researchers reached a consensus on the qualitative findings from the transcribed interviews. The approach was largely informed by the qualitative analysis process described by Tesch (1990).

Results

Phase 1 Survey Data Results

A total of 73 students from the three campuses completed the online survey which is a response rate of 36.5%. Key findings include:

- 96% of students planned on working during the 2023-2024 academic year
- 75% did not have a job already lined up before the school year began
- 57% of students did know what FWS is, and 47% were unsure if they were contacted about FWS opportunities by their university
- 89% did apply for financial aid when applying to their university
- 80% completed their college application themselves
- 78% indicated that they did plan on seeking out FWS opportunities on campus

When asked if students were planning on working on campus during the 2023-2024 academic year, 54% indicated that they did plan on seeking out an on-campus job should they work during the academic year. For those who indicated that they would seek an on-campus job, key reasons included the perception of greater flexibility in balancing work responsibilities with academic responsibilities and a perception of greater work-related opportunities.

For those who indicated that they would not seek an on-campus job should they work during the academic year, key reasons included already having a job that they did not wish to quit, as well as a feeling of uncertainty about how to balance off-campus work responsibilities with their academic responsibilities.

Phase 2 Qualitative Data Results

A total of 45 students between the three campuses participated in the semi-guided focus group interviews, which constitutes a response rate of 61.6% of those students who completed Phase 1 and a response rate of 22.5% of the entire eligible student population between the three campuses. The qualitative data analysis was completed utilizing NVivo software. Three major themes arose from the data analysis (Table 1).

TABLE 1. Major themes and codes identified from focus group interview transcripts

	Major Theme	Codes	
Theme 1	Feelings of Uncertainty and Lack of Preparation & Readiness	Lack of Personal Financial Literacy	Lack of Preparation by University
		Uncertainty About the Value of College Education	Uncertainty About Student Loans
		Lack of Preparation by High School	Uncertainty About Financial Aid
		Uncertainty About FWS Award Processes	
Theme 2	Feeling of Stress, Anxiety, and Loss of Personal Health	Stress	Sick
		Anxiety	Doubt
		Worry	Sacrifice
		Fear	Self-Care
		Personal Health	
Theme 3	Feelings of Obligation and Overwhelm	Responsibility to Family	Necessity of Working Full-Time
		Responsibility to Home Community	Necessity of Studying Full-Time

Theme 1: Feelings of Uncertainty and Lack of Preparation and Readiness

Theme 1 describes the overarching feelings of uncertainty, lack of preparation, and lack of readiness for higher education that students felt at the end of their summer session. Students described that they did not possess the financial literacy skills and competence needed to understand how to finance their undergraduate education, particularly in reference to student loans, financial aid, and federal work-study. Participants additionally reported that they were overall uncertain whether beginning an undergraduate program was a prudent financial decision, as they did not feel a strong sense of confidence that completing their undergraduate degree would aid them in their future financial success, particularly due to the fact that they were delaying their entry into the workforce by participating in both the summer EOF program and in higher education as a whole. Quotes from interview participants that relate to theme 1 include:

"The cost of education has risen so much. So people that used to get out of high school now have to go to graduate school more so that feels scary. I'm going to want to do

something that I'm gonna have to pursue higher education and how am I gonna support myself?"

"What if I had just graduated high school and started working? Like, is this worth it? But then we also see like, especially in the health care area, like all of these degrees are being moved up. So now we have to have even more schooling instead of being able to just go to school for a bachelors."

"Honestly, like, if I didn't save up months before doing EOF, I would be screwed. It's a lot of stress. I already work because I have to pay for this."

"I have no clue how to do the financial aid process. My mom, like, she went to college for a few years and she didn't go through the experience I did. And my brother got to go to college, but he didn't understand. Even though I applied to college, I don't understand how to apply for financial aid. That's, like, the most terrifying thing I've seen. I stay up at night and I worry and I wonder if I did everything correctly, and if I'm gonna wake up one day and I'm gonna find I'm not even enrolled."

"It kinda sucks. Because everyone tells you that the whole college experience is to find out who you are, find out who you want to be. But they don't say how much money you have to put down to actually find out who you are. So it's kinda like, you know, I did 3 years of this. But then last year, I find out it's not what I want to do. So yeah yeah yeah, I found myself, but at what cost, right?"

"I really didn't know if I wanted to do EOF because I could have been making all of this money instead. And that just sits in my brain because it's like, if I do drop or, or if I want to change my major, or want to go somewhere else, I could have been building for this future during this whole month, and now I'm like, back to square one again."

Theme 2: Feelings of Stress, Anxiety, and Loss of Personal Health

Theme 2 describes the overarching feelings of stress, anxiety, and a negative impact on one's personal health and well-being as a result of their concerns related to paying for college and being successful in their academic careers. Participants consistently shared feelings of worry, fear, doubt, and a feeling that they were sacrificing their personal well-being to undertake a college education. Quotes from interview participants that relate to theme 2 include:

"I would say that I am being stressed by my financial aid every single time I need to check it. There's something like she is saying. You just added out of nowhere. So I guess

I'm a little stressed over not getting the initial amount that I used to have. I have to resubmit everything again."

"This whole program has me being so stressed out and mentally stressed out. I tell myself it isn't going to be like this in the fall, but is it going to be worse or is it going to be better? So it's like, I don't know. Am I going to be able to handle that stress?"

"I feel like I'm stressed about how to how to keep my priorities in check. Like, I prioritize school or work over my physical health. Like I miss out on meals just so I can attend class or work, because I have class in the middle of the day. And my schedule is packed. So I'm gonna have to skip lunch and breakfast."

"I probably like school or work over my health, my physical health, so I can't have like meals. So I can attend this like class or work to have like class during the middle of the day. So my schedule is packed. So I'm probably gonna have to skip on lunch."

"It took me from April to October 2021, making minimum wage, working 4 days a week like 6 to 8 h shifts to make like \$4,500. you know, with everything what to do and like my cell phone and everything like that. It's hard to pay for it. Now I'm struggling, and it's stressing over how I'm gonna manage to get like \$5,300 per semester in 4 months working with that. I'm gonna have to work like every single day."

Theme 3: Feelings of Obligation and Overwhelm

Theme 3 describes the overarching feeling of being overwhelmed that participants felt, particularly in reference to their duty and obligation to their families and their home communities. Participants spent a lot of time during interviews to express how they felt overwhelmed by the amount of work involved in their undergraduate degree programs and the sense of responsibility toward their home communities. They shared that they must be successful for both themselves and for their communities due to being the first or one of the first members of their families to go on to higher education. These obligations add further stress to the pressures to study hard and work full-time in order to be able to pay for school and complete their degrees. Quotes from interview participants that relate to theme three include:

"I don't know, I feel like if I can't do these 5 weeks, then I'm not going to be able to last the fall semester. I don't know what to do. Should I drop out? I feel like if I do drop out, I'm a disappointment to myself, to my family, to my community members, to my high school, to my teachers. Literally everyone. So do I do this and sacrifice my mental health, or do I not do this and risk disappointing everyone?"

"So there's another thing that stresses me out is expectations from like family and things like that. So, EOF has a lot of opportunities for me, but it feels suffocating. Because I feel like if I mess up, I feel like, 'Oh wow! I didn't take enough advantage of this, so I feel like I burn out after a while just doing this college thing.'"

"Yeah, like my mom also wants me to just focus on school. But that like actually causes me stress, because I feel like it's like we should be able to work while we're in college, because there's like programs that could help us build towards our major and our money like internships, you know, and all that."

"Yeah. I think it's hard, because I wish I had the privilege to just like focus on my education and not have to have a job throughout college, but like at the end of the day, like I, the whole time I've been here looking for jobs and calling this around here, having to look because I don't have that privilege of just getting to focus on my education and solely like, do that like, I have to have a job like, I have to work and study and remain successful."

Discussion

This study sought to explore how first-generation EOF students think about the role of financial literacy, particularly Federal Work-Study, as a component of their current and future health and overall academic success. As the results from Phase 1 of the study show, the majority of students (96%) planned on working during their first year of undergraduate education, but three-quarters of the students did not have a job lined up or a plan on how they would begin to find employment. This was further emphasized in the qualitative responses from Phase 2 of this study, with students sharing that they were feeling a great deal of stress, anxiety, worry, and uncertainty as to how they were going to pay for their undergraduate education, often at the detriment to their personal health and wellness. Students in this study described intense feelings of tension between their desire to be academically successful while also needing to better understand how to navigate the financial obligations of their undergraduate education. This echoes the findings of Cadaret & Bennett (2019) on how palpable students' worries and anxieties pertaining to college financing impact their psychological, emotional, and overall well-being. The third theme that emerged from Phase 2 of this study further emphasized these findings. A common response of student participants emphasized the added stress pertaining to a sense of obligation to their families and communities and the seemingly impossible task of balancing the need to work full-time while also being a full-time student. This matches the theoretical work done by Brookover, Hanley, Boulden, and Johnson (2021) and the "being first" phenomenon that can add disproportionate burdens to first-generation students not as acutely felt by their multi-generation peers.

Given the concerns about financing their college education, we see a concerning gap in the level of knowledge of first-generation students about the resources available to them on campus. As shown in the Phase 1 findings of this study, only 57% of students were aware of what FWS was, and less than half of the students were unsure if they had been contacted by their respective universities about FWS as an opportunity to finance their education. This is worrisome, as it shows that those students who may be most in need of the kind of financial and academic support provided by FWS are largely unaware of its existence, its purpose, or how to access it as a resource. It is, therefore, no wonder that feelings of uncertainty pertaining to financial aid, the student loan process, and the overall sense of a lack of preparedness from their high schools or even from their summer EOF program (as shown in Theme 1) are leading students to question the value of obtaining a college education and taking on the stress, loans, and other debts associated with a multi-year college degree. Students, as a whole, rated their financial literacy as poor and were already beginning to feel levels of depression, anxiety, and worry before the academic year had even officially begun. First-generation students already experience challenges in being successful in their undergraduate careers and graduating with an undergraduate degree at higher rates than their multi-generational peers due to disparities in reserves of social capital and familial support (Long Gilkeson, 2020). Coupled with the mental and physical stressors and burdens carried by this student population, the path to success is further blocked and fraught with difficulties.

The findings of this study add further evidence to the growing body of literature that points to the financial disparities and lack of awareness of financial aid resources and support programs like FWS that first-generation college students experience. These pressures have a significant and measurable impact on the mental, emotional, and physical health of first-generation students and their ability to succeed in their college careers. The qualitative analysis from Phase 2 of this study shows how students feel that their schools and universities are not adequately preparing them for the realities of college life, particularly when determining how to pay for their college education without becoming overly burdened with debt. The overwhelming sense of insufficient financial literacy preparation in high school is potentially setting first-generation students up for even greater risk of financially concerning decisions. For example, the majority of respondents filled out their college applications themselves and completed their financial aid applications themselves. These students are taking on significant responsibilities and obligations without feeling they have been provided with the requisite financial knowledge to do so confidently and with greater self-efficacy.

Professional Application

The impact of the findings of this study is significant not only concerning a student's ability to succeed in their undergraduate career but also with respect to their future professional trajectory and current and future health and well-being. Individuals with higher levels of financial literacy

tend to be able to make better healthcare decisions (Stewart et al., 2018), maintain a better overall health status (James et al., 2018), and experience potentially reduced rates of longevity (Stewart et al., 2020). As such, many public health researchers and organizations are considering financial literacy as a determinant of health that needs to be given the same level of consideration, focus, and attention as smoking, physical activity, and dietary habits (Meyer, 2017).

Colleges and universities can use the findings from this study to improve financial literacy among first-generation students in several ways:

1. **Develop targeted financial literacy programs:** Understanding the unique challenges and perspectives of first-generation students can help universities tailor their financial literacy programs to meet these students' specific needs.
2. **Enhance Federal Work-Study (FWS) award information:** Universities can use the insights gained from this study to provide clearer, more comprehensive information about FWS awards, helping first-generation students make more informed decisions.
3. **Create supportive environments:** By understanding the financial struggles of first-generation students, universities can create supportive environments that foster more financial security, for example, by offering financial counseling or workshops specifically designed for first-generation students.
4. **Policy changes:** The findings can inform policy changes at the university level to better support first-generation students, for example, by changing how financial aid is distributed or by creating additional funding opportunities for first-generation students.
5. **Collaboration with other institutions:** The standardized qualitative questionnaire developed in this study can be shared with other colleges and universities. This collaborative approach can lead to a broader understanding and more effective strategies to improve financial literacy among first-generation students.

By implementing these strategies, universities can help first-generation students overcome financial challenges, succeed in their academic pursuits, enhance feelings of resiliency and determination, and improve their long-term health outcomes.

Limitations

Although this study has provided valuable insights into how first-generation EOF students think about the role of financial literacy, particularly Federal Work-Study, as a component of their current and future health and well-being, it has limitations. The study focused specifically on students enrolled in higher education institutions in the southern New Jersey region. This excludes potentially important insights and experiences of students in other parts of the state or across the U.S. In addition, researchers chose not to include demographic data as part of their

data collection efforts since their focus was to gain insight into the perceptions and experiences of first-generation EOF students overall within the specific study region. However, further disparities in students' experiences could emerge by exploring demographic differences in the data related to ethnicity, gender identity, and other personal identifiers.

Conclusion

Data from this study show that students feel acute stress related to how they are going to finance their college education, potentially to the detriment of their own physical and emotional health. Students also show a lack of financial literacy and understanding of the college financial aid process, and they do not feel that the systems and programs currently in place adequately prepare them. Student stress appears to be further exacerbated by a sense of responsibility to their family and home community, as they are the "first in the family" to go to college. Lastly, students are currently uncertain about what FWS is or how it can aid them educationally, financially, or professionally. All of these factors can significantly influence the current and future states of health and health disparities of first-generation students. Based on the outcomes of this study, future research considerations include 1) prospective research following first-generation EOF students over the course of their academic careers, 2) perceptions of faculty and staff working with first-generation EOF students pertaining to their financial literacy and utilization of programs such as Federal Work-Study and Financial Aid, and 3) identifying better informed best practices in supporting first-generation EOF students to address the unique sources of worry, stress, and anxiety that are impacting their ability to be successful during their undergraduate education.

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Appendix A

Phase 1 Survey Questions

1. Are you planning on working this academic year? [Yes/No]
 - a) If no – why are you not planning on working during this academic year? Please answer via the text box below. [Skip to question 4]
 - b) If yes – do you already have a job lined up for the upcoming academic year? [Yes/No]
 - i. If yes – is it a Federal Work Study Position? [Yes/No/Unsure]

2. If you are planning on working during this academic year, do you plan to look for a job on campus? [Yes/No]
 - a) If yes – why? Please answer via the text box below.
 - b) If not – why not? Please answer via the text box below.

3. If you are planning on working during this academic year, do you know how to find job opportunities on campus? [Yes/No]

4. Are you aware of what Federal Work Study (FWS) is? [Yes/No]
 - a) If Yes, describe what it means to you in your own words via the text box below.

5. When you applied to college, did you apply for financial aid? [Yes/No/Unsure]

6. When you applied to college, did you complete your application yourself, or did someone else help you? [I completed my application myself/Someone else completed my application for me]

7. When you applied to college, do you recall receiving information about Federal Work Study and/or work opportunities on campus? [Yes/No/Unsure]

8. Do you plan to seek out a Federal Work Study opportunity? [Yes/No]

9. What would make you want to seek out Federal Work Study? Answer via the text box below.

10. What would make you not want to seek out Federal Work Study? Answer via the text box below.