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Editor's Note

Welcome back, readers, to volume five of *Opportunity Matters*! As an open-access academic journal, *Opportunity Matters* curates content to advance access, opportunity, and equity in higher education, particularly for under resourced and underrepresented populations. In alignment with previous editions, we maintained an interest in work that explores critical inquiries, frameworks, and methods examining intersectionality and the interplay of various identities within core populations, namely students, faculty, staff, family, and community members. We invited authors to focus on real-time practices and barriers, providing valuable insights for practitioners, policymakers, and educational leaders to reimagine educational spaces.

For this volume of *Opportunity Matters*, we introduced an inaugural editorial board comprised of seven dedicated scholar-practitioners, researchers, and advocates for access and equity in higher education. We extend our deepest gratitude to the editorial board for their crucial role in maintaining the journal's vision while constructing a review process that honored and ensured the transparency and equitable review of each manuscript. Their investment in this volume reflects their values as scholars and educators, characterized by authentic care, mentorship, and the spirit of the journal.

We welcomed eleven pieces authored by emerging undergraduate student scholars, early career researchers, and seasoned academics. The manuscripts in this cycle, crafted by authors whose passions and purposes are to elevate communities that have existed on the margins of our educational systems, particularly in higher education, reflect their commitment. Inspired by the format and approach of earlier volumes, this edition welcomed empirical studies as well as practice-oriented frameworks and narratives from the field.

The featured manuscripts highlight the necessity of inclusive curricula that reflect diverse student populations, the role of mentorship and community support in postsecondary success, the need for tailored interventions to address educational disparities and educator well-being, and the importance of addressing systemic barriers through reimagined policies and practices that have historically disenfranchised students in their access to higher education. Ensuring that voices from the field are at the forefront of academic discourse, each piece offers a critical lens into the role of representation, advocacy, equity, and holistic support in fostering educational attainment and well-being for both students and professionals.

Echoing the sentiments of the past editors, Abráham E. Peña-Talamantes and Mika Yamashita, the manuscripts presented here will continue to inspire and inform practitioners, policymakers, and advocates dedicated to making higher education more inclusive and accessible for all.

Happy reading!

Stephanie M. Breen, PhD - *Editor in Chief*
Renée M. Trueman, PhD - *Editorial Board Member*

EMPIRICAL RESEARCH

Experiences of High School Teachers During the COVID-19 Pandemic: Teaching and Mental Health

Authors:

Maribel Garcia
University of California, Riverside
mgarc592@ucr.edu

Tatiana Pumaccahua
California State Polytechnic University
ttpumaccahua@cpp.edu

Abstract

The COVID-19 pandemic profoundly impacted the education system, necessitating a transition back to in-person instruction that posed unique challenges for high school teachers. This pilot study explores the attitudes of high school teachers and their differential instruction methods during this transition, focusing on a Title I school that receives additional federal funding due to serving a high percentage of low-income and at-promise students. Additionally, the study investigates the mental health implications of the pandemic on teachers' roles. A qualitative approach was employed, addressing two primary research questions. Participants included general education teachers from public high schools across the United States who worked during the COVID-19 pandemic. They completed a demographic questionnaire and participated in semi-structured interviews. Findings indicate a notable shift towards flexibility in grading, exam/assignment timing, and attendance policies during the pandemic. Increased awareness of mental health issues among students and teachers themselves was also observed. Participants reported heightened feelings of burnout and challenges in prioritizing self-care. Students were noted to exhibit increased behavioral, social, and attention difficulties. Overall, this pilot study underscores the profound impact of the COVID-19 pandemic on the education system. While further research is warranted, this article provides practical insights into the adaptations teachers have made in teaching methods, behaviors, communication, and social interactions., as well as the impact it has had on their views of mental health.

Keywords: teachers, COVID-19 pandemic, teaching strategies, teacher mental health

Introduction

Since the start of compulsory schooling, teachers have been adapting to societal changes, new generations of students, and progressively finding various methods for fostering an inclusive environment within the classroom (Cardoza, 2021). Due to such a high and continuously demanding work environment, teachers' mental health has spiked concern due to the increasing percentage of teacher attrition. When the mental health of teachers is affected by job-related demands, the impact often cascades into the classroom and students (Stapleton & James, 2020). For instance, when teacher's wellbeing is affected by burnout (i.e., feeling overworked, fatigue, and mental/physical exhaustion) it has an adverse effect on their teaching abilities, heightens stress levels, increases classroom disruptions, and often results in negative teacher-student interactions, and affects teachers' abilities to empathize (Madigan & Kim, 2021). Thus, considering that teachers are positioned in a role in which students come to them for emotional support and guidance, the consequences of burnout can be harmful. In recent years, specifically in 2020 (Stapelton & James, 2020), burnout peaked as teachers experienced a shift in instruction and unique challenges resulting from the COVID-19 pandemic.

The coronavirus disease of 2019 (COVID-19) pandemic greatly impacted the education landscape. In May 2023, the World Health Organization (n. d.) noted that the pandemic was no longer a global emergency; however, teachers were still expected to accommodate for students' ever-changing needs and address the educational aftermath caused by the pandemic. For instance, the pandemic tasked teachers with finding effective methods for providing students with missed school content (from days to weeks) that occurred due to exposure, possible exposure, or illness/death of a family member resulting from COVID-19 (Cardoza, 2021). The pandemic also expanded the responsibilities of teachers, as they became increasingly tasked in aiding their students not just with academic content, but also in coping with the various emotions they experienced from the pandemic (Pokhrel & Chhetri, 2021). It is important to highlight that teachers were unexpectedly placed in this position, all while still confronting professional and personal related stressors resulting from the pandemic (World Health Organization, n. d.).

In the context of schools predominantly serving students from economically disadvantaged backgrounds, where financial constraints and resource disparities are prevalent, teachers play a pivotal role not only in fostering academic growth but also in supporting the socio-emotional well-being of their students (Vernaza, 2012). However, the demanding environment of these schools can also impact teachers' mental health, potentially leading to burnout and decreased effectiveness in the classroom. Understanding the intersection of teachers' mental health and their support for at-promise students in low-income schools is crucial for developing effective strategies to enhance educational outcomes and create supportive learning environments. With this in mind, this pilot study explored the experiences of teachers in a Title I school during the pandemic.

Literature Review

Transitioning to Remote Teaching

In March 2020, teachers took part in a large transition shifting from in-person instruction to remote instruction due to the COVID-19 pandemic. During this transition, teachers had to find creative approaches for keeping students motivated, engaged, and in various occasions, finding methods to encourage students to, at a minimum, log on to their remote classes (Cardoza, 2021). Although not all schools engaged in remote instruction for the same length of time (some ranged

from a few weeks to months), for the teachers who were affected, these transitions and the cumulative impact of the pandemic led to a challenging 2020 academic school year (Pokhrel & Chhetri, 2021). For example, teachers used online games to engage students in school content, pre-recorded lectures, eBooks, email reminders, and much more (Purcell et al., 2020).

Like teachers, students also faced struggles in transitioning to remote instruction. For instance, in a study conducted by Motz et al. (2021), the authors highlighted the pressure instructors experienced during the peak of the pandemic—to continue teaching their courses in a new remote format, as well as to rapidly make various assignments available to their students, which in most instances, led to an increase in "busy work" for students. However, the increases in schoolwork did not appear to translate to increases in learning outcomes. Although students were completing more assignments, they were experiencing more challenges in completing their coursework. In fact, students in the study reported a decline in their learning throughout courses.

Differential Instruction and the COVID-19 Pandemic

Differential instruction is a type of teaching method that requires teachers to understand their students' diverse abilities to develop academic tasks that will support their learning (Cardoza, 2021). According to a literature review by Vargas-Parra et al. (2018), differential instruction should allow students to take charge of their learning process by nurturing their academic intrinsic motivation and providing options for how to learn. The study focused on the effective teaching methods for English language learners (i.e, students who first language is not English) with aims to foster and increase the English language learners potential (Vargas-Parra et al., 2018). The researchers shared three best practices on how to support teachers in successfully implementing differential instruction: (1) student-centered learning workshops (e.g., role-play, collaborative projects, etc.) in lieu of dictating specific learning activities (e.g., when a teacher is teaching a lecture), (2) providing teachers with more time and support so they can properly prepare their learning materials, and (3) giving teachers approved resources to aid in class preparation.

Another example of differential instruction relates to classroom structure redesign. A study conducted by Patterson et al. (2009), highlighted how students reviewed and practiced the material they were exposed to in their small groups (e.g., a small group that lets students review the components of long division and practice their math skills). The students included in the study were from a middle school serving 790 students, of whom 56% of the student population were of a race other than White, and approximately 67% of the students in the study received free or reduced lunch (Patterson et al., 2009). The researchers found that classroom redesign resulted in 60% of the class making improvements in their academic performance, all within a brief time frame. Results also revealed that 81% of students in the classroom preferred the new method of instruction rather than a class that solely emphasized lectures.

Another approach used during the pandemic involved flipped instruction modalities, which is a type of differential instruction. In these modalities, students typically watched a pre-recorded lecture and then attended class to apply what they learned from their respective asynchronous, synchronous, hybrid courses. These modalities also often used various online platforms (e.g., Edmodo, Zoom, Google Classroom; Alshengiti et al., 2021). These online platforms made it accessible for instructors to publish resources/class materials such as handouts and other reading materials. This type of method resulted in individual benefits for students, as it provided a more individualized type of education by allowing teachers to upload supplemental material students could use for reference (e.g., handouts, website references, articles, and tutorials).

COVID-19 Pandemic and Mental Health

Students

The COVID-19 pandemic continues to have a significant impact on the education system. A study conducted by Kurland (2021) predicted challenges associated with transitioning back to in-person instruction to likely impact students' academic motivation. As Kurland (2021) highlighted, the reality is that students have returned to school with their own experiences and unique challenges resulting from the pandemic. As a result, problem behaviors are likely to arise during this adjustment period. Further, it is important to consider the implications this adjustment may have on students' development of coping skills and challenges related to emotion-regulation. For example, Kurland (2021) indicated that early childhood mental health consultation is paramount in order for students to receive needed education on emotional awareness and coping. This type of consultation is critical, as teachers are not traditionally trained in how to support students with mental health related concerns.

It is essential to consider that there has been a marked increase in anxiety and depression concerns among children ages 11 to 17 (Mental Health America, 2021). Further, to add to this disparity, as highlighted by the California Department of Education Mental Health Resources (2024), there has not been a mandate in place for mental health trainings in preschool to 12th grade. Although in 2022 California declared a law requiring students to receive mental health education by a qualified instructor at least once during elementary, middle, and high school; the increases in students' mental health concerns, as well as the paucity of mental health education, further underscore the necessity for mental health training and consultation in schools (NAMI, 2021). In addition to these sources of support, Kurland (2021) shared recommendations to facilitate the transition to in-person instruction, including the importance of maintaining open communication between school administration and staff; creating opportunities that allow for the provision of Social and Emotional Learning; encouraging teachers to practice mindfulness with their students; supporting teachers as they help their students to develop coping skills; and providing resources for educators to learn how to better identify possible causes of problem behaviors.

It is important to continue to invest in improving the learning experiences of students returning to schools after the COVID-19 pandemic. Studies examining the impact of COVID-19 on students' school experiences have found similar challenges in their transition to in-person instruction. In fact, in a study by Styck et al. (2021), which examined COVID-19 related stress among 4th through 12th graders, found that students experienced stress in a variety of domains, including social isolation, schoolwork stress, fear of COVID-19 illness, stress related to missing events, and reported low levels of motivation for completing schoolwork. When comparing data results, Styck et al. (2021) found that middle and high school students experienced higher stressors in comparison to elementary school students and students who identified as female reported higher stressors in contrast to male-identifying students. As highlighted by these studies, COVID-19 has unequivocally impacted the mental health of students, with marked increases in anxiety, depression, and stress; as well as in creating challenges for teachers and others in the school community, both socioemotionally and academically.

Teachers

In addition to COVID-19 increasing awareness of mental health concerns encountered by students, it has also brought awareness to the mental health challenges faced by teachers. Related to this, Baker et al. (2021) evaluated the impact of stressors and proactive factors (e.g., taking initiative, going beyond assigned tasks) experienced during the pandemic on teachers' mental health, coping, and teaching. Some examples of the stressors included are "separated

from family or close friends," "received medical treatments," "increase in workload," among others. The study included 63.4% of diverse teachers who did not identify as White (i.e., Black, Asian American, Hispanic, Biracial; Baker et al., 2021). The researchers found that teachers struggled to balance academic and learning goals, while simultaneously supporting students' well-being, and trying to care for their own mental health. Transferring from in-person to virtual instruction increased teacher's workloads and challenged teachers who lacked experience with virtual instructional technology. When the transition first occurred, teachers were expected to teach themselves, the students, and the student's caregivers how to use online instructional platforms (Baker et al., 2021).

Similarly, Yang (2021) examined educators' perceptions of online teaching self-efficacy, Social and Emotional Learning, and their influence on educators' compassion fatigue in providing distance learning during the pandemic. Social and Emotional Learning (SEL) is the process by which individuals develop healthy identities, manage emotions, demonstrate empathy for others, and maintain supportive relationships (Hoffman, 2009). Conversely, compassion fatigue is a physical and emotional fatigue state and mental exhaustion that can occur to any individual from constant exposure to and empathizing with the suffering of others (e.g., a nurse empathizing with the family of their patient in critical condition; Sinclair et al., 2017). Yang (2021) found that educators with longer years of working in education reported higher levels of compassion fatigue than educators with less experience in the field. 47.59% of the participants identified as a race other than White (i.e., Black, Latinx, Asian, Other, Multiracial). Further, the study also demonstrated that compassion fatigue was influenced by teaching self-efficacy online.

Purpose of Pilot Study and Research Questions

Although research has been conducted on differential instruction and teacher's mental health, the COVID-19 pandemic brought unique challenges to the education system and to teachers' roles. Presently, there is limited research that examines the impact of the COVID-19 pandemic on teacher's mental health and the type of differential instruction being used in the transition back to in-person instruction, especially when considering the reality that many students have fallen behind during remote instruction (Marshall et al., 2020). There appears to be a scarcity of research investigating how teachers have adapted to the return to in-person instruction during the COVID-19 pandemic (DeCoito & Estaiteyeh, 2022). As such, there is a high need to research, enlighten, and understand the current school environment and the challenges teachers have encountered upon their return to in-person instruction. This pilot study's purpose is to advance knowledge on this area by examining high school teachers' attitudes and differential instruction methods. Specifically, examining the attitudes present during the transition back to in-person instruction during the COVID-19 pandemic. This pilot study was guided by the following research questions: (1) How did teachers utilize differential instruction to accommodate students' needs during the COVID-19 pandemic? (2) What challenges did teachers encounter during the pandemic and how did they tend to their mental health?

Method

Participants

Four general education teachers at public high schools in California took part in semi-structured Zoom recorded interviews. Subjects the participants taught included Spanish (all high school grade levels), Chemistry (sophomores), and English (sophomores at a continuation school).

Limiting the study only to California helped control varying educational laws and restrictions during COVID-19 across other states. This pilot study only focused on public high school teachers. The reasoning for the selection of this population was threefold. First, past research examining COVID-19 related stress among student populations found that high school students experienced elevated stress and difficulties from the pandemic, in contrast to elementary students (Styck et al., 2021). Second, high school is a critical period in a student's educational trajectory, as this is the last stage of compulsory education before students transition to college or the workforce. Third, public schools, compared to private schools, provide the most diversity and representation of traditionally underserved students (California Department of Education, 2024). Altogether, these reasons underscore the importance of focusing on how the transition to in-person instruction affected public school educators teaching the high school population.

The sample of this study included teachers who identified as female (n = 3, 75%) and male (n = 1, 25%). Participants' ages ranged from 30 to 37 (M = 33.25, SD = 3.30). The participants identified their race or ethnicity as Latinx (n = 2, 50%), Caucasian (n = 1, 25%), and one of the participants declined to state. The participants reported to have been teaching for seven (n = 1, 25%) to nine years (n = 3, 75%). Similarly, participants indicated that they have worked at their current schools for seven to nine years (M = 8.25, SD = 0.96), and most of the participants taught in Title I schools (n = 3, 75%). Title I schools focus on supporting economically disadvantaged students meet state academic content and performance standards (California Education Department, 2023).

On average, the participants taught between three to six classes (M = 4.5, SD = 1.30), and the majority also taught upper-classmen juniors and seniors (M = 2.5, SD = 1.30). Some participants also noted that they managed after-school extracurriculars (n = 3, 75%), and many teachers reported not having any teaching assistants (n = 3, 75%). Further, the number of students in a classroom ranged from 15 to 26 (M = 29, SD = 9.71), and participants reported having three (n = 3, 75%) to four (n =1, 25%) students with Individualized Education Programs (IEP) in their classes. To elaborate, IEPs are customized plans designed to meet the unique educational needs of students with disabilities and are mandated through the Disabilities Education Act (IDEA) in the United States (Pretti-Frontczak & Bricker, 2000). Lastly, on scale of 1 (least important) to 5 (most important), the participants reported their mental health to be very important (M = 4.45, SD = 0.43).

Measures

Participants responded to a set of demographic and semi-structured interview questions. Below is a description of each measure used. Participants reported their background (i.e., age, gender, state of residence), educational setting (e.g., Title I school), classroom settings (i.e., subjects taught, number of students, students with IEPs, teaching assistants present), and the importance of their mental health. A semi-structured guide was developed and included seven questions that addressed the two research questions of this study. The semi-structure interview questions centered on current teaching methods used, experience of returning to in-person teaching during the pandemic, self-care acts, and recommendations for improvement. Furthermore, it should be noted that a semi-structured interview format was selected due to the flexibility it provides during the interview process, as it allows the interviewer to gain information about the participants' meaningful experiences in detail (Kvale, 1996).

Procedure

Participants were recruited using snowball and purposive sampling techniques, such as recruitment emails, social media announcements, and flyers. Recruitment letters were used to contact interested individuals with a description of the study, what being a participant entailed (i.e., survey and interview), and the consent form. After each interview, the participants were rewarded with a $10 gift card as compensation for their time and involvement in the study.

After all interviews were completed; they were transcribed verbatim by two research assistants, both who were trained by the primary author. During the transcription process, all identifiable information was removed. Names were replaced with pseudonyms to ensure anonymity and confidentiality of all participants. Each transcription was reviewed and compared to the audio recording multiple times to ensure accuracy and achieve trustworthiness of the findings. The transcription process aided in ensuring the researcher's understanding and familiarity with the data collected. In addition, both research assistants were trained to be secondary data coders by the primary author.

Data Analysis

The data was analyzed using both quantitative and qualitative methods. Quantitative methods were used to analyze demographic background data. The semi-structured interview questions were analyzed using qualitative methods. In terms of the latter, content analysis was used in this study due to the structured approach it provides for data collection when conducting a systematic examination of content, while also reducing researcher bias and increasing the reliability of the findings. Additionally, content analysis offers a robust interpretation of data, is flexible, helps interpret the meaning behind the data, and helps understand the broader cultural and social implications (Elo et al., 2014). Further, quotations were used to accurately illustrate the experiences shared by participants.

Results

Research Question 1: How are teachers using differential instruction to accommodate students' needs during the ongoing pandemic?

Differential Instruction

This interview asked participants to describe how they adjusted their teaching methods as a result of the pandemic. Two categories emerged from the findings: (1) mixed methods of technology and direct instruction and (2) increasing socialization.

Mixed Methods of Technology and Direct Instruction. Participants shared that they used various methods in their instructional approach, such as Chromebooks (to submit assignments online), Ed puzzle (as an extra learning activity), and paper assignments. One participant shared how they used to rely on paper so much, but their school has shifted to more remote work. Thus, instead of paper and pencil they use a google document and type their responses. Further, a participant shared that a strategy they found helpful was providing the students with a choice to complete the assignment on the Chromebook or on paper, as a way of providing flexibility.

Increasing Socialization. This includes the encouragement of socialization among peers through activities such as group/partner work. Participants highlighted how levels of socialization have decreased among students and with school staff. One participant shared the following:

> *"I think the biggest struggle has been getting students to engage with themselves again and engage with their partners, cause I think they were at a time where they been isolated…they don't really speak to anyone, so they came in very not wanting to work with each other. And it was a struggle because you know, I would I love to do partner work I do Kagan strategies where they're all in groups; however, a lot of students were very hesitant, and they just wanted to work by themselves."*

School Absences Due to Covid

The next interview question asked participants how they accommodated students when they missed school due to Covid related reasons. The following two categories emerged: (1) using online databases and (2) the flow of communication.

Online Databases. Online databases were utilized to assign and upload assignments, check grades, and provide extra resources. In particular, the program Edpuzzle was highlighted in participants' responses. Participants expressed that Edpuzzle allowed students unable to attend classes to still engage in the learning experience by providing video explanations of the lesson, readings, and engaging activities to complete.

Communication Flow. Student needs were individualized through observation and communication based on their needs and interests. Participants shared that they engaged in more efforts to maintain communication with their students (more so than before the pandemic). In addition, participants shared that they increased their flexibility to help accommodate for student's mental health needs. For instance, a participant shared the following:

I've been emailing them a lot more. I try and keep in contact with them a lot more. When they're out that long, a lot of differentiating. I've excused students from quizzes because you know, they demonstrated their skills in their homework and they were able to do their homework; whereas, you know, if they have to take this quiz ten days later what's the point you know.

Research Question 2: What are some challenges teachers have faced because of the pandemic and how are they tending to their mental health?

Self-Care Acts

The next question asked participants to describe the ways they attended to their mental health. Four categories emerged from the responses and included (1) creative outlets, (2) personal connections, (3) colleague support system, and (4) increased awareness of prioritizing mental health for themselves.

Creative Outlets. When participants were asked what they do for self-care, they shared numerous activities. For instance, some shared they engage in physical activities such as running and leading a marathon club at their school to foster relationships with students. Other participants shared performative outlets such as playing the guitar, writing songs, writing poems or scripts for shows, and one participant shared they were in a band.

Personal Connections. The participants noted the importance of dedicating time for hobbies, loved ones, social outings, and themselves. Some participants shared their hobbies such as running and making music. Other participants focused more on making time to go out with friends or spend time with family to distract themselves from only focusing on work.

Colleague Support System. Participants expressed having relatable conversations with colleagues. They noted that having an outlet to express their feelings and frustrations was helpful. Participants elaborated on how beneficial it was to have a community and their interpretation of what self-care entailed. For instance, a participant shared the following:

> *"Another thing that I guess practicing self-care is with my colleagues; because I have such amazing colleagues here at my school that we do outside outings that are not school based, but it's just as friends because we have developed such a good relationship that we'll have collective self-care that we'll go somewhere, we'll walk*

somewhere- but it's just the idea of having support in your community that's part of self-care. Cause' I feel like a lot of the times, they tell us that self-care is your thing, your individual thing, but I like self-care as a collective, if that makes any sense."

Increased Awareness of Prioritizing Mental Health for Themselves. Participants also shared that they had become increasingly more aware of the importance of putting time aside for their own self-care. Some participants referred to themselves as "workaholics" when reflecting on how they were prior to the pandemic. As a result, various participants expressed making it a goal to prioritize themselves, keeping work to only school days, and setting boundaries which they noted was not always easy to do.

Biggest Challenge

Next, participants were asked to reflect on what they considered as "the biggest challenges" related to being a teacher during the pandemic. Two categories emerged from participants' responses: (1) burnout and (2) engagement and attention management.

Burnout. Participants shared that due to feelings of burnout they considered exploring other options aside from teaching; shared feelings of not doing their best, feeling drained and lacking motivation; and commented on noticing that others were leaving the profession. One participant shared the following:

"I've been thinking about this a lot cause a lot of the teachers that that I work with, that started the same year I did, you know, they've gone on to get their PhD, they're going onto admin a lot of them are going onto admin, going to off to teach at junior college, they don't want to teach at high school anymore and so I just keep thinking like, is that what I should be wanting to do right now? Is that what I should do right now? But I really decided for me."

Engagement and Attention Management. Participants shared that engagement and attention management (resulting from the remote to in-person instruction transition) were some of the biggest challenges experienced. For instance, participants noted that when students were remote, students did not have to sit in one place; rarely engaged with others; and since their cameras were often off, some would even sleep while in class. Thus, now that they are back in-person, engagement and attention management are more difficult than prior to the pandemic. A participant shared the following:

"Somebody told me, if I think about, my tenth graders, the last time they had a full year of school they were seventh graders, so they are like over ripe eight graders…which is not a grade level I'm used to teaching. So, I'm like I don't know how to deal with eighth graders."

Another participant also shared the following:

"When I was online teaching, like no one turned on their cameras, right…so I'm pretty sure, you know, people had me on mute and were on their phones, right. The whole semester, or during the year or so they were online, and so, its habit forming! You know, you're listening, but you're on your phone, and you think you're doing both, but you know, it's in many ways, I say- I can't compete with that right. I'm never gonna be as smart, as funny, but you know, when it comes to engagement, I guess my best bet is being able to be consistent, right…and show them that I'm genuine, and you know, I'm here to support them for their future."

Administrative Support

The following question asked teachers how the administration at their respective schools supported their mental health. Two categories arose from this question: (1) innovating social events and (2) vocalizing self-care and mental health.

Innovating Social Events. Some social events teachers mentioned included luncheons, "free Fridays" (i.e., free time and engaging in fun activities), or anything that gives students and teachers a break from their workload and a chance to relax. Some participants highlighted how their administrators were also doing the best they could. Some examples of events teachers shared included their administrators hosting occasional luncheons at school where they catered food for teachers; the principal taking all the teachers out to eat at a restaurant during holiday season; and administrators having teachers take part in engaging activities to help them connect with one another. Some participants shared an overall understanding and appreciation for the efforts being made by their administrators. However, some participants also shared that they felt that no real effort was being made to proactively decrease their workload. They shared feeling that more work was always being piled on and that the only support they received was via weekly mental health reminder emails.

Vocalizing Self-Care and Mental Health. Participants were vocal on the importance of self-care; however, they also indicated not engaging in many actions to support their mental health. A participant shared the following:

> *"So, the biggest talk is always self-care and I think when we have our meetings every Tuesday, they always say self-care. But when I think of self-care, I think of the practice of self-care, and what I want to see more in is doing it in practice. Because they often preach about self-care and tell us we should take care of ourselves, but they don't."*

Another participant also shared the following.

> *"So last semester there was a shortage on substitute teachers so there was a lot of, you know, teachers using their prep to cover another teacher and that was really stressful… but this semester they seem to have gotten more substitute teachers, they have gotten some more like campus supervisors, priority? for them?…So, let's see here…I mean, to kinda work on some discipline issues and stuff, so I think that they saw the problems and kinda remedied them in like personal way, you know what I mean? Rather than like talking to us 'what do you need for your mental health' and stuff."*

Discussion

The purpose of this study was to understand and examine high school teachers' attitudes and differential instruction methods in the transition from remote to in-person instruction during the COVID-19 pandemic. Throughout this study, participants shared how technology has benefited their classes by facilitating the implementation of differential instruction (e.g., turning lessons into games, videos, pre-recorded lectures) and application of innovative techniques that help in maintaining students' attention (Cardoza, 2021). These types of strategies supported both students and teachers. It provided students with resources that prevented them from falling behind in school. Similarly, it provided teachers with methods that allowed them to better support their students during the transition to in-person instruction. Moreover, teachers in the study expressed becoming aware of the importance of putting time aside for self-care. Related to this, teachers worked on prioritizing their mental health by seeking the support of their work

colleagues; making time for hobbies and loved ones; and connecting with creative outlets, such as writing and watching movies.

One of the four participants mentioned looking into other jobs and planning to leave their profession due to the burnout they felt. In a recent survey commissioned by the California Teachers Association and UCLA Center for the Transformation of Schools, 1 in 5 teachers similarly shared that they were likely to leave the profession within the next three years. Further, 1 in 7 teachers shared in the survey that they would be leaving the profession indefinitely. Lastly, in the survey 68% of teachers described their jobs as exhausting, 61% as stressful, 49% found it frustrating, and 51% described their jobs as overwhelming (McDonald & Sum, 2022). These statistics highlight the challenges teachers face and their current outlook towards the profession.

To add on, the National Center for Education Statistics (2023) conducted a survey on teacher attrition and found that 8% of public-school teachers left teaching in 2021 (since last measured in 2012). Other researchers also found that after the 2022-2023 school year, 30% of new teachers left their school for another job within the district, a different school, or completely left the career and education system entirely (ERS, 2024). Similarly, in the present study, teachers shared that they experienced feelings of burnout, feeling drained, unmotivated, and witnessing many of their colleagues choosing to leave the profession due to these feelings. As previous research demonstrates, teachers experiencing burnout are less likely to engage in effective teaching strategies, as their mental health impacted their instruction and classroom management abilities (McDonald & Sum, 2022). This has damaging consequences. If teachers cannot help themselves and receive support/resources to manage their stress and workload, it is unlikely they will be able to effectively support students in their social, emotional, and educational needs. Support is pivotal for teachers to successfully champion students' academic achievement.

It is also important to note that participants in this study taught at different Title I schools (i.e., continuation high schools and regular high schools in different school districts). As a result, most students participants instructed were at-promise (i.e., students with adverse background that have the potential to succeed) adolescents from traditionally disadvantaged backgrounds. To elaborate, students from Title I schools often experience an array of adverse childhood experiences and socioeconomic difficulties (e.g., lack of basic resources, unstable home environments, food insecurity; Vernaza, 2012). These stressors place students in a precarious position due to the consequences it could have on their learning/educational trajectories (Vernaza, 2012). In relating to teachers, according to Howard (2014), educators at Title I schools tend to face more frequent behavioral issues among students, teach larger class sizes (which limits the amount of individual attention one can provide to students), and struggle with limited resources, in comparison to non-Title I schools. Altogether, this combination of factors can lead to higher levels of stress and burnout among Title I teachers. Addressing these concerns is critical to effectively support students from traditionally underserved backgrounds, which represents a large proportion of students at K-12 public schools (California Department of Education, 2024)

Limitations

Limitations include the study being a pilot examination and consisting of a small sample size due to a low volume of volunteers, the researcher had four participants. Another limitation worth noting is the number of individuals who identified as male in the study. Only one participant identified as male, while the other three participants identified as female. Furthermore, participants in the study were mainly from Title I schools, and only one participant worked at a continuation school for at-promise high school students. A continuation school provides at-promise students (i.e., students with the potential to succeed despite their adverse

circumstances) with a more flexible learning environment tailored to their individual needs. This placement is often a result of the student experiencing various challenges (e.g., academic difficulties, behavioral issues, family problems) that warrant an individualized learning setting (Kratzert & Kratzert, 1991). Moreover, all participants were from different schools within Southern California which limited geographic diversity.

Recommendations

Considering these findings, a key recommendation includes increasing the school psychologist's ratio to student population (Shortage of School Psychologists, n. d.). Considering these findings, a key recommendation includes increasing the school psychologist's ratio to the student population (Shortage of School Psychologists, n.d d.). Accommodating for teachers to be provided with workshops on mental health-related topics (e.g., psychoeducation on burnout and related coping strategies). For instance, an evidenced-based program named Cultivating Awareness and Resilience in Education (CARE) for teachers is a professional development program that can increase teachers' well-being and social-emotional competence (Jennings et al., 2013).For instance, an evidence--based program named Cultivating Awareness and Resilience in Education (CARE) for teachers is a professional development program that awareness practices, emotional skills instruction, and compassion-building teachers to provide feedback and share concerns by doing monthly check–ins, provides recognition of teachers who have been doing above and beyond. Further, at the administrative level, it is recommended that additional time be provided to teachers as they prepare and continue to adapt in the transition of post-pandemic instruction and another suggestion could be allowing teachers to take mental health days when necessary.

At the systemic level, it is recommended for schools to offer clear policies and procedures about reporting teacher burnout, techniques to overcome burnout, and strategies for reducing teacher workload. Some ideas administration could do is having teachers complete a burnout survey at the end of each semester to see how the semester went. Another idea includes looking out for the signs of burnout such as a teacher increasing rate of absenteeism or tardiness to work, withdrawal from social interaction with colleagues, and peers, physical signs of fatigue (e.g., dark circles under eyes and neglect of grooming), and decreased enthusiasm and creativity in work performance. Further recommendations include stable funding increases (i.e., providing extra funding to low-income communities that need more resources). Additional funding could support a smaller student to teacher ratio and provide teachers with tools to aid in their instruction.

Future research studies in this area could benefit from interviewing teachers and utilizing previously collected data on burnout levels before, during, and after the pandemic. This design will allow for the comparison of data across years and how that may have affected rates of teacher burnout, teacher attrition, effective teaching strategies, and student learning outcomes. Additionally, it may be interesting to examine these variables across two studies; the first focusing on teaching strategies and the second centering on students' academic outcomes. There are endless directions this research area could be taken. These potential research ideas are only a few suggestions based on the findings, limitations, and recommendations of this pilot study.

About the Authors:

Maribel Garcia, B.A., is a first-generation Latina doctoral student in school psychology at the University of California, Riverside. She is the first in her family to pursue higher education. She is an alumnus of California State Polytechnic University, Pomona, where she received her bachelor of arts in psychology. Maribel Garcia is committed to spreading mental health awareness and aims to help teachers identify, understand, and manage burnout. Maribel believes that to help create effective and positive learning environments, we must first help teachers attain a positive work environment with multi-tiered support to educate students. Her research continues to circle teacher mental health, and she hopes to learn more about how teachers' mental health affects students and their learning environment. During her undergraduate studies she worked with her mentor, Dr. Pumaccahua in her Socioemotional Learning Lab and formulated this study.

Dr. Tatiana Pumaccahua is a proud first-generation Indigenous Latina, an assistant professor in the Department of Psychology at the California State Polytechnic University, Pomona. Dr. Pumaccahua is also the principal investigator of the Socioemotional Research Lab, where her work is dedicated to school-based mental health, socioemotional learning prevention and intervention programs, and the cultural adaptation of evidence-based practices by utilizing creative methods. Dr. Pumaccahua is dedicated to improving access to quality mental health services and advancing higher education opportunities for underrepresented students. Maribel and Dr. Pumacchua formed this study, considering the lingering effects of the COVID-19 pandemic to understand what changes affected their mental health, their teaching strategies, the support they receive, and what changes they hope to see in schools.

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Appendix – Demographic Questionnaire

1. How do you identify racially and ethnically? _____

2. What gender do you identify as (if any)? _____

3. What is your age? _____

4. How long have you been a teacher? _____

5. What is your level of education (e.g., B.A., M.A., credentials, other)? _____

6. How long have you been at your current school? _____

7. What state do you teach in? _____

8. What setting do you teach in (e.g., urban, suburban, rural)? _____

9. Is the school you teach at a Title I school? _____

10. What subject(s) do you teach? _____

11. How many classes do you teach? _____

12. What grades do you typically work with (e.g., freshmen, sophomores, juniors, seniors)

_____

13. Do you manage any after school extracurriculars? _____

14. Do you have any teaching assistants in your classrooms? If so, how many? _____

15. How many students do you typically have in a classroom? _____

16. About how many students do you have in a classroom with an IEP program, on average?

_____

17. On a scale of 1 (least important) to 5 (most important) is your mental health to you?

_____

Appendix – Interview Guide

Introduction

[Hello _____], my name is _____; I am a fourth-year undergraduate student from the _____. Before we begin, I would like to thank you for taking time out of your day to meet with me and answer some of my questions. The information you share will be confidential and anything pertaining to your identity will be replaced with a pseudonym. This interview is fully voluntary thus if at any point you want to stop or would wish to skip a question you may do so. As mentioned in the consent form, do I have your permission to record our zoom call? I will only be using the audio recording for the purpose of this study. [Pause and wait for a response and if they approve then follow up with thank you for your consent.] Do you have any questions before we begin? [If the answer is no] Great! Let's begin.

1. In what ways do you differentiate instruction in your classroom?

Probe Questions:

a. How do you assist students to stay engaged in the classroom (e.g., use of technology, active learning strategies)?

b. How do you accommodate students with IEP programs in your classroom (e.g., collaborate with special education teachers)?

Thank you for answering those questions on differential instruction. Next, I will be asking some questions on how your classroom environment has shifted due to the COVID-19 pandemic.

2. How have you had to adjust your teaching methods due to the ongoing pandemic we are living in?

Probe Questions:

a. How do you accommodate students who have to miss school due to COVID-19 related reasons (e.g., after school tutoring, video lectures, etc.)?

b. Do you feel you have enough support from the administration to prioritize the mental health of your students? Why or why not?

Thank you for answering those questions. Next, I would like to shift the focus from the students to you and how you conduct some self-care acts.

3. What are some things you do to take care of your mental health?

Probe Question:

a. What do you feel is the biggest challenge about being a teacher in this time period (e.g., burnout, stress, etc.)?

b. How does your administration support your mental health (e.g., workshops or resources about self-care)?

Before we complete this interview, I would like to thank you again for your participation in this study. I would like to end this interview with one final question about your recommendations for change.

4. What changes would you like to see happen for the betterment of the students and the faculty at your school?

Closure:

I hope to see those changes come true someday. We have now completed the interview. I would like to thank you for your time and wonderful insight into the current life of a high school teacher. After this meeting ends, I will send you an email with your Starbucks gift card as a token of your participation. If you have no questions for me then this will conclude our meeting. Thank you very much, have a nice day!

EMPIRICAL RESEARCH

Fusion for Inclusion: Blending Universal Design for Learning and Culturally Sustaining Pedagogies in Early literacy, A Scoping Review

Authors:

Melody Mann
University of Maryland
melmann@umd.edu

Matthew Love
San Jose State University
matthew.love@sjsu.edu

Sudha V. Krishnan
San Jose State University
sudha.v.krishnan@sjsu.edu

Abstract

Early childhood literacy skills predict the future success students have in their postsecondary lives. These early classroom experiences with literature lead to better opportunities in higher education, job retention, and beyond. However, the emergent literacy curriculum is not always representative of the culturally and linguistically diverse population that makes up the classrooms. This scoping review looks at the current literature around culturally responsive and sustaining literacy lessons in early childhood education and whether or not they include manners of Culturally Responsive and Sustaining Pedagogies and Universal Design for Learning in their investigations. By investigating the study design, methodology, overarching themes, and cultural sensitivity across these studies, researchers found there is a need to promote representation and diversity in emergent literacy in early childhood education.

Keywords: Culturally Responsive and Sustaining Pedagogies, Universal Design for Learning, Early Childhood Education, Literacy

Introduction

Literacy across disciplines is crucial for students' success throughout their academic and post-secondary lives as early literacy experiences offer robust opportunities for social interactions, and academic skill development, helping to establish a home-to-school connection (National Early Literacy Panel, NELP, 2008; Pillinger & Wood, 2014). Building strong literacy foundations in early childhood, for students in both general and special education, leads to college readiness in the future (Bayly, 2020; Brown, n.d.; Kennedy et al., 2012). In ECSE, and general education settings, the development of emergent literacy skills (e.g., letter/sound recognition, mimicking reading behaviors, identifying environmental print) simultaneously fosters an early interest in learning to read which is pivotal to a child's sustained success (Ne'eman & Shaul, 2022).

In the United States of America, Early Childhood Special Education (ECSE) is delivered through the Individuals with Disabilities Education Act (IDEA) for children between birth and 8 years old who experience developmental delays, disabilities, or special needs (DEC, 2020). IDEA guarantees that young children with disabilities are integrated in the education setting and provided with a fair and developmentally appropriate public education (US Department of Education, 2010). Early childhood special education plays a critical role in supporting the long-term academic, social, and behavioral outcomes of children eligible for early intervention. In early childhood interventions, literacy is a core component that is structured to holistically address multiple areas of development (i.e., academics, social skills, behavior; Kelly & Allen, 2015).

The Problem: Gaps in Literacy Achievement

In 2022, the National Assessment of Education Progress reported that not even half (43%) of children in the fourth grade scored at or above a proficient level in reading across the USA. This statistic drastically grew as racially marginalized students performed lower at just 17% of Black students, 21% of Latino students, 11% of students with disabilities, and 10% of multilingual learners were able to read proficiently by fourth grade. Since the COVID-19 global pandemic, students are increasingly scoring below proficient in literacy across grade schools, causing worrisome trends that support the evidence of the growing achievement gap (NCES, 2023). There is a national academic achievement gap apparent in early childhood education in emergent literacy skills (Assari et al., 2021; Neuman, 2006; Park & Kyei, 2011). Children who do not develop emergent literacy skills in early education tend to perform poorly across subjects going forward in grade schools in language arts and English courses (Niklas et al., 2016; Prevoo et al., 2014). This achievement gap has informed current findings that children who cannot read proficiently by third grade are less likely to graduate high school and go on to college (Hernandez, 2011).

Long-Term Implications for College and Career Readiness

The overarching goal of the US educational system is to ensure college and career readiness for all students, equipping them with the skills and knowledge necessary to thrive in higher education and the workforce. Early education plays a critical role in this mission by establishing a strong foundation in literacy, numeracy, and socio-emotional development. However, the impacts of early learning can vary significantly among diverse populations. Students from different cultural, linguistic, and socio-economic backgrounds may experience unique challenges and opportunities, making it essential to implement inclusive and culturally responsive early literacy practices to support equitable outcomes for all learners.

These statistics are troubling for children's later life outcomes as low literacy skills are directly correlated to higher unemployment rates, reduced income, and overall impacts U.S. competitiveness on the global stage (Policy Circle, 2024). The National Assessment of Adult

Literacy (2016) further reports that 2/3 of students who cannot read proficiently by the end of the fourth grade will end up in jail or on welfare. This disparity is particularly concerning among racially marginalized populations as students from Black, Indigenous, and People of Color (BIPOC) communities are often faced with institutionalized racism (Kohli et al., 2017; Polos et al., 2022; Strauss, 2019) and neglected from educational contexts (Darling-Hammond, 2001) leading them to be funneled into the school-to-prison pipelines (Herrick, 1991).

Additionally, educators have stressed the importance of solid reading skills in early grades for successful college and career preparedness, a view backed by longitudinal research (Hernandez, 2011). Research has shown that foundational reading skills should be developed early, as students struggle to acquire them after transitioning from learning to read (Grades K–2) to reading to learn (Grades 3–12) (Lonigan & Shanahan, 2010). Early literacy interventions lay the groundwork for college and career readiness by developing foundational reading and critical thinking skills from a young age. Even though there have been great strides in developing evidence-based techniques for teaching reading, traditional evidence-based reading interventions often overlook students' literacy identities, which are vital for motivation (Utt & Tochluk, 2020). Literacy motivation is increased when students feel relatedness, belonging, autonomy, and competence, achieved through teacher collaboration, choice of texts, and challenging goals (Guthrie & Knowles, 2001).

Inclusive culturally responsive literacy practices address students' values, beliefs, culture, race, ethnicity, gender, sexuality, and engagement with critical perspectives, fostering their identification with and motivation for literacy learning (McLean & Alexander, 2020). Emphasizing only skills-focused reading practices can limit students' engagement and prevent access to enriching literacy experiences. Integrating diverse children's literature helps amplify students' voices, enhancing their contributions and motivation in the literacy learning environment.

Theoretical Frameworks

Admittedly, there is not a one-size-fits-all all approach for interventions that support emergent literacy. However, there are several considerations that can be made when developing lessons to ensure that emergent literacy lessons and activities are inclusive and accessible to all learners. Universal Design for Learning (UDL) and Culturally Responsive and Sustaining Pedagogies (CRSP) are methods for making learning meaningful and accessible.

UDL

The research evidence supporting the UDL framework is substantial and continually growing, drawing from fields such as neuroscience, educational psychology, special education, educational technology, and implementation science. A review of empirical studies by Rao et al. (2014) found statistically significant positive effects of UDL in literacy, math, science content knowledge, and student engagement. Experimental studies have shown the impact of UDL solutions in science and social studies (King-Sears et al., 2023), with effect sizes ranging from 0.20 to 0.90. The UDL framework is recognized and endorsed by the United States Department of Education, United States Agency for International Development (USAID), United Nations Educational, Scientific and Cultural Organization (UNESCO), various countries, states, universities, and educators. This growing body of research evidence identifies UDL as a promising approach for helping all students, especially those with disabilities, to achieve their educational goals.

CRSP

Considering the goals of emergent literacy to develop early alphabetic awareness and to foster an interest in learning to read, early educators must consider how (i.e., instructional methods) and with what (i.e., representative curricular materials) these goals can be achieved in ways that promote child engagement, create household-to-classroom cultural connections, and foster safe opportunities for discussion and reflection (Gauvreau et al., 2021).

To promote awareness about the early literacy achievement gap. the purpose of this manuscript is to evaluate the current studies and practices among emergent literacy curriculums, DEIJ initiatives, and early childhood education settings to further inform action steps educators can build upon to respond to the address these deficits in applied settings (Alim et al., 2017; Waitoller, et al., 2016) and utilize the equity frameworks of UDL and CRSP that can be followed in the planning and implementation stages of an emergent literacy curriculum to ensure accessible and inclusive early literacy learning environments are available for all children served in inclusive early childhood classrooms.

Research Questions

Early literacy environments provide educators with opportunities to address cultural and linguistic diversity within their classrooms. The purpose of this paper is to explore the current literature around inclusive representation in early childhood literacy instruction, and further how research proceeds to troubleshoot deficits that may surface.

- What are the study characteristics (study design and methodology) of research on culturally diverse and responsive approaches in early childhood literacy?
- Among these studies, does the research conducted on early childhood literacy highlight the significance of culturally responsive and representative literature in promoting student engagement, learning, and motivation in early childhood education?
- What are the emerging patterns in the findings with research on representation, equity, and inclusion in early childhood literacy?

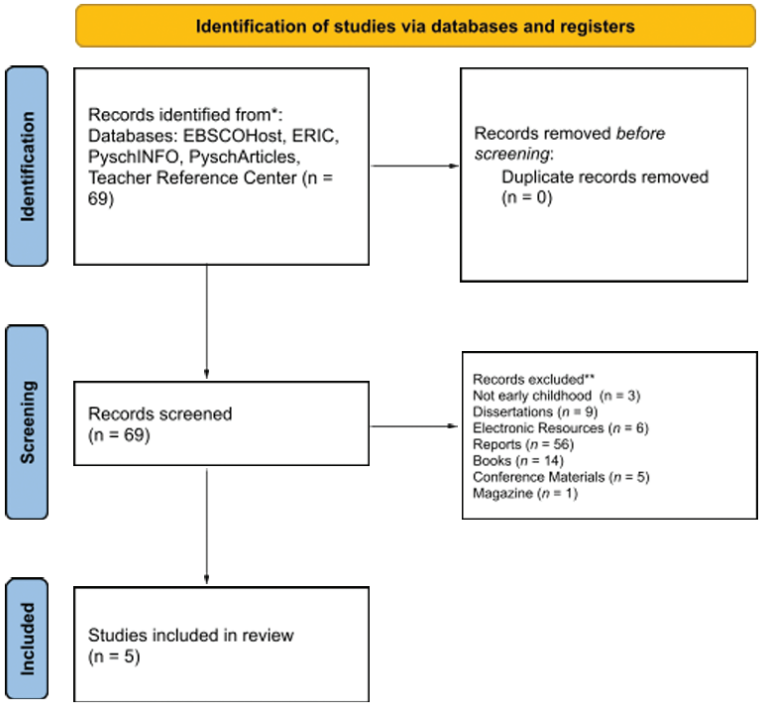
Significance

Scholarship in the areas of equity, diversity, inclusion, and social justice in education has long called for pedagogical approaches that support all kinds of learners. However, siloes of research and practice for meeting the needs of diverse learners have created fragmentation in theory, where educators are offered multiple and varying solutions for creating learning environments responsive to the varied and diverse children in their classrooms. However, with theoretical fragmentation impacting how educational systems are established to respond to both cultural and linguistic diversity as well as dis/ability, child identity and educational needs are left unfulfilled (Waitolleret al., 2016). Additionally, educational systems' fragmented response to students' diverse identities ignores the realities early educators face in their classrooms with student populations whose identities are intersectional. Children who exist at the intersections of difference (i.e., cultural and linguistic diversity, disability) experience multiple barriers to inclusion in contemporary education systems that are often masked in mainstream equity movements (Collins, 2019; Kafai, 2021). Extant research has indicated that the influence of children's race, gender, language, and other identity characteristics on their risk of experiencing barriers to success in school cannot be disarticulated from disability (Annamma et al., 2018). Doing so, "... disaggregates race from disability and other markers of difference (e.g. gender, social class, and language) resulting in a fragmented individual" (Cruz et al., 2024).

Methodology

This review was conducted using a systematic approach. In a systematic review, the researchers report the steps they took, which are clearly planned and described in detail. All approaches are reported with transparency, and methodological decisions are grounded in theory for the reader to reference (Hyet et al., 2014; Jahan et al., 2016). These factors listed above were accounted for during the review process.

Figure 1: *PRISMA Diagram*



Five electronic databases were selected for this literature review: Teacher Reference Center, PsycINFO, PsycArticles, ERIC, and EBSCOHost. These databases were chosen because of their multidisciplinary character and range within the field of literacy and child studies. The following keywords and phrases were used across the databases using the boolean operators "AND" and "OR" throughout early childhood literacy, diversity, culturally responsive teaching, culturally relevant pedagogy, culturally responsive instruction, and culturally inclusive. No filters were applied in the initial search of the literature. This search yielded 69 articles. All results were imported into Zotero.

Screening

Articles were for their relevance to the research questions and study topic overall. The screening and selection process was conducted by the primary author to determine the eligibility of the articles in the sample. Articles that were both kept and removed were tracked on an Excel spreadsheet with the categories: abstract, author, year, and research method to track the removal of duplicates and articles that did not meet the criteria. There were no duplicates in the search, thus articles (n = 69) were screened for the following criteria.

Inclusion Criteria

Articles were included in the sample if they met the following criteria: a) published in an academic journal, b) included early childhood (birth - 7 years old) in their sample, c) focused on childhood literacy as the construct of interest, and d) accounted for aspects of diversity, equity, inclusion, and/or social justice in their investigation.

Exclusion Criteria

Articles were screened and observed for the following indicators of exclusion: a) Articles not published in an academic journal, b) Participants in the study were ages 7 and older, and c) Researchers did not account for early childhood literacy and diversity in their study constructs, and d) conference materials, book chapters, dissertations, etc.

Rationale

Early literacy is a critical component of educational development, laying the foundation for future academic success and lifelong learning. However, ensuring that all children, regardless of their backgrounds, have equitable and inclusive access to early literacy education remains a significant challenge. Diverse socio-economic, cultural, linguistic, and cognitive backgrounds among children necessitate tailored approaches to early literacy that recognize and address these differences. Equitable and inclusive approaches in early literacy aim to provide all children with the opportunities and resources they need to develop essential literacy skills.

Despite the growing recognition of the importance of equity and inclusion in education, there is a lack of comprehensive understanding of how these approaches are being implemented in early literacy programs and their impact on diverse student populations. A scoping review is needed to: (i) map existing literature to identify and categorize the various strategies and interventions used to promote equity and inclusion in early literacy, (ii) clarify concepts and definitions related to equitable and inclusive early literacy practices to establish a common understanding, (iii) identify research gaps to highlight areas where evidence is lacking or where more research is needed to inform practice and policy, and (iv) inform future research in order to provide a foundation for more focused systematic reviews or primary research studies by identifying the scope and nature of existing research.

In conducting this scoping review, we aimed to explore the current state of knowledge on representation in early childhood literature. Our research questions were highly specific, targeting a niche area within the broader field of accessibility and inclusiveness in early reading. which inherently limited the number of relevant studies available. Despite a thorough and systematic search of multiple databases, including PubMed, Scopus, and Web of Science, as well as a manual search of reference lists and gray literature, only five studies met our stringent inclusion criteria.

The inclusion criteria were intentionally rigorous to ensure that only the most relevant and high-quality studies were considered. These criteria included specific characteristics of the population,

types of interventions, and outcome measures. By focusing on quality over quantity, we were able to conduct a more in-depth examination of the available evidence. The selected articles were chosen based on their methodological rigor and relevance to our research question, ensuring that our findings are based on robust and credible sources. Furthermore, the limited number of studies highlights the scarcity of research on our topic, which is an important finding in itself. This scoping review aims to map the existing literature and identify significant gaps that warrant further investigation. By highlighting the paucity of studies, we hope to stimulate future research efforts in this area. Lastly, it is important to note that the topic under investigation is relatively new, and the body of literature is still developing. The inclusion of a small number of studies reflects the early stage of research in this field and underscores the need for more comprehensive studies in the future. In summary, the inclusion of only five articles in this scoping review is justified by the narrow focus of our research question, the rigorous inclusion criteria, the comprehensive search strategy, the emphasis on quality, the identification of research gaps, and the emerging nature of the field. This review provides valuable insights into the current state of knowledge and highlights areas for future research.

Quality Appraisal

To answer the research questions posited in this review, the final sample (n = 5) was reviewed according to the quality indicators established by each specific research design. Articles were critiqued and evaluated for their comprehensive ability to address all major facets of academic dissemination and organization.

Qualitative Articles

Qualitative articles (n = 5) were assessed by combining the quality criterion outlined in the Quality Studies in Special Education (Bratlinger et al., 2005) and the Reflexive Quality Criteria: Questions and Indicators for Purpose-Driven Special Education Qualitative Research (QR Collective, 2023). These two sources were the foundation for assessing the sample based on the indicators conceptualized, focusing on research questions clarity, methodology, sampling rationale, participant purpose, constructs of interest, and the comprehensive reporting of study findings.

Bratlinger et al.'s (2005) have provided a foundational understanding for evaluating qualitative articles in early childhood special education, by addressing the essential elements of ethnographies, case studies, and phenomenology, aiming to ensure studies are robust, reflective of the experiences of students and families, and have offered insights into the challenges faced in investigations with diverse individuals with disabilities and their families. . Additionally, the paper discusses the obstacles and ethical considerations inherent in conducting qualitative research in disability studies, making it a valuable tool for evaluation in this review.

QR Collective (2023) expands on Bratlinger et al.'s (2005) insights on qualitative studies by highlighting the significance of the narrative that drives the research questions. The updated quality indicators now incorporate cultural, historical, and linguistic factors into analyzing selected articles, addressing reflexivity, identity, community, and contextual complexities previously overlooked in special education research. By integrating these new considerations with traditional qualitative research expectations, a comprehensive approach is taken to evaluate the majority of the studies.

Considerations

These quality indicators were designed to be in line with UDL and CRSP frameworks, (Bratlinger et al., 2005; QR Collective, 2023) and can be used to evaluate research in this field.

Analysis

Supplemental to the quality appraisal, to create themes across the sample, researchers conducted a thematic analysis utilizing the Braun and Clarke (2022) 'six-phase guide' to understand their data. The first step was becoming familiar with the data (n = 6 articles) through 'active reading' (Kiteley and Stogdon 2014) which was depicted in Table 1. Six columns were created to highlight the key components of the studies: authors, research purposes, participants, methods, analysis, and results (themes and overview). Next, the second step was to take the sample and screen for initial codes. In this phase, Table 1 served as the foundation from which Table 2 was created to compare social validity and considerations in the research questions. The third step was dedicated to searching for themes in which a thematic map (Bruan & Clarke, 2006) was created which showed three themes: bilingual integration for multiple literacies, DEIJ in the classroom, and classroom community fostering emergent literacy. Following this, the fourth and fifth steps emphasized the review, conceptualization, and naming of the themes using the Watson and Webster (2002) concept matrix. When creating the themes, results were taken into consideration through the theoretical framework of UDL and CRSP (see Figure 1.0).

In our analysis of the current studies on early childhood literacy education, we employed the frameworks of UDL and CRSP as foundational pieces for understanding representation and inclusivity reported across articles. These frameworks guided our screening process and thematic analysis, enabling us to evaluate the inclusivity, effectiveness, and the extent to which researchers communicate the importance of these principles in their respective papers. By using UDL, we assessed how well the studies addressed diverse learning needs and provided multiple means of engagement, representation, and expression. Concurrently, the CRSP framework allowed us to examine how the studies supported cultural diversity and sustained the cultural identities of learners. This dual framework approach ensured that our review captured a comprehensive understanding of how current research incorporates inclusive and culturally responsive practices in early childhood literacy education, as reflected in the five selected studies.

Results

Articles published within the last 15 years signified a gradually growing interest in DEIJ perspectives in early childhood literacy. The research was conducted within the United States of America and did not touch upon these subjects in a global context. Though research in early childhood literacy is limited, these articles (n = 5) provide insights into empirical considerations.

Table 1 provides a general content matrix overview of the study logistics and Table 2 provides the concept matrix and thematic analysis results.

Articles (n = 5) were evaluated for their participant demographics, study characteristics, methods, tools, research design, and emerging patterns across the findings.

Table 1: *Thematic Analysis Table: Details on studies included in the review.*

Authors	Research Purpose	Participants	Study Design and Methods	Analysis	Results
Garces-Bacsal, 2022	This study aims to expand the selection of picture books available to early childhood educators by incorporating international titles translated into English and multicultural titles. The purpose of this proposed expansion is to bolster emotional connections with diverse stories and introduce social and emotional learning skills in early childhood literacy.	Not applicable	This qualitative study used a grounded theory framework and culturally responsive teaching to analyze patterns and themes in diverse picture books.	The research team utilized open, axial, and selective coding to categorize books across five social and emotional learning (SEL) competencies. Peer debriefing was conducted to identify predominant themes, and personal reflexivity was practiced to acknowledge researchers' biases.	Researchers provided a diverse booklist divided across the five SEL competencies. The booklist consisted of titles that are not only aligned with SEL themes but were also developmentally appropriate for early childhood settings. Researchers sought to enhance cultural responsiveness, provide exposure to narratives from around the world, and promote identification and representation for young readers. These findings highlighted the importance of using diverse books to support social and emotional learning in children.
Hilaski, 2020			This qualitative study		
Long et al., 2013	Researchers aim to explore how teachers can use the concept of syncretism to create inclusive literacy practices for young children from minoritized communities. By emphasizing critical syncretism, the research advocates for privileging marginalized traditions and practices to support student achievement and broaden worldviews. The study underscores the importance of challenging discriminatory practices in education by appreciating and implementing syncretism as a powerful learning process.	2 teachers and their grade school classroom accounts	This practitioner paper utilized vignettes from classrooms to present action steps that educators can utilize to create inclusive literacy curriculums. Researchers pulled from texts and research that reference racial pedagogies and emphasize how these can inform culturally responsive practices in literacy instruction.	Researchers used critical syncretism to integrate and merge findings across schools of thought, bodies of literature, and theoretical perspectives in responsive approaches of culturally informed practices in literacy curriculum.	
Naqvi et al., 2012	The purpose of the study was to identify linguistically and culturally responsive teaching practices in dual-language book reading contexts and to document their effects on children's linguistic, metalinguistic, and cultural engagement. The study sought to address the research question of what constitutes effective linguistically and culturally responsive teaching and learning practices in mainstream kindergarten classrooms.	160 children in kindergarten	The quasi-experimental study collected approximately 45 hours of video recordings of reading sessions in 132 sessions of about 20 minutes each. Researchers took detailed descriptions of teaching/learning vignettes to showcase the responsive elements of teaching and evidence of children's growing linguistic, cultural, and metalinguistic awareness.	The analysis focused on teaching/learning vignettes that provided descriptions of the book, session participants, instructional context, excerpts of session transcriptions, and an analysis of the session to highlight the linguistically and culturally responsive elements of teaching and children's linguistic, cultural, and metalinguistic awareness. They analyzed these recordings to identify exemplary teaching practices that supported multilingual emergent-literacy learners in making meaning of DLBs.	The initial descriptive analysis revealed that about 35% of the sessions showed some evidence of culturally and linguistically responsive teaching and learning, with only approximately 10% of sessions including substantive evidence involving extended talk. Researchers highlighted the importance of supporting professional learning communities to enhance culturally and linguistically responsive teaching practices in educational settings.
Purnell et al., 2007	Researchers aim to investigate how educators can utilize the integration of early literacy skills and arts to cultivate the appreciation and celebration of cultures in early childhood instruction. The study aimed to establish a theoretical framework through personal accounts that highlight the importance of a viable home-to-school connection for young children.	3 accounts/anecdotal vignettes were utilized in this study	This practitioner paper shows how researchers analyzed accounts of consideration in early childhood literacy to provide action steps on what can be implemented, integrated, and adapted to optimize student learning.	Anecdotal analysis; observing scenarios through critical lens of culturally informed pedagogy	Researchers highlight through their action steps that incorporating diverse cultural perspectives into the curriculum can help students develop a strong sense of cultural identity, promote inclusivity, and enhance their learning experiences. By bridging the gap between students' home cultures and the classroom environment, educators can create a supportive and engaging learning space that respects and celebrates diversity.

Table 2: *Concept matrix identifying main themes (Watson & Webster, 2002)*

Article	Themes		
	Bilingual Integration for Multiple Literacies	DEIJ in the Classroom	Classroom Community Fosters Emergent Literacy
Graces-Bacsal & Myra (2020)		X	X
Hilaski, 2018		X	X
Long et al., 2013	X		X
Naqvi et al., 2012	X		X

Note: Totals do not indicate the significance of one theme over the other, they merely showcase the researchers who covered these topics in their respective investigations.

Research Question One

Research question one sought to highlight the study characteristics, specifically the study design and methodology, of current studies on culturally diverse and responsive approaches in early childhood literacy. All the articles in this sample were qualitative (n = 5) in nature. Across the sample, researchers utilized a variety of approaches to assess their research questions from anecdotal (Purnell et al., 2007), ethnography (Long et al., 2013), thematic analysis through axial coding (Garces-Bascal & Myra, 2022), observational (Naqvi et al., 2012), and constant comparative method (Hilaski, 2020). These methodologies were employed to gauge the relevance of culturally responsive approaches in early childhood literacy instruction.

Research Question Two

This next question sought to investigate whether among the studies currently published, did research conducted on early childhood literacy highlight the significance of culturally responsive and representative literature in promoting student engagement, learning, and motivation in early childhood education. Researchers focused on the representation and inclusion of literature representative of DEIJ manners (Graces-Bacsal & Myra, 2022), bilingual education (Long et al., 2013), multiple literacies for diverse learners (Purnell et al., 2007), addressing the cultural mismatch between home and school-based instruction (Hilaski, 2020), and how linguistic and cultural repertoires build emergent literacy skills (Naqvi et al., 2012).

Garces-Bacsal & Myra (2022) qualitatively investigated the importance of “difficult concepts” for early childhood literacy (i.e., death, slavery, racism) of translated English picture-book texts within the social-emotional learning framework. The authors promoted the usage of stories that emphasize these critical topics in developmentally appropriate manners for young readers to encourage inclusion, sensitivity, and empathy within the classroom. Similarly, Long et. al (2013) qualitatively evaluated the syncretic literacy practices used by bilingual students that draw on their linguistic and cultural backgrounds. Their evaluation highlighted the significance of

accounting for student identities within the classroom to promote culturally responsive learning and improved literacy outcomes.

Purnell et al. (2007) built upon this by highlighting the need for educators to be well-prepared with a range of skills, attitudes, and foundational knowledge to create culturally responsive classrooms that respect and foster a safe space for all learners and their identities. Researchers spoke to UDL and CRSP guidelines in their future directions for considering multiple literacies in early literacy instruction for dual language learners such that students from different backgrounds feel included and valued. Hilaski (2020) built upon this finding by emphasizing the cultural mismatch culturally and linguistically diverse students face when transitioning into early literacy instruction. This paper explored the significance of expanding childrens' vocabulary in mindful manners that are culturally inclusive and align with UDL foundations of accessibility and CRSP frameworks for equity. Naqvi et al., (2012) further built on this idea because they showed how multicultural, multilingual, and overall globally diverse perspectives enhance student learning thus contributing to increased emergent literacy skills.

Overall, researchers across the sample highlighted the importance of acknowledging student identities in early literacy instruction to enhance the accessibility, quality, and equity of the lessons. Researchers accounted for UDL and CRSP approaches in their analysis to ensure a comprehensive examination of equity and inclusivity in early literacy practices. The UDL framework was employed to assess how early literacy interventions can be designed to be accessible and effective for all learners, regardless of their abilities or backgrounds. Simultaneously, the CRSP framework was brought into the analysis because it focused on identifying strategies that recognize and value the diverse cultural and linguistic backgrounds of students, promoting their engagement and success. This dual approach enabled a thorough evaluation of the literature, highlighting best practices and gaps in the implementation of equitable and inclusive early literacy education.

Research Question Three

Lastly, articles were scanned for emerging patterns in the findings with research on representation, equity, and inclusion in early childhood literacy. Overall, all articles within our sample reflected themes of DEIJ and its significance in the lives of young readers in early childhood education. The following three themes emerged from the thematic analysis: Bilingual integration for multiple literacies, DEIJ in the classroom, and classroom community fosters emergent literacy (see Table 2.0).

Bilingual Integration for Multiple Literacies

Graces-Bacsal & Myra (2022) highlighted the importance of integrating cultural and linguistic diversity among dual language learners in early childhood literacy. Long et al. (2013) similarly shaped their qualitative study to further emphasize the dual identities that bilingual students bring to literacy lessons. Purnell et al. (2007) built on these strengths by showcasing the variability and power of multilingual instruction for all learners in emergent literacy.

DEIJ in the Classroom

Graces-Bacsal & Myra (2022) deeply analyzed the importance of instructing young learners on economic, social, and personal issues around diversity and equity in early childhood instruction. They posited emergent literacy as an opportunity to grow awareness and empathy across all learners in the classroom. Similarly, Hilaski (2020) built upon this by showing how having these conversations in early childhood education settings can contribute to building awareness and vocabulary in young learners. Lastly, Purnell et al. (2007) emphasized that children bring their

own unique identities into the classroom, which shape how they view the world through DEIJ lenses.

Classroom Community Fosters Emergent Literacy

Graces-Bacsal and Myra (2022) demonstrated that integrating student identities into classroom instruction enhances a collective learning experience. Hilaski (2020) described this as a communal learning environment that strengthens emergent literacy skills for all learners. Long et al. (2013) emphasized that while diversity encompasses various aspects together, it can create a representative environment reflective of real-world settings, preparing learners for the future. Naqvi et al. (2012) highlighted this in their exploration of cultural and linguistic sensitivity when designing learning spaces that foster emergent literacy skills.

Discussion

Preparing early educators to cross-pollinate CSP and UDL ensures that learning environments are proactively developed to be responsive to the student's academic, social, and behavioral needs (Alim et al, 2017). Instead of retrospectively integrating elements responsive to student needs, a cross-pollinated approach acknowledges and celebrates the funds of knowledge—abilities, assets, and backgrounds—that children bring to the classroom, reflecting them in their learning environment (Paris, 2012). Central to the combined UDL-CSP framework is the idea that children should see themselves in their curriculum while being provided multiple paths to access learning (Alim et al., 2020). Realizing pedagogical approaches and learning environment creation that reflects these ideas is no simple task, however, as it requires early educators to engage in deep reflection on their own practice, identify equity gaps in their classrooms, and thoughtfully redesign the curriculum to address the needs of all learners.

The first research question focused on examining the study characteristics, including study design and methodology, of current research on culturally diverse and responsive approaches in early childhood literacy. The sample (n = 5) employed different research methods such as anecdotal assessment, ethnography, thematic analysis, quasi-experimental observational studies, and the constant comparative method to approach their investigations around their respective topics about diversity and emergent literacy instruction. Researchers used these varied approaches to evaluate the significance of culturally responsive practices in early childhood literacy instruction.

The second question explored the importance researchers placed on culturally responsive and representative literature in enhancing student engagement, learning, and motivation in early childhood education. Across the sample, researchers investigated topics such as difficult concepts in early childhood literacy, bilingual education, multiple literacies for diverse learners, cultural mismatches in instruction, and the role of linguistic and cultural backgrounds in emergent literacy skills. These studies emphasized the significance of using developmentally appropriate stories to address critical topics, recognizing student identities to promote culturally responsive learning, preparing educators with the necessary skills for creating inclusive classrooms, expanding children's vocabulary in culturally inclusive ways, and leveraging multicultural perspectives to enhance student learning. Overall, the findings underscored the value of acknowledging student identities in early literacy instruction to improve accessibility, quality, and equity in educational settings aligned with the CRSP framework and UDL guidelines for instruction.

Lastly, the third research question utilized thematic analysis and concept mapping to identify three emerging patterns across the sample: Bilingual integration for multiple literacies, DEIJ

in the classroom, and the role of the classroom community in fostering emergent literacy. Across the studies, researchers highlighted the importance of integrating cultural and linguistic diversity among dual language learners, emphasizing the dual identities of bilingual students and showcasing the power of multilingual instruction in emergent literacy. They also delved into instructing young learners on social, equity, and personal injustices to promote awareness and empathy in the classroom. The significance of student identities in building a collective learning experience, fostering emergent literacy skills, and preparing learners for the future was emphasized across the studies.

Limitations

This topic is relatively new to educational studies as states nationwide are working to better understand the manners of CRSP and UDL in early childhood literacy instruction. In this light, despite our team not putting any filters or restrictions on our database searches, we have a limited scope in our final sample, which yielded only five articles. Additionally, as more scholars are likely working to publish their findings, the existing literature may not yet reflect the full scope of research being conducted in this area. Consequently, it is challenging to draw definitive conclusions about the effectiveness and implementation of CRSP and UDL in early childhood literacy instruction based on the current sample. Future research should continue to explore this emerging field to provide a more comprehensive understanding.

Future Directions: Applications for the Field

For the field of early childhood education research and early childhood educators looking to design learning environments that are accessible and inclusive proactively, considerations for ensuring children's successful mastery of emergent literacy skills and engagement in a barrier-free learning environment should drive the planning process (Bennett et al., 2016). Early educators should also be aware that current school practices privilege certain forms of knowledge and practice in literacy (i.e., printed text, monocultural representation, and background knowledge) and can create barriers for children from diverse backgrounds and those with diverse dis/abilities. This further becomes a setback in academic achievement as these students transition to consider post-secondary education options (Bayly, 2020). For example, children in early childhood settings, including those with disabilities, may be unable to access literacy if the texts are print-based and require alphabetic knowledge or decoding skills they may not possess (Cope & Kalantzis, 2015). Additionally, some children with diverse motor, visual, or auditory abilities may not be able to handle, use, or listen to these texts (Hudson & Browder, 2014). This contributes to the academic achievement gap that prevents students from pursuing higher education and related opportunities as they maturate through the grade school system (Kennedy et al., 2012).

Additional considerations should be made for how literature that captures student engagement will foster children's interest in learning to read in the emergent literacy stage. Given that the student population in the United States continues to represent a more culturally and linguistically diverse population, early educators need to look beyond the historically monocultural, monolingual, and single access points to curriculum and instruction currently used in early literacy programs (Carroll et al., 2019; Cohn, 2020).

Cross-Pollinating UDL and CRSP

Early educators should be willing to adapt and customize their approach in response to their current children's unique needs and experiences. Mindful practices require ongoing observation,

reflection, and collaboration with children, families, and colleagues to create a truly inclusive and responsive learning environment. Particularly, early educators must strive to avoid tokenism or approach these practices as mere add-ons to existing teaching methods. Instead, teachers should strive to integrate these practices into their teaching meaningfully by first considering the myriad implications for children from historically minoritized communities in the classroom. Children may have diverse needs and experiences, and attending to the intersectionality of a student's diverse identities may require the teacher to be sensitive to all of their concerns, which may be, at times, conflicting.

Teachers should also be willing to recognize and address instances where power imbalances may negatively impact children's learning experiences. Third, teachers need to engage in ongoing learning. UDL and CRSP are complex and evolving practices, and teachers should be willing to engage in ongoing learning and reflection to understand and implement them fully. These efforts might involve attending professional development sessions, reading relevant research, or collaborating with colleagues interested in these practices. The following will provide an overview of how early educators can thoughtfully and intentionally cross-pollinate UDL and CSP in their emergent literacy curriculum in ways that align with the Division of Early Childhood's Recommended practices.

Developing Equitable Curricular Goals to Guide Planning

Beginning with the goals of an early literacy curriculum, NELP (2008) suggests that eleven core knowledge and skills should be addressed in an early literacy curriculum. These elements can be introduced and practiced with children in various ways through research, practice, and theory. To fully engage all children, early educators, and researchers can focus on developing CRSP-aligned goals that allow children to explore and share their identities through the exploration of children's literature and the sharing of personal narratives. Both researchers and teachers can then ensure that all children have equitable means for achieving the established goal. A commitment to a CRSP-UDL approach to early literacy instruction should also include opportunities for active family participation as children develop increased literacy skills when multiple stakeholders participate in the child's academic endeavors early in their school lives (Clarke et al., 2009).

Future areas of research and practice should emphasize the critical importance of including families in emergent literacy programs. Establishing a strong home-school connection not only sets families up for long-term success with schools but also provides children with additional opportunities to engage in literacy activities. This connection also creates avenues for families to share recommended books, stories, traditions, and celebrations with early educators. To further advance this field, researchers and educators should explore the following areas:

- Investigating which emergent literacy skills are targeted by lessons and determining effective strategies for involving families in achieving these goals.
- Developing and assessing the accessibility of educational materials to ensure all children can benefit from them.
- Designing and evaluating collaborative activities that sustain the classroom community and foster the development of children's emergent literacy skills.

By addressing these areas, future research and practice can enhance the effectiveness and inclusivity of early literacy education.

Creating Flexible Discourse Opportunities for Children

A final consideration for researchers is developing an empirical knowledge base that embeds elements of CRSP and UDL in emergent literacy would create opportunities for children to engage in meaningful conversations. Making space for student voice and classroom discourse in both schools and academic literature are core elements of CRSP (Hammond, 2014). However, for some children and marginalized groups, classroom conversations can present multiple barriers that do not get discussed in research. Driven by the UDL Guidelines (CAST, 2018), early educators and researchers working with these populations should strive to offer children multiple means of action and expression. For example, instead of offering one option for demonstrating knowledge or engaging in classroom discourse, options can include small group classroom dialogues, video narratives, artistic expression, poetry, painting, or poster creations that allow children multiple opportunities to express themselves and share their ideas. These opportunities promote lifelong learning that leads children to pursue higher education prospects in the future (Ne'eman & Shaul, 2023).

Conclusion

Early educators can still deliver evidence-based practices with holistically focused goals that address the needs of all learners. By engaging in an instructional design process guided by UDL and CRSP, teachers, children, and families are empowered while compassionately sharing, learning about, and viewing the world around them through emergent literacy instruction. While this manuscript has aimed to guide applying multiple curriculum design frameworks to emergent literacy, further research can support inclusive practices in early childhood literacy that combine UDL and CRSP. Representation starts by giving a voice to all families and children.At the same time, further directions promote increased belonging and inclusiveness by continuing the conversation on sensitivity and representation for all learners.

About the Authors:

Melody Mann is a first generation doctoral student, McNair alumna, and former McNair/TRIO writing specialist who is at the University of Maryland, College Park. Her research interests focus on equity and inclusion for diverse students in special education, specifically Punjabi American immigrants. Dr. Matthew Love and Dr. Sudha Krishnan are both Assistant Professors at San Jose State University. Dr. Love's research focuses on Universal Design for Learning to promote inclusive education for all learners in special education. Dr. Krishnan's research focuses on implementing literacy practices using pedagogies based on socio-cultural theory that can provide challenging and empowering education for students with disabilities. Together, all authors are dedicated to creating holistic representation for historically underrepresented populations in academia.

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EMPIRICAL RESEARCH

Unveiling Success: Low-Income Students Define Effective Institutional Strategies

Author:

Austin Hayes Morell
University of Mary Hardin-Baylor
austinhayesmorell@gmail.com

Abstract

Trends in higher education indicate a gap in success for low-income college students compared to students of other incomes. The voices of those low-income students must be used to determine interventions that may lead to their success. This qualitative, phenomenological study was designed to inform the practices of higher education institutions by sharing the experience of successful low-income students through the lens of Tinto's Theory of Departure (1993) and Rendón's Model of Success for Underserved Students (2006). Data collection and analysis occurred using Interpretative Phenomenological Analysis (IPA) as a guide. Findings included the importance of relationships throughout the college experience, the impact of finances on the college experience, the need for individualized and holistic institutional supports, and the influence financial aid and assistance can have on retention. Based on the results of this study, recommendations for institutions of higher education include an investment in people and programs to facilitate relationships, allocating funding directly to support students from low-income backgrounds, providing services that meet holistic needs, and ownership of the campus climate. Recommendations for future research are also offered.

Keywords: Low-income, college students, graduation, persistence, retention, student success

Introduction

Higher education in the United States has a perpetual challenge with income being a factor in how likely a student is to graduate (Alon, 2011; Barbera et al., 2020; Bell & Glass, 2019; Cahalan et al., 2020; Plucker & Peters, 2018). In 2019, 13% of students from the lowest income quartile, compared to 62% of students in the highest income quartile, had attained a bachelor's degree within six years. Why is this? While attainment had trended upward for all income groups since 1970, the gap in degree attainment between the highest and lowest income quartiles was larger in 2019 than in 1970 (Cahalan et al., 2020). Higher education institutions have multiple compelling reasons to care about this issue. Aside from this being an important social justice issue (Alvarado et al., 2020), Pell Grant recipients' graduation and retention rates are now included in the data considered for ranking by U.S. News and World Report (U.S. News, n.d.). Despite institutional attention, there has been little research regarding effective institutional practices based on understanding low-income college students' experiences.

The purpose of this study was to identify the experiences and perspectives of successful low-income college students within higher education, specifically institutions not typically found within the literature (i.e., institutions graduating 50% or less of their students receiving Pell Grant), through the lens of Tinto's Theory of Departure (1993) and Rendón's Model of Success for Underserved Students (2006). Model of Success for Underserved Students. There is an urgent need for a more comprehensive understanding of the systems in place that impact these students and how the overall outcomes for low-income college students can be improved (Renbarger & Long, 2019). This study furthers our understanding of the issues that affect low-income students' outcomes and provides recommendations for policymakers and higher education administrators by revealing interventions that positively impact degree completion for low-income college students.

What Impacts the Success of Low-Income College Students?

The literature surrounding low-income college students in the United States has focused on access to higher education, academic preparedness, enrollment choice, financial aid, campus engagement, retention, and completion (Alvarado et al., 2020). The reality is that low-income college student success is a concern for higher education institutions because of the gap between their retention and completion rates compared to their higher-income peers (Alon, 2011; Bell & Glass, 2019; Cahalan et al., 2020; Plucker & Peters, 2018). Retention and graduation research must focus on institutional factors rather than only focusing on the student (Barbera et al., 2020; Plucker & Peters, 2018). With this in mind, the following few pages set forth essential considerations that impact outcomes for low-income students, including college costs, programs that support these students (e.g., TRIO SSS), the role of the institution, and intersectionality.

College Costs

College affordability is the primary barrier to college completion for marginalized students, including those from low-income backgrounds (Long & Riley, 2007). Decreased state support, partnered with the lack of government financial aid reform, has left students and their families financially responsible for the increased cost of education (Boatman & Long, 2016; Cahalan et al., 2020; Lowry, 2018). In 2016, the average net price of college (cost of attendance minus financial aid) was $15,914 for students in the lowest income quartile and $31,604 for the highest-income quartile (Cahalan et al., 2020). The percentage of income needed to pay the net price of college for the highest income quartile was 14%, while students from the lowest income quartile required 94% of their average annual income to pay for college (Cahalan et al., 2020).

The College Board (2019) reported that tuition and fees had increased 222% at public, 4-year institutions since 1985. A challenge presented by the increase in tuition and fees is that they have greatly surpassed available financial aid offerings, which are necessary for low-income students in higher education (Alon, 2011). Wages have not kept up with inflation, which, combined with the rising cost of tuition, exacerbates the challenge of affording higher education (College Board, 2019). The gap in financial aid often results in additional challenges for students, influencing their need to work and, subsequently, degree completion (Choitz & Reimherr, 2013; Engle & Tinto, 2008).

The Higher Education Act of 1965 authorized several federal aid programs to support individuals seeking higher education, including the Federal Pell Grant program, the most extensive federal grant program available for low-income undergraduate students (Congressional Research Services, 2021). Although the Pell Grant has helped lower the tuition cost for students, the average cost (tuition, required fees, and room and board) has significantly outpaced the Pell maximum award amounts. Unfortunately, students and parents must often manage tuition, fees, and other expenses not covered by their financial aid package (College Board, 2019). In 1975, the maximum Pell Grant award covered 67% of the average cost of attending college. For the Pell Grant award to cover two-thirds of the college's average cost today, it would have to be $16,484 compared to the $6,095 it was in 2018-2019 (Cahalan et al., 2020). Stated plainly, the buying power or how far a Pell Grant could go in funding a college education has decreased in value using constant dollars and the percentage of tuition that may be covered. Even with current tuition prices outpacing Pell Grants, rigorous studies have concluded that Pell Grants still significantly positively impact low-income college students' access and outcomes (Alon, 2011; Umbritch, 2016).

TRIO Programs

The Higher Education Act (HEA) also established support programs intending to increase the access and success of disadvantaged college students. In 1968, Special Services for Disadvantaged Students was authorized through an amendment of the HEA. The term "TRIO" was used to describe the original three existing programs, Upward Bound, Talent Search, and Special Services for Disadvantaged Students, later renamed Student Support Services (U.S. Office of Postsecondary Education, 2011). Over the years, the programs have been expanded, and additional programs have been added to consist of seven programs today. These programs are Educational Opportunity Centers, Ronald E. McNair Postbaccalaureate Achievement, Student Support Services (SSS), Talent Search, Upward Bound, Upward Bound Math-Science, and Veterans Upward Bound (U.S. Department of Education, 2022).

TRIO SSS serves college students to reach undergraduate degree completion by enhancing retention, graduation, and transfer rates through required services, including academic tutoring, course selection, financial literacy skill-building, and support for financial aid and admissions applications. Additional services such as mentoring, career counseling, stipends, and related programming are available. Participants in SSS programs are primarily first-generation or low-income students, though these programs may also work with a certain number of students with documented disabilities (Dortch, 2018).

Research has been conducted to evaluate the effectiveness of TRIO SSS programs toward reaching their stated goals. Scholars have found that students who participate in TRIO SSS may have higher grades and are more likely to persist (Chaney et al., 1997). For instance, Thomas et al. (1998) suggested that TRIO SSS programs could play a key role in closing the graduation gap between students of different incomes. In a separate study, Dortch (2018) reported that TRIO SSS programs can "foster an institutional climate supportive of potentially disconnected students" (p. 8). Dortch's (2018) finding alludes to TRIO SSS's role in shaping an institutional climate and improving the sense of belonging among college students.

Institutional Role in Support for Low-Income College Students

While economic factors play a crucial role in determining the persistence of college students, institutions have developed interventions and programs to support and retain low-income students (Babineau, 2018; Plucker & Peters, 2018). Support programs on a college campus often include "scholarships to offset the need to work, summer bridge programs, freshmen seminars, student affairs programming, mentoring groups, learning communities, comprehensive tutoring, and supplemental instruction initiatives" (Morales, 2014, p. 94). Researchers advocate for a combination of financial and additional academic and social support, which highlights the trend toward the importance of non-cognitive factors on college success and persistence (Babineau, 2018; Broton & Goldrick-Rab, 2016).

Higher education institutions, including administrators, faculty, and staff, are crucial in molding student motivation and fostering retention through active engagement (Cruz & Haycock, 2012; Tinto, 2017). Morales (2014) argued that faculty members serve as the "cultural glue" (p. 100) that connects the students to their institution of higher education. More recently, scholars have emphasized the involvement of institutions in assisting students who need or desire to work on campus, providing aid for summer sessions to fill cognitive gaps, and increasing financial aid because of the economic hardships, particularly during the COVID-19 pandemic (Alvarado et al., 2020).

Integration into the campus environment and students' sense of belonging, is also a key to retention (Engle & Tinto, 2008; Strayhorn, 2012). Low levels of integration (both academic and social) may be caused by the economic hardships and financial aid challenges faced by low-income students (Engle &Tinto, 2008). Engle and Tinto (2008) propose that one institutional strategy to enhance academic preparedness, facilitate the college transition, and foster campus engagement involves implementing specialized programs to serve underserved student populations. Low-income students may experience several challenges with a sense of belonging because of their financial position, including an inability to acquire or keep up with technology, pressure to spend on social activities to build relationships, and the need to purchase academic materials (Nguyen & Herron, 2021). The obstacles students face due to financial strains often reduce their ability to connect or engage on campus (Goldrick-Rab, 2016; Jack, 2016; Nguyen & Herron, 2021).

Intersectionality

Students from low-income backgrounds often have intersecting identities, specifically that of racial minority or first-generation identities (Roughton, 2016). The idea of intersectionality was first introduced by Dr. Kimberlé Crenshaw, who explained that the simple definition of discrimination may only consider one identity like race or gender. She coined the term intersectionality to highlight that multiple identities may interact and compound inequality and disadvantage (Crenshaw, 1989). Holding multiple marginalized identities may intensify a student's challenges regarding a sense of belonging versus only holding one marginalized identity (Bettencourt, 2021; Little et al., 2019; Vaccaro & Newman, 2016). In their research, Soria and Stebleton (2012) highlight that minority, low-income, and working-class students were disproportionally represented in the population of first-generation college students. Researchers emphasize the importance of not generalizing low-income students as all having other marginalized identities but also considering intersectionality, especially when challenges can be compounded with issues of racism or inaccessibility (Alvarado et al., 2020; Bettencourt, 2021).

Theoretical Framework

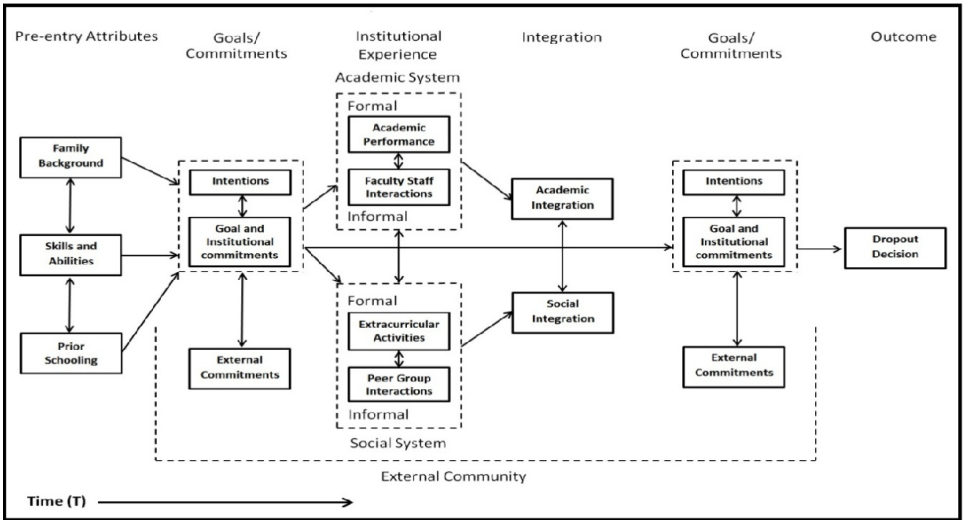
Tinto's Model of Institutional Departure (1993) was used as the primary theoretical framework to guide this study, focusing on increased student retention through institutional interventions. Rendón's Interactive Model of Success for Underserved Students (2006) was used as a secondary lens to counteract some of the limitations associated with Tinto's model regarding its applicability for marginalized populations.

Tinto's Model of Institutional Departure

Tinto's (1993) Model of Institutional Departure explains the interactive components involved in a student's ultimate persistence or higher education departure. A student begins with pre-entry attributes consisting of various components divided categorically, including sex, race, intellectual ability, financial resources, and educational experiences. This student then interacts with higher education institutions comprising an academic and social system. The integration of the individual, both intellectually (academic) and personally (social), continuously modify their intentions (goals) and commitment (motivation).

Tinto (1993) placed educational and institutional commitment at the beginning and the end due to its dynamic nature in the journey toward degree completion. Each of these systems have both formal and informal structures; for example, interaction with a faculty member in class (academic, formal) compared to out-of-class (academic, informal) and extracurricular organizations (social, formal) compared to casual peer interaction (social, informal). External factors (i.e., work, family, community) affecting an individual's persistence are also considered in Tinto's latest model when in his previous model, external factors were assumed unchanged (Tinto, 1993). A visual representation of this model can be found in Figure 1.

Figure 1: *Tinto's Model of Institutional Departure (1993)*



Institutional departure may occur for several reasons. A student may not be academically integrated into an institution and, consequently, perform poorly scholastically or lose motivation or commitment to their goals. A student may also be misaligned socially and feel isolated or too socially integrated, negatively affecting their academic integration. Therefore, the model calls for a balanced—not to be confused with symmetrical—system integration. A negative interaction in either system can also lead to decreased commitment, especially to the institution, resulting in departure (Tinto, 1993).

Income intersects with this model, both directly and indirectly. Financial resources are "viewed as part of the broader set of individual attributes, and the model argues that the primary impact of financial resources (as distinct from financial aid) upon persistence will be indirect" (Tinto, 1993, p. 116). Most directly, this can be seen in Tinto's (1975) use of the economic theory of cost and benefit to explain why a student's institutional or goal commitment may waiver if they decide using time or money in an alternative manner would have a higher payout (Tinto, 1975). This departure decision is complicated by the increased cost of higher education (Cahalan et al., 2020).

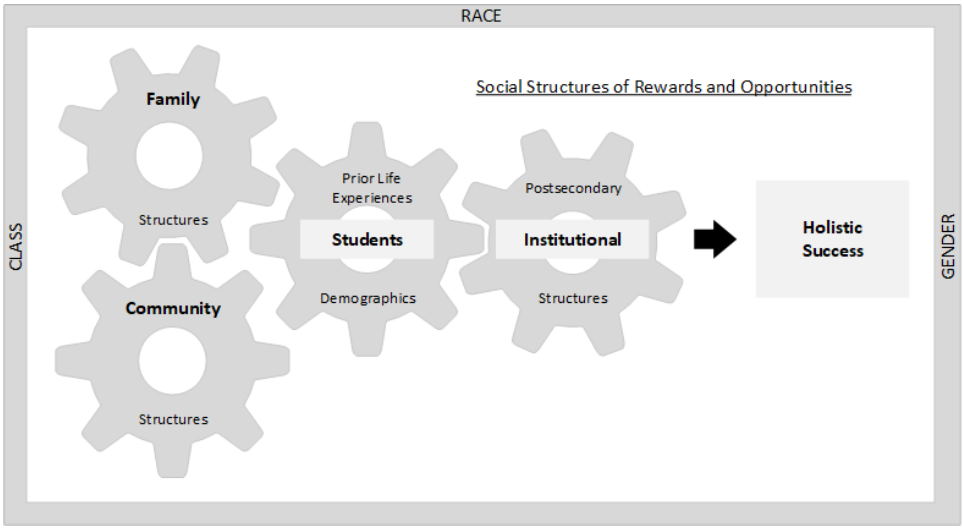
Rendón's Interactive Model of Success for Underserved Students

Criticism of Tinto's model has primarily focused on the lack of consideration for diverse populations, especially when those students do not share the same backgrounds or identities as their peers or faculty (Rendón, 2006). Tinto's (1993) model also requires a student to behave in a "typical" way, which may not be true of underserved students (Rendón, 2006). As a response to this criticism and an attempt to be inclusive, Rendón's Interactive Model of Success for Underserved Students (2006) was also used as a theoretical framework.

Rendón's (2006) model includes the image of gears, intentionally representing a system in constant motion interacting with other structures multiple times and in various ways. The model has four structures of experience: family, community, prior life experiences, and postsecondary education environments. The student's interaction in the model may be forward and backward, positive and negative, as they progress. The interactions between systems are shaped by students' identities, such as race, class, and gender (Rendón, 2006). The family structure may include parental support, expectations, or financial resources. Community structure may consist of mentors, networks, or faith-based organizations. Prior life experiences may include high school, military experience, or other experiences pre-matriculation. The postsecondary structure may include diverse faculty representation, multicultural curriculum, mission, values, and policies. Student success at the end of the model is holistic and includes academic, social, emotional, and spiritual development (Rendón, 2006). A visual representation of Rendón's (2006) model can be found in Figure 2.

In providing context for the model, Rendón (2006) explained that a focus on institutional action rather than student characteristics should be the focus of research and recommendations for practice. She recommended involving underserved students in the research process about themselves and that students should not be approached from a deficit lens. Rendón (2006) further recommended face-to-face interviews with underserved students to understand their experiences better (Rendón, 2006).

Figure 2: *Rendón's Interactive Model of Success for Underserved Students (2006)*



Research Method & Design

An experiential qualitative phenomenological research design guided this study. Phenomenological research reveals common themes amongst individuals who have experienced a central phenomenon, defined as "the key concept, idea, or process studied in qualitative research" (Creswell & Guetterman, 2019, p. 16). Specifically, interpretative phenomenological analysis (IPA) was used in this study. This approach focuses on lived experiences that are significant to the participant and examines in detail how they make sense of and attach meaning to these experiences (Eatough & Smith, 2012; Reid et al., 2005; Smith et al., 2009).

The three core components or theoretical underpinnings of IPA research are phenomenology, hermeneutics, and idiography (Larkin et al., 2006; Smith et al., 2009; Smith & Nizza, 2022). Hermeneutics is an understanding that a person exists within a particular context in the world and has an interpretative understanding of that world (Smith et al., 2009). IPA employs double hermeneutics through data collection because the researcher makes meaning of the participant's description of their experience when trying to construct themes while the participant also makes meaning of their own experience as they share with the researcher. Idiography explains the concern with the particular individual, as shown through the dedicated focus on each case and participant (Smith et al., 2009).

This study aimed to understand low-income college students' lived experiences and perceptions to inform institutional practices that may lead to participants' success and retention. The research questions that guided this inquiry were:

- How do successful low-income college students describe their experiences at institutions that graduate less than half of their Pell recipients?
- What are low-income college students' perceptions of institutional practices intended to positively impact student success?

Sampling & Data Collection

Purposeful sampling procedures are required for IPA (Smith et al., 2009). Therefore, criterion sampling (Creswell & Guetterman, 2019) was used to identify participants who matched the criteria outlined for participation within a specific institutional setting. Due to the case-by-case nature of IPA, a small sample size is necessary. A small sample of nine participants was used. In their senior year, participants were low-income college students in good academic standing, who were prepared to graduate or had recently graduated. The setting was a sample of R2 institutions of higher education within the United States that had a graduation rate of 50% or less for their Pell-eligible students (according to 2020–2021 IPEDS data) and TRIO Student Support Services (SSS) programs. The definitions of low-income, good academic standing, and prepared for graduation aligned with the definitions of each institution, and students self-selected to participate based on the stated criteria. All participants received a form of need-based financial aid either from their institution or from the federal government through Pell Grant.

Recruitment occurred by identifying gatekeepers at various institutions aligned with the defined setting. For example, the Pell Institute for the Study of Opportunity in Higher Education assisted with gaining access to TRIO SSS program directions for participant recruitment. After each interview, participants were encouraged to forward the study information to other students they thought might be eligible, a method called snowball sampling (Creswell & Guetterman, 2019). In the recruitment email sent to gatekeepers, an emphasis on experience was communicated to recruit participants whose successful experience in college was meaningful to them (Smith et al., 2009).

With IPA's focus on rich data collection, the interview process is crucial. Participants must be "able to tell their story freely, on their terms, taking the time to reflect and think about what to say, and to express their thoughts, feelings, and concerns without feeling judged" (Smith & Nizza., 2022, p. 19). Semi-structured interviews lasting an average of 60 minutes allowed flexibility for the participant to drive what was covered. This also allowed the researcher to engage in the dialogue alongside the participant to identify and interpret the relevant meaning, as found in IPA research (Eatough & Smith, 2012; Reid et al., 2005; Smith et al., 2009). Interviews were conducted virtually through the Zoom video-calling software, alleviating geographic constraints.

An interview protocol was developed containing ten open-ended interview questions focused on how participants have experienced navigating college as low-income students. Questions were developed utilizing IPA's theoretical foundation and recommendations. To increase validity, the interview protocol was reviewed by three professionals connected to student success and low-income students.

Procedures for Data Analysis

Data analysis began by transcribing the interviews. Transcription was done by the researcher and through the transcription software, Otter.ai. Transcripts were formatted based on Smith and Nizza's (2022) recommendations, and the analysis followed IPA's guidance to generate an insider's perspective (Larkin et al., 2006; Reid et al., 2005). A hallmark of IPA is that transcripts are analyzed case-by-case using cumulative coding (patterns of meaning within the transcript) before integrative coding (patterns of meaning across transcripts; Larkin et al., 2006). Returning to the foundational concept of idiography, IPA requires a thorough analysis of one participant's interview before proceeding to the next participant's interview (Smith & Nizza, 2022). The following steps, provided by Smith and Nizza (2022) and supplemented by Smith et al. (2009), were utilized for data analysis in this study:

- **Read and write exploratory notes.** This first step includes engaging in depth with each transcript. Exploratory notes were made in the right column of the transcript.
- **Formulate experiential statements.** These statements or phrases were concise and captured what emerged concerning the meaning of the participant's experiences. Each statement might map to more than one line of the transcript. These statements were interpretive (not descriptive) and were grounded in the data of the transcript.
- **Find connections and cluster experiential statements.** This step aims to synthesize and distill experiential statements into a refined grouping representing the meaning gleaned from the participant interview. The research questions guided this process, and statements were connected through a manual process.
- **Compile a table of personal experiential statements.** After clustering was completed, each cluster was named with a personal experiential theme, including direct quotes from the participant and page and line references for each theme.
- **Set aside the first case and move to the next one.** This step also included bracketing knowledge from the first case to approach the second with an openness to interpret its meaning on its own.
- **Conduct a cross-case analysis.** Once all cases had been analyzed, a look across cases for commonalities and differences occurred. This resulted in a new table of group experiential themes representing all participant interviews.

This study's findings summarized the essence of participants' experiences and identified commonalities in their experiences and perspectives of the central phenomenon of navigating college as a low-income student (Saldaña, 2021). Credibility was established through member checking to confirm transcript accuracy (Creswell & Guetterman, 2019). All participants received a copy of their interview transcript for review and had the opportunity to clarify or edit their statements, increasing trustworthiness.

Findings

Seventy institutions met the parameters of the setting, according to data from the Integrated Postsecondary Educational Data System (IPEDS), being very high (R1) or high (R2) research institutions graduating 50% or less of their Pell-eligible students. Nine students, or recently graduated students, from four universities participated in this study. These four institutions were all R2, public institutions that graduated between 48% and 50% of their Pell recipients and had undergraduate TRIO Student Support Services (SSS) programs on their campuses. Additional information regarding the campus context was gathered through a website review and participant interviews. Table 1 provides a summary of participating institution's characteristics with pseudonyms to maintain anonymity.

Table 1: *Institutional Profiles*

#	Pseudonym	Type	Carnegie Classification	Undergraduate Enrollment	% of Pell Grant recipients	% of Pell Grant recipients who graduate within 6 years
1	University of South Central	Public	R2: High Research	33,175	41%	49%
2	South Central State	Public	R2: High Research	29,801	46%	47%
3	Great Plains State University	Public	R2: High Research	9,847	23%	47%
4	New England University	Public	R2: High Research	12,269	50%	49%

Note. Data was reported through the U.S. Department of Education's National Center for Education Statistics (NCES) College Navigator and Integrated Postsecondary Education Data System (IPEDS).

Study Participants

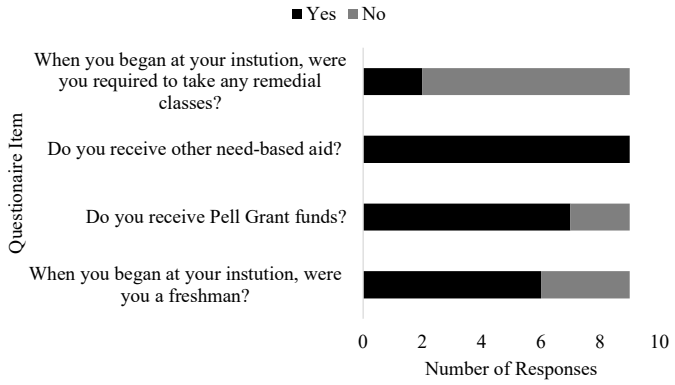
While not all participants were Pell Grant recipients, all received some form of need-based aid, which qualified them for this study. Participants were recruited by identifying gatekeepers within institutional student support programs and TRIO SSS with contact information found on institutional websites and provided by the Pell Institute. Participants completed a questionnaire before selection. All students who met the participant criteria by graduating or being prepared to graduate within the academic year and receiving need-based aid were selected for the study. Table 2 summarizes some of the participants' questionnaire responses associated with demographic information.

Table 2: *Study Participants Demographics*

#	Pseudonym	Race	Gender	Age (in years)	Pell Recipient	Institution	First-Generation College Student	TRIO SSS
1	Gabe	Hispanic	Male	25	Yes	3	Yes	Yes
2	Lydia	White	Female	21	No	1	No	No
3	Annalise	Black	Female	20	Yes	2	No	No
4	Sage	White	Female	21	No	1	Yes	No
5	Leigh	White	Female	22	Yes	3	Yes	Yes
6	Victor	Hispanic	Male	26	Yes	1	No	Yes
7	Monica	Hispanic	Female	21	Yes	1	Yes	Yes
8	Angelica	Hispanic	Female	22	Yes	4	Yes	Yes
9	Iman	Hispanic	Female	22	Yes	4	Yes	Yes

In addition to demographic information, the questionnaire allowed participants to provide information about their status and participation at their institution. This included whether the student participated in required remedial education or whether they had transferred into their institution. As shown in Figure 3, most participants were Pell recipients and began as first-year students.

Figure 3: *Responses to Participant Screening Questionnaire*



After thorough data analysis, four themes and 13 subthemes emerged based on participant responses to 10 interview questions. The themes, subthemes, and corresponding participants are outlined in Table 3 below.

Table 3: *Summary of Themes and Subthemes*

	Gabe	Lydia	Annalise	Sage	Leigh	Victor	Monica	Angelica	Iman
Theme 1. Experiences in college are centered on relationships.									
1a. Peers and social connections		X	X		X	X	X	X	X
1b. Professors and major	X	X	X	X	X	X	X	X	X
1c. Support Programs	X	X		X	X	X	X	X	
Theme 2. Experiences include strong financial considerations and impacts.									
2a. Investment language	X		X	X	X		X	X	X
2b. Stress and mental health		X	X	X	X		X		X
2c. Living situations and basic needs	X		X	X	X	X			
2d. First-generation student identity	X			X	X		X	X	X
Theme 3. Successful institutional interventions are individualized and provide holistic support.									
3a. People		X	X	X	X	X		X	X
3b. Programs	X			X	X	X	X	X	
3c. Climate	X	X	X				X		X
Theme 4. Financial aid and assistance are crucial institutional support for low-income students' degree completion.									
4a. Impact	X		X	X	X	X	X		X
4b. Decreases stress		X	X	X	X	X		X	X
4c. Costs considered		X	X		X	X	X		

Theme 1 and Theme 2 are in response to the first research question regarding the experiences of low-income college students. Theme 3 and Theme 4 are in response to the second research question, looking at low-income students' perceptions of institutional practices designed to support them. The following section explores these themes and sub-themes more fully, utilizing data from participants' interview transcripts to maintain validity and increase transparency.

Theme 1. Experiences in College Are Centered on Relationships

As participants described their experiences as low-income college students, a consistent connection to relationships was found. One participant, Iman, explained her experience in college as being impacted by a support system, including professors and friends. Despite the challenges she had faced during her college experience, another participant, Angelica, emphasized the importance of relationships. She explained, "all the stuff that I've gone through and the stuff that people usually deal with. It's, like, if you don't have a relationship, in a college, like, who do you go to?" Across all nine interviews, three aspects of relationship development were most significant: the descriptions of relationships with peers or social connections, relationships with support programs, and faculty relationships within their academic departments.

Among Peers and Social Connections

Both theoretical frameworks (Tinto, 1993; Rendón, 2006) detail the importance of social integration for the retention of college students. Several participants specified how relationships with peers and social connections affected their college experience. Lydia, Annalise, Leigh, and Iman explained that friends or social connections with peers were an impactful and essential component of their college experience. Tying this back to retention, Annalise reflected, "I think the greatest impact was the friends that I made. . . . I found that if I was by myself, I don't know if I would have finished college." Other participants detailed the strategies they implemented to foster social connections. Support programs, residence halls, and student organizations were among these vehicles. Monica described the process of "getting out of [her] comfort zone" by talking to people in class, asking questions, and being kind to "feel more comfortable and more like a community" with her peers. Regardless of the approach participants selected, social connections and community among peers were relevant to most experiences at their various institutions.

With Professors and Academic Majors

All nine participants discussed their experiences and relationships with professors. These relationships came from class, work experience, research, and immersion experiences. In general, many professors seemed distant in large core curriculum classes and failed to engage with students. Other professors, often found within the participants' major courses, did engage or build relationships and were seen as unique, memorable, and influential. Relationships developed when professors got to know students personally, asked how they were, and engaged authentically. Gabe explained that there was a time a professor reached out to him individually when he was considering dropping out, which caused him to think, "You are human; you do care," when he had previously seen professors as intentionally creating professional boundaries between themselves and students. Similarly, Annalise felt empowered and capable based on encouragement from one professor who acknowledged her hard work and focus on learning in a particularly challenging class. Angelica also had an impactful professor who would make himself available as a resource to the students, causing her to think, "Wow, like, they care." Lydia acknowledged the importance of a professor acknowledging her unique experience as an international student, which impacted her sense of belonging and connection to campus.

Relationships with professors outside the classroom also had an impression on participants. Leigh had a unique and impactful relationship with a faculty mentor through research and work-study. Similarly, Sage detailed a close relationship she established with a faculty member connected to her peer leader program when she described, "I also worked closely with faculty members. I worked with a lady for the entire time I was mentoring, and her and I became very close, we had similar things going on in our lives."

Within Programs Intended to Support Students

Most study participants were connected to and involved in various programs intended to aid their success. Overwhelmingly, participants credited their involvement in these programs as having a positive and beneficial impact on their experience. For example, Lydia, being an international student, mentioned programs around campus such as the "International House" which provided her a place to connect with other international student and have access to staff members specialized in meeting her unique needs. Similarly, Monica was part of a program offering similar services as TRIO SSS called "Breakthrough." She reflected on her relationships within that program when she stated,

> *"I can go to them because I know that they'll guide me in the right place when my parents can't … Breakthrough has all the resources. And that's why, you know, I think it's a really good program."*

Gabe, another participant, experienced a general struggle with a sense of belonging at his institution, except for how he described the TRIO SSS program as his "second family." Angelica did not establish social connections with the campus or TRIO SSS program in general. She did, however, strongly connected with a TRIO SSS advisor, and she credits a significant portion of her retention to the support and guidance provided by that individual. This advisor relationship replaced the support her academic advisors and academic college failed to provide.

Leigh, a TRIO SSS participant, described how she differentiated relationships through her experience. While she relied on her work-study supervisor and faculty mentor for academic support, as detailed previously, she sought TRIO SSS staff for emotional support. She spoke highly of this program, explaining that it aided in both her social and academic success, consistently pointing to the relationships she built with TRIO SSS staff. In addition to the structured support programs, working on campus also offered support to others in the study, such as Victor and Sage, enabling them to connect with peers, faculty, staff, and campus resources. Overall, it was clear that experiences in college for participants were centered around relationships and these relationships were found within peer and social connections, the academic major and with professors, as well as within support programs, including TRIO SSS.

Theme 2. Experiences Include Strong Financial Considerations and Impacts

In addition to relationships, finances were another vital factor affecting participants' experiences. Among participants in the study, finances were a prominent component of their college experience. Most participants considered their experiences and made decisions, consciously or unconsciously, with their finances in mind. Many approached college and other choices utilizing a financial lens and spoke of college as an investment. However, finances were also often a cause of stress, affecting mental health, and were considered when navigating things such as living situations and access to basic needs, such as food, housing, and transportation. In addition, financial standing also intersected with other identities held by these students, specifically that of first-generation college students, and affected how they described their experiences at their institutions.

Financial Lens with Investment Thinking

A common remark from many participants was that they viewed their experiences through a financial lens and used investment language when discussing higher education. As seen in the data, investment language took on slightly different meaning for each participant and ranged from the value of a college degree, the cost of not working, the potential salary of future employment, and the return on tuition dollars paid by participants. Annalise and Anjelica exhibited this idea of investment language when they each explained whether a class or their efforts were worth it. Annalise explained, "I had to be a little bit more careful compared to other students, you know, other privileged students, of what classes to take because it is my money." Sage echoed these remarks when she justified her diligence in attending all classes. She saw skipping class as a waste of money. She attributed some of her retention to graduation to this factor.

Iman's decision-making process for her major involved careful consideration of the cost and benefits, contemplating the money spend on tuition and the potential income loss from not working. She explained, "So I kind of have to see if this is the major that I'm choosing. Is it worth investing in? You know, is it really worth, you know, going to, like, not working and going to school instead." Similarly, Monica combined these ideas of decision-making around major and investment when she explained that she experienced stress considering retaking classes or going on study trips because of the debt she may incur. She detailed,

> *"It is stressful to think about, you know, oh retaking a class, if I need to, going on more trips, doing things that, you know, are completely out of my budget, because I've already added on, you know, so much debt."*

Stress and Mental Health

Mental health was a topic many participants brought up with little encouragement. Many times, poor mental health and financial difficulties went hand in hand. Finances caused stress in part because of a desire and possibly an expectation to give back or provide financial assistance to other members of the immediate family. Monica and Iman both mentioned this idea multiple times in their interviews. Specifically, Monica detailed that she had been working since she was 16 to support herself and seek financial independence. Iman more explicitly described her financial responsibilities, including books for class, and needing to work because she needed to help her parents. Additionally, Annalise described the distress that considering and navigating limited finances had on her. She stated, "I had to think about that since I was like 16. It's, it takes a mental toll on you."

Lydia, an international student who may face deportation if she cannot fund her education, described her anxiety as she considered how she would pay her tuition bill. She was able to navigate these concerns by seeking help and identifying staff who advocated for her needs of financial assistance and ensured there were resources to cover her tuition costs. At the beginning of her college journey, Leigh admittedly had experienced poor mental health. She "worried about money the entire time," "lost weight," and was "really stressed because I didn't have enough money." Sage's stress was similar; as she explained, it "eats you," but her anxiety was associated with the number of loans she took out. In addition, participants were also transparent about the extent to which their financial challenges impacted their living situations and ability to meet their basic needs.

Effect on Living Situations and Access to Basic Needs

Many participants explained that their financial challenges affected decisions about and access to ideal living arrangements and basic needs such as food and transportation. Gabe shared

that he had been homeless in the past and made decisions to prevent a similar situation from occurring again. An interesting subset of this data was the perception of on-campus housing accommodations. Sage and Leigh selected their on-campus residence halls based on the cheapest option. Sage compared her room to a "cement box" and felt her educational experience was not equitable to that of other students with more money.

She explained,

> *"And some students are able to afford them these really nice places, and they get such a better education and college experience than students that are having to live in the less advanced dorms, like me."*

When Annalise was forced to move out of the residence hall and into an apartment because she could no longer afford it, she detailed the various financial responsibilities she took for granted on campus and the challenges that came. She explained that she no longer had a meal plan, making it difficult to access campus dining, and she needed to buy groceries. Transportation was also a barrier, and the cost of eating on campus without a meal plan became unaffordable. Annalise explained at length the challenges she faced in managing a budget for a car, gas, rent, and groceries. Angelica echoed these thoughts when she explained,

> *"When people think about college, you don't think about, like, your bus pass, like, your food, like, other small stuff, like, makes your life easier. It's not just about, like, showing up to school, it's like, "Who's going to pay your food, your breakfast, your lunch?" What about those days, like where you don't want to cook dinner after a long day?"*

Other participants also discussed food insecurity and its effect on their mental health and social connections, as discussed previously. Sage joked about how her friends thought she loved peanut butter and jelly sandwiches. She elaborated, "[I] just went with it. But they didn't know it because I literally couldn't even, like, get anything else to eat."

Intersections with First-Generation College Student Identity

When asking participants to reflect on their college experience and explain their perspective as low-income college students, there was a consistent connection to other salient identities. More specifically, different intersecting identities were brought up when discussing finances. The most common of these identities was the first-generation status. Leigh made this connection when discussing the stress finances created in her life. She connected this financial stress to her family's educational background:

> *"I come from a first-gen college background. And my parents always, like, fought a lot about money. And so, like, even to this day, money is, like, a stressor for me."*

Monica, Angelica, and Iman spoke more generally about this intersection. For instance, Monica mentioned this identity's challenges and pressure when considering which institution to attend. Interestingly, she described changing the institution she planned to attend, right before classes began her freshman year and ended up at a campus that felt more diverse, more welcoming, and was closer to her family. Her father pushed back on this decision and there was some disagreement on which institution to attend passed on perceived prestige and amplifying her first-generation identity as she navigated this tension with her father. Similarly, Angelica focused on the first-generation identity and explained that it brought "a lot of struggles as a student" some of which included feeling ostracized from other students in the honors classes at her high school and navigating her parents' status as immigrants. Iman reflected on her father's amazement with her success and the fact she had made it to higher education. She detailed a

time they were visiting her university when he said, "I never thought I would like see my daughter in the university or even be in a university myself." She continued, "So, I kind of took that to heart. And I was like, I'm gonna run with this degree and take it wherever it, well, it takes me really."

Theme 3. Successful Institutional Interventions Are Individualized and Provide Holistic Support

Participants consistently identified that being treated with respect and seen as an individual by their institution was important to them. It was apparent that when support was holistic, meeting more than one need alone, the participants found it most valuable. Institutional campus climate, the emphasis on recognizing students as unique individuals and holistic programming converged, influencing participants' sense of belonging. Financial factors also impacted how likely the participants were to engage with institutional interventions (e.g., student support programs).

Institutional Support Through People

Individualized and holistic support from the institution was often delivered through interactions with people. It is worth noting that, when asked about their institution's role in their success, several participants initially expressed a negative view. However, they went on to describe individuals, many of whom were employed by the institution, such as professors, therapists, supervisors, and advisors, who played significant roles in their success. Other participants, however, viewed the individual's support as an extension of institutional services. While admittedly disconnected from her institution and not accepting many resources or help, Angelica spoke the highest praises of her TRIO SSS advisor.

Similarly, Lydia attributed the support she received to her academic success and connected those people to the institution. Like Angelica and Lydia, Annalise explained that the institution supported her success and retention by creating an "umbrella" of support and being assigned to a "good advisor."

Leigh offered an intriguing perspective in which she adjusted her reliance on individuals according to her specific needs. She took advantage of a support program and therapist for emotional support. However, she looked to her professor and work-study supervisor to "hook [her] up with a lot of academic kind of situations." Sage and Victor mentioned their supervisors in work-study positions and others. Similarly, Iman referenced her professors as being involved in her success, as she stated, "[they] sort of resourceful to me, challenged me in mentally in any way that I needed to really."

Institutional Support Through Programs

Another vehicle for holistic institutional assistance is formal support programs, many of which overlap with the relationships detailed in both Theme 1 and Theme 3a above. TRIO SSS was the first support program that stood out to many participants as an impactful institutional initiative that met many needs. Gabe explained that TRIO SSS provided funding, food, and tutoring resources. While his experience with and perception of the institution he attended was generally negative and tense, he still spoke highly of the TRIO SSS program. Leigh was a self-proclaimed marketer of the TRIO SSS program and attributed much of her holistic (academic, social, and financial) support to this program. She enthusiastically explained this by stating, "Okay, we have free printing. We have one-on-one tutoring. We have your own advisor that you can go into their office and cry whenever, basically. And then like every Friday, they had a community event, so they'd have, like, food or, like, an event or, like, a craft. Angelica echoed, "I feel, like, programs like SSS are great. And there's an extension of this offered to [New England University]."

Outside of TRIO SSS, Victor and Sage indicated that the strongest institutional impact on their experience was their on-campus student employment positions. "Victor confidently identified work-study as the most impactful institutional intervention. He discussed his experiences with the program and the relationships he formed there. Similarly, Sage attributed her success to being employed in a peer mentoring program.

Institutional Support Through Campus Climate

While students shared identities of "low-income" or "first-generation," other identities (racial, ethnic, and cultural) were more valuable for some in establishing a sense of belonging and connection to the university. Positive campus climates led to perceptions of being regarded as an individual, not a statistic. For most participants, the connection between campus climate and a sense of belonging was woven into their original decisions about which institution to attend. Annalise, a Black woman at a predominately Hispanic institution, described her appreciation for the diversity found on campus and the opportunity to learn from others. Monica changed her decision about attending the institution she had initially planned to enroll in after experiencing discomfort during a summer program. The diversity at the school she chose made her feel more welcome and comfortable. She explored the importance of representation when she explained,

> *"I think it was just having more people that look like me, more minorities, more people. It [was] just showing that a school cares, or, you know, cares to include other minorities, in their academics, in order to all make us feel welcome."*

In a similar tone highlighting representation, Iman was pleasantly surprised when she arrived on campus to find it was "so diverse" with students who looked like her. Alternatively, as powerful as diversity and representation can be, it is detrimental when absent. Gabe, for example, did not find a connection with or see many students who looked like him. After having people mistake his ethnicity, he explained that his campus climate was not inviting. Participants highlighted their perspective of successful institutional interventions delivered through people or programs, that were individualized and holistic, within a campus climate that provided the opportunity for a strong sense of belonging as a key finding in retaining low-income college students.

Theme 4. Financial Aid and Assistance Are Crucial Institutional Support for Low-Income Students' Degree Completion

Impact

An overwhelming number of participants discussed the impact of financial aid and assistance as institutional support for their degree completion. Iman powerfully summarized this by explaining, "I think if it weren't for those grants, I wouldn't finish, I wouldn't have finished school." Others echoed these thoughts calling their institutions generous and appreciative for both the reasonable cost they were being charged compared to other students. Annalise explained that her institution "really played a huge role in my finances" by "trying to help you as much as possible." Sage also highlighted that the scholarship she discovered later in her college journey "helped tremendously." Victor explained that he used financial aid to meet all financial needs, and Monica detailed her appreciation for scholarships to make her degree more attainable.

While the appreciation of financial aid was seen across the board, there were also opportunities for improvements and suggestions from participants. Sage, Victor, and Annelise spoke about accessing food on campus and the challenges these costs presented. Gabe was critical of a lack of sustainability in his aid. While he appreciated programs such as TRIO SSS that provided financial assistance, he explained, "Those were only, like, a one-time semester thing that was,

like, at the beginning. And so, it'd be nice to have something multiples, like, you know, one at the beginning, one at the end, and one at the middle."

Financial Aid Decreases Stress

A standard narrative across the participants was the stress and mental health impact of financial challenges. Conversely, financial aid was seen as institutional support that decreased this stress. Annalise described the scholarship she won when preparing for college that helped her cover the cost of tuition. Sage directly connected the idea of financial aid to retention when she noted, "if more students knew about [applying for scholarships], maybe they would, you know, be able to stay in college or maybe be able to have less financial stress on themselves."

In addition, Leigh reflected on a time she could tap on her advisor in TRIO SSS to connect with financial aid and get a "random amount of money" she needed, which aided her retention and decreased her stress. Angelica was also appreciative and spoke explicitly of the financial aid her institution provided, aiding in overall comfort. When asked what aided his confidence that he would graduate, Victor responded, "The financial aid, to know that my school is being paid for." Financial aid was necessary for participants to attend their institution, but it also helped lower their levels of stress associated with finances, increased their overall wellness, and allowed them to be successful both inside and outside the classroom.

Finances Considered

An essential aspect of institutional interventions designed to support students is the consideration of financial factors when determining whether they will utilize or take advantage of existing support services. Leigh and Lydia both spoke of their use of therapy. When asked specifically whether their therapist was located on campus, they confirmed and cited the cost of the service. Leigh summarized, "Because it's free on campus, I do on-campus therapy."

Another participant, Annalise, spoke very highly of her involvement with student organizations. Through one organization, she participated in a self-defense class that had a lasting impact on her. When discussing this class, she explained, "The club made sure to make it affordable." When Victor reflected on how his institution supported him and could support other low-income students, he explained his appreciation for the health insurance that was provided at a much lower cost by the school. Lastly, like the investment lens described in Theme 2, Monica viewed an immersion trip with her major through a financial lens. She recommended that institutions consider the supplies and gear needed for this experience. She explained,

> *"Whether it's for being out in the field in my classes, you know, hiking boots, hiking pants, all of this gear to be out in the field. So, it wasn't cheap at all. And you know, [the institution] providing that would have also helped."*

Participants were clear in their appreciation for financial support from their institution as well as open to providing recommendations where these direct and indirect financial supports could be provided for others.

In sum, the central findings of this study underscore the pivotal role of financial considerations and interpersonal relationships in shaping the collegiate experiences of the participants. The findings also demonstrate how the identity of a low-income college student intersects with other salient identities, notably that of being a first-generation college student, and its subsequent ramifications on their mental well-being. Moreover, participants express a pronounced demand for institutional practices that provide comprehensive support, with an emphasis on financial aid and assistance, as a means to mitigate the stress and financial challenges they encounter during their academic journey.

Discussion

When asked to describe their experiences, participants overwhelmingly included references to and descriptions of relationships they had built during their college experience. Positive social interactions have been shown to increase retention rates for low-income students more than academic interactions (Barbera et al., 2020; Capizzi et al., 2017; Tinto, 1993). Participants described these social connections being built in residence halls, classes, work, and around campus. Relationships with faculty and staff were also critical (Eitzen et al., 2016; Cruz & Haycock, 2012; Morales, 2014; Tinto, 1993). Participants in this study also described positive relationships with therapists through on-campus counseling centers, advisors within TRIO Student Support Services (SSS) programs, work-study supervisors, and coaches. These relationships and programs influenced participants' college experience and supported them in their work toward graduation.

When asked about their institution's role in supporting them, most participants referenced relationships with specific faculty or staff members who helped them. This aligns with research indicating that institutional support interventions, including people and programs, aid in retaining low-income students toward graduation (Babineau, 2018; Plucker & Peters, 2018). The people mentioned by participants were connected to areas such as TRIO SSS, counseling services, work-study, professors within majors, and peer leader programs. Participants recognized the value of comprehensive support and sought it through programs such as TRIO SSS, which provided multiple services, addressing their needs holistically. The holistic focus was effective because it included financial assistance partnered with wraparound services, which aligns with research about effective university programs (Broton & Goldrick-Rab, 2016; Boatman & Long, 2016; Herbaut & Geven, 2020; Renbarger & Long, 2019; Umbritch, 2016).

In this study, when asked how being a low-income student affected their college experience, participants spoke directly about the intersection of their identities as first-generation college students. A study by the National Center for Education Statistics (NCES) in 2017 found a larger representation of first-generation college students in the population of lower-income households than those whose parents had college degrees (Redford & Hoyer, 2017). This was also seen in the participants of this study, with 67% coming from first-generation backgrounds and 78% being eligible for the Pell Grant. Success in college, including college degree attainment, is highly correlated with the level of parental education (Cahalan et al., 2020). Participants in this study saw their first-generation and low-income identities as highly connected. Less financial opportunities based on lack of knowledge and increased challenges based on parental education levels were some of the sentiments that were shared across experiences.

Intersecting identities, including race and ethnicity, are important factors when studying low-income college students, although it is important not to assume these identities are shared (Roughton, 2016). Individuals with racially minoritized identities are often over-represented in the population of low-income students (Engle & Tinto, 2008). While a complex idea, a sense of belonging is shaped by campus climate and students' regular interactions with peers, faculty, staff, and administrators (Stebleton et al., 2014). Students' lack of belonging can be amplified when they possess multiple, intersecting marginalized identities, especially those associated with race and class (Bettencourt, 2021). Several participants spoke of the diversity of their campuses and how it made them feel at home. Others felt a void in this area if they were unable to see themselves represented on campus. Engle and Tinto (2008) recommended that institutions communicate their support of and commitment to underserved students through special programs targeted to them. This institutional commitment shown through ownership of the campus climate and dedicated programs for low-income students is an essential concern for higher education institutions.

In addition, college affordability and economic challenges are primary barriers to degree completion for students from marginalized populations, including those from low-income backgrounds (Alon, 2011; Long & Riley, 2007). This was seen through the increased stress that financial challenges brought to participants in this study. Many participants articulated the support they received from their institution as critical. This support was provided through financial aid toward tuition and fees and other financial support such as money for books, food, and funds available during the COVID-19 pandemic. Participants discussed the crucial impact of financial support from their institution, the decreased stress from having financial aid, and how they considered finances in institutional support services.

The issue of college affordability has resulted in the cost of college being pushed to students and their families (Boatman & Long, 2016; Broton & Goldrick-Rab, 2016; Cahalan et al., 2020; Lowry, 2018). While not all participants were Pell Grant recipients, much of the literature has shown the positive effects of Pell Grants and other need-based financial aid to support the retention and graduation of low-income students (Alon, 2011; Chen, 2012; Umbritch, 2016). Therefore, financial aid, while not the only necessary support, is still essential in supporting low-income students to degree completion.

Participants experienced economic challenges outside of tuition and fees and beyond what traditional financial aid could cover (Herbaut & Geven, 2020). A scarcity of financial resources, outside paying for tuition and fees, affects students' ability to engage on campus and their college experience (Broton & Goldrick-Rab, 2016; Jack, 2016; Nguyen & Herron, 2021). Participants explained that they also considered the cost of resources such as counseling and programming to gauge whether they were available to them. Other participants recommended that institutions consider covering additional costs such as supplies, health insurance, or on-campus dining.

Recommendations for Practice and Research

Institutions should reallocate funding to support low-income students with robust financial aid programs. This aid should consider economic challenges associated with tuition and fees, housing, supporting families, loss of income from not working as much during college, access to equitable housing, and basic needs. As recommended by participants, continuous support rather than one-off support may be the most effective in supporting these students. Institutions may consider assessing costs outside tuition and fees to invest resources that may benefit low-income student graduation rates.

In addition to direct financial assistance, an investment in people and programs is recommended. Tinto (2017) calls for professional development in the skills necessary to work with various underserved student populations. In addition to this investment in training, an investment in staff retention is essential, as participants spoke of staff turnover negatively affecting their experiences. It may also benefit institutions to invest in programs that support marginalized students holistically and ensure these programs are fully staffed and funded.

In addition to further investment in financial assistance for low-income students, there are opportunities for institution, state, and federal policy reform. The rising cost of higher education has significantly outpaced the percentage of tuition that a Pell Grant can cover, while state allocations for higher education are decreasing. This fact juxtaposes the positive effect financial aid can have on low-income students' retention, making it clear that something needs to change (Boatman & Long, 2016; Cahalan et al., 2020; Lowry, 2018). Participants of this study relied on and appreciated financial aid allocated to them but still experienced the stress and challenges brought on by economic insecurity. This calls for the federal government to increase the amount

of Pell Grants proportional to the increased cost of college. In addition to this government reform, institutions should evaluate their financial aid policy to ensure there are no barriers to low-income student access and commit to providing more need-based aid.

Institutions should have ownership over their campus climate and understand how this may affect the sense of belonging for low-income students. This may include investment in hiring and retaining faculty and staff representative of the student population, specifically those from marginalized backgrounds. Participants of this study articulated the idea that institutions could communicate their care by taking ownership of the campus climate and, therefore, the sense of belonging of low-income college students.

With most participants coming from TRIO SSS programs, the federal government should increase the funding to TRIO programs, specifically SSS, so that these programs may serve more students on more campuses than can benefit from their presence. Additionally, institutions should work closely with their TRIO SSS programs to embed them into the institution and maximize their impact on low-income student graduation. Already included in the design of TRIO SSS are services in one place, such as mentoring, advising, social connection, direct financial support, and academic resources such as tutoring.

In sum, the findings of this study were consistent with the data and findings of the literature about low-income student success (Alon, 2011; Barbera et al., 2020; Bell & Glass, 2019; Boatman & Long, 2016; Caballero, 2020; Engle & Tinto, 2008; Long & Riley, 2007; Renbarger & Long, 2019; Umbritch, 2016). Recommendations for future research may include bounding the study to a specific state or region of the United States, a more specific institutional type or size, and/or a deeper dive into a single campus. Additionally, modifying the sample population may enhance the literature by focusing on first-generation status, Pell Grant recipients, a specific race or ethnicity, academic major, or transfer status. Lastly, additional research should explore the financial challenges of international students, financial assistance for low-income students pursuing graduate studies, and the effects of the COVID-19 pandemic on low-income student success.

Conclusion

This study provides insight into the experiences of successful low-income college students and their perceptions of institutional support while highlighting university practices that may help retain these students. Leveraging institutional resources, balanced with the students' voices, is a first step toward a more equitable higher education experience for students from low-income backgrounds. A commitment to fully resourced and supported faculty, staff, and programs, increased direct financial assistance, and institutional ownership over the graduation gap based on income is necessary. If higher education institutions genuinely desire to support all students toward degree completion, the voice of successful low-income students cannot be minimized.

About the Author:

Austin Hayes Morell, Ed.D., is an Associate Director of the Center for Academic Success and Engagement at Baylor University in Waco, TX, where she focuses on holistic success and retention strategies for special student populations. Dr. Morell holds a Master of Arts in student affairs administration in higher education from Ball State University and a Bachelor of Science in elementary education from Salisbury University. Her research for this publication was conducted while she was a doctoral student at the University of Mary Hardin-Baylor and interning with the Pell Institute for the Study of Opportunity in Higher Education. As a first-generation college student and previous TRIO Student Support Services staff member, Dr. Morell is committed to enhancing student success in higher education, particularly for those from historically underrepresented backgrounds. She aspires for this research and related publications to influence institutional practices and policies affecting these students. Her research interests include college student success, retention, first-generation college students, students from low-income backgrounds, and persistence. Dr. Morell is dedicated to using methodologies that integrate college student development theories with students' perspectives and experiences, to provide a voice to those most impacted by inequities in higher education.

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EMPIRICAL RESEARCH

DREAMers in Higher Education: Mental Health Challenges, Supportive Factors, and Perseverance

Authors:

Evelyn Ojeda
California State Polytechnic University
eojeda0218@gmail.com

Tatiana Pumaccahua
California State Polytechnic University
ttpumaccahua@cpp.edu

Abstract

DREAMers, or undocumented students, are heavily underrepresented in higher education. According to the United States Census, the U.S. is comprised of 46.2 million immigrants, with 23.8% of immigrants having an undocumented status (Baker & Warren 2024). Despite this number, only 2% of the student population in higher education settings is represented by DREAMers. Although limited, past literature addressing DREAMers in higher education has focused primarily on Latinx individuals and their political and legal challenges. However, there is a paucity of knowledge about these students' lived experiences in higher education, especially as it relates to their mental health. As such, the present qualitative study aimed to address these gaps by examining the mental health challenges, supportive factors, and resiliency that DREAMers (i.e., AB-540, DACA recipients, TPS, ISRT eligible) experience in higher education. Specifically, DREAMers from diverse racial/ethnic backgrounds were encouraged to participate. Moreover, Undocumented Critical Theory (UndocuCrit), derived from Critical Race Theory, is the framework for the present study. Notably, the findings highlight fundamental information on the supportive and challenging factors that impact the mental health of DREAMers and their perseverance within higher education. The emerging categories from the findings demonstrated strong parental influences behind DREAMers' motivation to pursue higher education. In addition to institutions having a dearth of resources for undocumented students, particularly in supporting their mental health.

Keywords: DREAMers, undocumented students, immigrants, higher education, mental health, Undocumented Critical Theory

Introduction

The foreign-born population of immigrants in the United States has grown since the late 1800s (U.S. Citizenship and Immigration Services, 2020). At present, the United States is a country largely made up of immigrants (Azari et al., 2024). According to the 2022 United States Census, there are a total of 46.2 million immigrants in the U.S., within that number, 11 million are undocumented (Baker & Warren, 2024).

Given that undocumented individuals make up 23.8% of the immigrant population in the U.S, it is important to understand how this community is represented in other areas pertinent to the advancement of U.S. society, such as higher education (Baker & Warren, 2024). According to Millet (2022), roughly 15.5% of undocumented individuals hold a bachelor's degree or higher. However, undocumented students only make up 2% of the student population enrolled in U.S. colleges and universities (Nienhusser & Romandia, 2022). Of those, roughly 10% will earn a Master or Doctoral degree (Freeman & Valdivia, 2021).

Increasing the number of undocumented immigrants in higher education is an important aspect to invest in, improving the rates of educational attainment thus benefitting the economy of the United States (Flores, 2015). Despite the challenges they encounter, undocumented immigrants have demonstrated the ability to build on their unique experiences and characteristics to succeed in higher education (Mendoza, 2013). Immigrants' aptitude and intelligence have been key in making the United States affluent, as they have successfully co-founded 25% of advanced technology establishments (Mendoza, 2013).

Supporting the growth of the undocumented student population benefits the average postsecondary attainment in the United States. According to Flores (2015), the United States is behind in resources and profit acquired from postsecondary achievements; thus, underscoring the critical need for improving high school and college graduation rates. Maximizing undocumented students' educational potential presents a valuable opportunity for raising postsecondary degree attainment, acquiring profitable jobs in high-demand fields, adding to tax contributions, and decreasing the need for receiving government assistance (Mendoza, 2013). Altogether, these outcomes highlight the potential benefits of supporting undocumented immigrants in higher education. Post-secondary educational advancement provides an opportunity for these students to become social and economic participants. In turn, their success may support the country's role in the global economy.

It is important to understand the different factors that are preventing the DREAMer student population from attaining higher levels of education. DREAMers is a term that constitutes of various legal statuses, including students that are DACA and non-DACA recipients (Koh, 2024). Students who are not eligible for DACA may qualify for In State Resident Tuition (ISRT), Temporary Protective Status (TPS), and AB540 (Koh, 2024). Due to the different legal statuses, students are presented with distinct benefits and limitations in higher education. For instance, the AB 540 status allows undocumented students in California to be eligible for in-state financial aid. Similarly, ISRT allows undocumented students to be eligible for in-state financial aid in some states outside of California. In contrast, the DACA status allows students to apply for a work permit, driver's license, and a social security number; however, this status must be renewed every two years (American Immigration Council, 2024). Lastly, TPS is a temporary immigration status of 6-18 months that allows undocumented students to have a work permit and a stay of deportation (American Immigration Council, 2024). Further, when it comes to higher education, each state has policies regarding financial aid and educational access for DREAMers (Freeman & Valdivia, 2021). These barriers make the task of finding the right university to attend a much harder endeavor than it seems.

Aim of the Study

There is a paucity of literature focusing on the challenging and supportive factors, beyond political and legal challenges, that DREAMers from diverse backgrounds experience in higher education. Specifically, not much is known about the mental health challenges these students encounter in their academic journeys. This study aims to increase the knowledge of the factors that support and challenge diverse DREAMers' while enrolled in higher education. This study examines these factors within the UndocuCrit framework, to contextualize their experiences and highlight their resilience.

Research Question(s)

To advance the current literature of DREAMers in higher education, a comprehensive investigation of the current study was necessary. This examination focused on the factors that promote and hinder the mental health of DREAMers within higher education. Therefore, the following research questions were developed:

- What supportive factors contribute to the mental health of DREAMers within higher education settings?
- What challenging factors impact the mental health of DREAMers within higher education?

Literature Review

DREAMers endure unique experiences in their higher education journey that affect their mental well-being and identity development. To learn about the mental health of undocumented individuals as college students, there needs to be an understanding of the overall mental health climate of university students. It is equally important to learn about the supportive factors and personal characteristics that have led DREAMers to succeed despite the innumerable challenges they face throughout their time in academia.

DREAMers in Higher Education: Challenging Factors

In addition to documentation status, DREAMers face an array of challenges when navigating the higher education system. A study by Locke and Gonzalez (2020) examined the barriers that arise from racial oppression and social inequality for Latina DREAMers in higher education. The study found that participants had to be highly selective when searching for universities to attend, as they had to take into consideration whether the university accepted DREAMers and provided them with financial support. These findings suggest that DREAMers' undocumented status contributes to financial-related stress and a state of uncertainty of their futures when attending higher education institutions.

In addition to financial-related stress, other common factors that have been found to impact these student's educational experiences include misinformation and a lack of resources available for DREAMers in higher education. Previous studies have shown that not many universities feature resource centers for DREAMers, and as a result, many institutional agents lack the knowledge needed to support DREAMers' educational success (Castrellón, 2021).

Other studies have focused on DREAMERs pursuing graduate degrees. Freeman and Valdivia (2021), more specifically, examined the opportunities and resources offered to undocumented

graduate students. The study found a major lack of programs and resources available for undocumented graduate students. This lack of resources created challenges for these students in terms of their mental health, sense of belonging, and disclosure status (i.e., disclosing undocumented status to institutional agents).

Additionally, a common misconception about DREAMers is that they are all Latinx individuals. Although Latinx individuals do make up a large amount of the DREAMer student population, there are DREAMers from a variety of racial and ethnic groups. Reed and colleagues (2022) highlighted the stigmatization of undocumented students. Skewed perceptions of the racial-ethnic makeup of the DREAMer population as entirely Latinx are not reflective of reality. Notably, other studies have found that non-Latinx DREAMers (e.g., Asian, Black, Middle Eastern/North African, White) are less likely to disclose their documentation status and are often excluded from campus programming and resources aimed at DREAMers (Reed et al., 2022).

Prior research has demonstrated that DREAMer's immigration status, sociopolitical climate, and various policies impact their psychosocial well-being (as reflected in their experiences with stress, anxiety, depression, confidence, sense of belonging, identity development, and emotional stability; Nienhusser & Romandia, 2022). All factors considered, there are several challenges that DREAMers inevitably encounter due to their legal status. It is important to consider the impact of these challenges on their educational trajectories, especially in the context of higher education.

Mental Health of University Students

To further contextualize the mental health outcomes of DREAMers in higher education, it is important to take into consideration the overall mental health of university students in the United States. According to Byrd and McKinney (2012), the student population is becoming more diverse as more minorities, first-generation, and foreign-born individuals are attending institutions of higher education.

As a result, the mental health needs and severity of their symptoms in university students have rapidly shifted in the past couple of years due to the lack of diversified multicultural trained professionals (Byrd & McKinney, 2012). Moeller and colleagues (2020) indicated that increased rates of depressive disorders, stress, and anxiety have been recorded at university campuses in recent years. The severity of mental health symptoms not only affects the students but also the overall university environment.

A major component influencing students' mental health outcomes is the sense of belonging students feel when transitioning to university life. Previous studies have demonstrated that a sense of belonging can significantly reduce symptoms of depression, loneliness, and social anxiety (Moeller et al., 2020). In addition, past literature has scarcely covered the mental health challenges that undocumented students encounter. It is crucial to consider that undocumented students not only face the challenges of being a college student but also the barriers and safety concerns related to their legal status. Therefore, it is important to engage in an in-depth investigation of the mental health of DREAMers to explore the intersection between a student's legal status and well-being.

DREAMers in Higher Education: Supportive Factors

Despite facing significant external barriers, DREAMers have demonstrated a high degree of determination in their educational pursuits. A study by Martinez and colleagues (2021) emphasized that undocumented student's resilience and persistence were the major attributes that helped them overcome the barriers encountered in their educational trajectories. Further,

their research has shown that obtaining an education is an opportunity that DREAMers highly value, as they see it as the main path to strive for success. Interestingly, despite limited resources at universities, past literature demonstrates that DREAMers feel safe from immigration police while on their university campuses (Reed et al., 2022).

When undocumented students have questions or are faced with academic barriers, they are more likely to seek assistance within their universities. Freeman and Valdivia's (2021) findings indicate that DREAMers turn to their mentors, peers, and resource centers for advice regarding their academic plans. As most DREAMers are first-generation students, it is unlikely that a family member can provide them with academic guidance. Additionally, having a community that is supportive of undocumented students can be highly encouraging. For instance, My Undocumented Life is an online service in which DREAMers can find legal services, health resources, scholarships, job opportunities and a blog to connect with other DREAMer students with similar academic journeys (Freeman & Valdivia, 2021). Ultimately, DREAMers' desire to succeed academically is what builds and sustains their resilience in higher education.

A defining characteristic amongst undocumented students has been their perseverance and determination to succeed in their pursuit of higher education. Cortez and Winslade (2018) explored the trajectory of undocumented students from high school through college. The study highlighted that throughout their education, DREAMers encountered numerous barriers that could have kept them from pursuing higher education. For instance, being silenced due to their legal status, fear of deportation, apprehension in trusting others, uncertainty of their futures, and the internalized hopelessness that results from being labeled "illegal." All of these unique factors play a role in DREAMers' identity formation and their resiliency throughout their academic trajectories.

From an early age, DREAMers develop admirable characteristics as they are forced to become aware of the limitations, barriers, rules, and consequences that can result from their legal status (Cortez & Winslade, 2018). Because of their exposure to adversity, DREAMers have the unique ability to adapt in challenging times. It is important to further investigate DREAMers personal characteristics that lead them to persevere in higher education.

Theoretical Framework: Undocumented Critical Theory

When examining the experiences of DREAMer students in higher education, it is essential to consider the sociopolitical context encapsulating them. Aguilar (2018) introduced the Undocumented Critical Theory (UndocuCrit) framework, a model based on the Critical Race Theory (CRT) that highlights the major dimensions impacting the lived experiences of undocumented individuals while acknowledging their resilience and unique stories. In contextualizing these experiences, the UndocuCrit framework focuses on four main principles that are often overlooked in traditional CRT. The first principle, fear is endemic among communities, explains that racist immigration practices, regulations, and policies were created to inflict fear among undocumented individuals. As a result, many undocumented individuals avoid government entities and programs, including higher education institutions. The second principle, different experiences of liminality translate into different experiences of reality, states that differences in legal/documentation status lead to different lived experiences. This principle highlights the importance of providing inclusion and a sense of belonging in undocumented communities. This principle is key, as undocumented individuals' lived experiences are influenced by their education access, documentation status, race, ethnicity, and local context. The third principle, parental sacrificios became a form of capital, emphasizing that parents of undocumented individuals are a strong motive behind their resilience.

Undocumented individuals witness and understand the sacrifices their parents make for them, and as a result, they are motivated to succeed. This principle also explains that parental sacrifices can be a cognitive capital for undocumented individuals. More specifically, witnessing their parents' navigation of barriers influences immigrant students' motivation to gain knowledge, skills, and abilities to then create support networks. Lastly, the fourth principle, acompañamiento is the embodiment of mentorship, academic redemption, and community engagement, explains the importance of creating resources and providing knowledge to fit the experiences of undocumented individuals (Aguilar, 2018). The UndocuCrit Theory encourages future research about DREAMers to contribute to the framework and tailor it if needed. This framework was tailored and implemented in the design of the present study's methodology and guided the data analysis process.

Methods

The present study intentionally used a qualitative approach to provide an in-depth illustration of undocumented students' experiences in higher education. Using a qualitative approach allowed participants to provide a detailed description of the experiences they encountered not only as university students but also as undocumented individuals in academic settings. Participants were given the opportunity to express the personal characteristics they developed throughout their education journey. It should be noted that the data collected was more extensive than what is reported as this research is a segment of a larger study.

Participants

This research study explored the lived experiences of undocumented students, ages 18 and above, who attended 4-year colleges and universities in the United States for more than one year. The total number of participants included six students who identified as DREAMers (e.g., undocumented, AB- 540, DACA recipients, Temporary Protected Status, ISRT eligible), as indicated in Table 1. DREAMers from diverse ethnic backgrounds were encouraged to participate in this study.

Table 1: *Participants Demographic Information*

Pseudonyms	Demographic information
Sofia	A senior, 22-year-old female, majoring in sociology with an emphasis in social work and minoring in Chicano studies. Identifies as heterosexual, with Hispanic/Latino ethnicity. Country of origin is Mexico. She is bilingual in English and Spanish. Sofia is attending college in the west side of the United States and is the first in her family to attend a four-year university. Caregiver's highest educational level is some high school. Sofia was a DACA recipient at the time of study and has had DACA status for eight years. She was 1-year old when she was brought to the United States.
Nari	A senior, 21-year-old female, majoring in cultural anthropology. Identifies as heterosexual, with Asian ethnicity. Country of origin is South Korea. She is bilingual in Korean and English. Nari attends college in the Pacific Northwest of the United States and is the first in her family to attend a four-year university. Parents had some undergraduate level of education in South Korea. Nari was a DACA recipient at the time of study and has had DACA status for six years. She was 1-year old when brought to the United States.
Maria	A junior, 20-year-old female, majoring in family human services and Spanish. Identifies as heterosexual, with Hispanic/Latino ethnicity. Country of origin is Mexico. She is bilingual in Spanish and English. Attends university in the West Coast of the United States and is the first in her family to attend a four-year university. Caregivers' highest educational level is an associate degree from Mexico. Maria was a DACA recipient at the time of study and has had DACA status for four years. She was 2-years old when brought to the United States.
Carlos	A senior, 23-year-old male, majoring in animal science. Identifies as queer, with Hispanic/Latino ethnicity. Country of origin is Colombia. He speaks Spanish, English, and a little bit of French. Diego attends university in the West side of the United States and is the first in his family to attend a four-year university. Caregivers' highest educational level is some high school. Diego had an AB-540 status at the time of study and has had this status for seven years. He was 16-years old when brought to the United States.
Diego	A senior, 21-year-old male, majoring in psychology with a minor in French. Identifies as queer, with Hispanic/Latino ethnicity. Country of origin is Guatemala. He speaks English, Spanish, French, Portuguese, and German. Carlos attends college in the West side of the United States and is the first in his family to attend a four-year university. Caregiver's highest level of education is high school. Carlos had an AB-540 status at the time of study and has had this status for eight years. He was 14-years old when brought to the United States.

Note. AB-540 = non-DACA undocumented, DACA = Deferred Action for Childhood Arrivals

Measures

A survey containing 14 demographic questions was utilized in the present study. Questions inquired about participants' age, sex, gender identity, ethnicity, birthplace, and immigration status, among others. Additionally, a semi-structured interview, driven by the UndocuCrit framework, was administered to participants. The interview guide included six main questions related to supportive/challenging factors, mental health, and perseverance. Another 11 questions were included as follow-up prompts that were part of a larger investigation into DREAMers' educational experiences. The present study reports on a subset of eight follow-up prompts to the core interview questions.

Procedures

The study was approved by the university Institutional Review Board before the process of data collection. Participants were recruited via email, letters, and flyers, and social media. Additionally,

recruitment information was sent out via email to DREAMer Resource Centers and other relevant resources and organizations within the United States. Each participant completed an informed consent form, answered the demographic questionnaire, and participated in a semi-structured interview. Interviews were scheduled with each participant and conducted via Zoom, with an average duration of 30-45 minutes. All participants received a $10 Amazon gift card as compensation for their participation, along with a debriefing statement with resources that they could potentially find helpful.

Qualitative Data Analysis

All semi-structured interviews were video recorded and transcribed verbatim by two research assistants. All transcriptions were checked by the two research assistants for accuracy, followed by an additional third review by the first author. Once the transcription and verification process was completed, all team members were trained by the second author on qualitative descriptive content analysis (i.e., inductive manifest content analysis).

Specifically, as part of the training, all participants' responses to the first main research question were read through. Once deeper familiarity of the data was achieved, both authors and research assistants identified recurrent categories across all responses and developed codes (Braun & Clarke, 2006). The codes were then applied to the interview responses for all participants. Following the training, this process was continued by the first author and research assistants for all the remaining semi-structured interview questions. Lastly, it should be noted that prior to the application of the codes to the data, consensus was reached on all the codes. The consensus process involved various Zoom and in-person meetings with the research team. Consensus meetings lasted 3 hours on average to discuss the findings until at least 90% agreement was reached (White & Marsh, 2006). Throughout this process, the first and second authors met weekly to deliberate about the research progress and the qualitative descriptive content analysis. Further, the second author served as the qualitative consultant for the entire study.

Limitations

This study had three main limitations that should be considered. First, the participants of this study were limited to only the western and southern regions of the United States. Therefore, that leads to participants not being diverse enough to represent DREAMers in the entire United States. Undocumented students' lived experiences are highly influenced by the resources they have access to, the social attitudes and political climate they grow up in, and the institutions they attend. In turn, each DREAMer might face different challenges depending on the region they reside in. Next, as a result of being limited geographically, this study was also limited in terms of participants' racial/ethnic diversity. Although DREAMers from diverse ethnic backgrounds were encouraged to participate, five out of the total six participants identified as Latinx. Different ethnicities lead to different lived experiences and perspectives, which limits the generalizability of this study. Finally, there was a limitation in the representation of documentation status. The majority of participants were DACA recipients, which leaves not much representation for non-DACA students. DREAMers' experiences vary depending on their specific documentation status, as they have access to different privileges depending on their status.

Results

The two research questions of the present study were addressed across four semi-structured interview questions. The first interview question explored the supportive factors DREAMers experienced in higher education. Results for this question yielded two major themes highlighting the various ways the students' parents motivated them to pursue higher education and the positive impact faculty, mentors, and fellow students had on their educational trajectories.

The second interview question examined the challenges experienced by DREAMers as they completed their university studies. The results of this question produced four themes. Specifically, participants spoke about the challenges resulting from unhelpful faculty and staff; the lack of university resources for DREAMers; their decreased sense of belonging; and the difficulties in building a social support system.

Next, the third interview question explored the factors that contributed to the mental health of DREAMers. This question yielded one theme that highlighted how their legal status and policies adversely impacted their well-being.

Lastly, the fourth interview question examined DREAMers' perseverance in higher education. This question produced one theme that underscored the ways DREAMers demonstrated their determination to succeed in higher education.

Supportive Factors in Higher Education

Parental Motives

Participants identified two parental motives that contributed to their desire to pursue higher education. These motives included caregiver(s)' sacrifices creating more educational opportunities (n = 5, 83%) and caregiver(s)' immigration journey leading to educational expectations (n = 6, 100%). Amongst the participants, Carlos mentioned the following about their mother's sacrifice in leaving her home country and moving to the United States:

> *"That decision she took to move here really inspired me and motivated me to take advantage of the opportunity she gave me and my brothers and, you know, make her proud and make her feel like it wasn't a bad decision and that she didn't leave her family, her mom, for nothing."*

Nari, another participant, underscored their caregiver(s)' working conditions influencing their desire to pursue higher education:

> *"My parents work in the restaurant industry now, and they work pretty long hours without a lot of vacation days or time off."*

Nari also spoke about the educational expectations their caregiver(s) had of them stating: She really wanted me to try and find opportunities like within bigger organizations. So, I think growing up with that in mind it was kind of, it felt like, it was though, it was the next progression after high school was just to go into undergrad.

Faculty, Mentors, and Fellow Students

Participants also spoke about the roles that faculty, mentors, and fellow students played in their academic success. These roles included faculty connecting students with the campus

community (n = 4, 66%), university staff serving an instrumental role in their academic success (n = 4, 66%), students encountering a person who supported/inspired them to continue their education (n = 5, 83%), and faculty and mentors providing a safe space through allyship (n = 3, 50%). Related to the contributions made by faculty in connecting students with the campus community, Sofia said:

> *'So a lot of my professors in my field of sociology, I guess they, they kind of connected me to other professors that are not in my field. And I guess those are the ones who became like my mentor for McNair."*

Maria also stated the importance of university staff to their academic success by noting:

> *"I still meet with my like center of multicultural advisor, just because like I go over with my degree guidance stuff with her, but I also just like, I'm able to talk to her about like, other topics like applying, like renewing my DACA and stuff."*

Challenging Factors in Higher Education

Faculty/Staff Support

Various categories emerged when participants spoke on whether the faculty/staff in their university were well informed regarding DREAMers' documentation status and if they felt like they provided them with resources. The categories identified included participants feeling that not enough university staff were trained on DREAMers (n = 4, 66%), many university staff being misinformed about DREAMers (n = 3, 50%), and undocumented students feeling that university staff were indifferent toward DREAMers (n = 2, 33%). While discussing whether university staff was well trained on how to help DREAMers, Maria stated, "Not all departments are like educated on like, on like DREAMers or like undocumented students and stuff, which is like kind of a bummer." When speaking about staff being misinformed about DREAMers, Diego indicated:

> *"I feel like they are very misinformed. They're probably still in 2013 trying to figure out how DACA works, many, many, many, I've actually even remember many even though you could still apply to DACA in this, in 2020, 2021, 2022. They still thought that new applications would be accepted. And I was just like you cannot just tell me to apply to DACA when you already know like they're not accepting anybody. So, they're not informed at all."*

In the third category, Carlos stated, "Some of them really don't pay attention or care about people like us." This category illustrated that students are aware that many university staff are indifferent towards DREAMers.

University Resources

When participants spoke about whether they felt like their institution had enough resources for DREAMers, three categories were identified. The categories included universities having some resources, but not enough (n = 5, 83%), resources needing to be more easily accessible (n = 2, 33%), and resource centers needing more DREAMer allies/staff (n = 2, 33%). Related to the availability of university resources for DREAMers, Nari indicated:

> *"I definitely think that they could have more resources for DREAMers, especially given the funding I see for other areas of the university and other student groups. I think that the university could definitely spare more resources for the DREAMers, especially in terms of scholarships or financial aid."*

For the second category, Maria elaborated on the difficulty of accessing resources for DREAMers:

> *"Providing more resources or just making them like, more known. Because I feel like you have to like deep, like dive so deep into like trying to look for all these things."*

Carlos spoke about universities being inadequately staffed with DREAMer allies:

> *"It is always nice to have a little bit more staff that is, you know, focused on helping DREAMers or helping undocumented students. Cause I've seen it with a lot of, you know, students or like classmates that they're struggling with and there's only one or two people at the Dream Center. I wish the Dream Center could be a little bit bigger. It could have more staff so they can reach out to more people and, you know, have that interaction with other students that they might need."*

Sense of Belonging

A category emerged from participants speaking about whether they have felt excluded in their university because of their documentation status. The category identified was that DREAMers felt limited in comparison to documented peers (n = 3, 50%). Maria spoke about how they felt excluded due to their legal limitations:

> *"There's been times when like you hear people talking about like, oh my God, like over the summer we're gonna go to Europe and stuff like that, which is like a little like, you know, like, oh my God, I wish I could like just pack my bags and go. But then also it's like, you know, not like they mean to harm you and stuff like that."*

Diego shared their feeling by saying:

> *"My first year I was kind of naive, and I didn't know much about how my undocumented status could play a role in me getting hired or working. And like I would go, and they were like we can't hire you immediately on the spot. Fine. So, that was hard, and then navigating like trying to get at least work here on campus, it be complicated."*

Social Support Systems

Participants spoke about whether it was difficult for them to build a social support system due to their documentation status. The categories that emerged were that some DREAMers felt building a social support system was not difficult (n = 3, 50%), whereas other participants found it difficult (e.g., due to fear of disclosure, safety concerns; n = 3, 50%). For the first category, Maria spoke about their legal status not affecting their friendships, "I don't think I've had like any issues with like, my legal status at all regarding my friends. And I feel like, I think it's cause I, you know, like growing up like since you were young, like you're pretty assimilated into the community very well." However, in the second category, participants expressed the difficulty of making connections and building a social support system due to the fear associated with disclosure of their legal status. Nari stated:

> *"It was a little bit more difficult to I think forge really deep friendships where they would have to know a lot more about your life. And especially if you were struggling with something under the surface that like you're not sure if they are safe to talk to about, or if they would understand, or like I think it, it can be a bit of a barrier. Even if you know that you can tell them and they're like a safe person I think it, if you have lived as a*

DREAMer for a long time there's still that like fear and uncertainty that you feel. Or that uncomfortableness of like telling somebody about it."

Factors that Contributed to Mental Health

Mental Health as a DREAMer in Higher Education

Participants spoke about the difficulty of navigating being a DREAMer in higher education and the impact it had on their mental health and well-being. The categories identified were that participants felt stressed due to legal status and policies (n = 4, 66%), and the increased pressure experienced as a DREAMer (n = 5, 83%). When discussing feelings of stress as a DREAMer, Nari indicated:

"I think that's significantly been impactful on my mental health like having to navigate that on my own for a good while and navigate like if I study this will I have, will, will there be a job that I can go into as a DREAMer, or like what scholarships am I applicable for or what scholarships are applicable for my situation. Like what can I apply for, what's off limits to me because it's federal money or government money Like can I sign up for food stamps or like state-funded resources or government resources?"

In addition, participants also spoke about the increased pressure as a DREAMer in higher education, Maria stated:

"I felt like I was just like super stressful about like, what I'm gonna do, like all this stuff. Like, you know, like I felt like school was like my only way to like continue like, like to find a good job and stuff. And like, I don't know, like, just knowing that like, I'm mostly undocumented. Like I had to work like a lot harder."

Perseverance in Higher Education

Determination to Succeed in Higher Education

Lastly, participants highlighted that their lived experiences of being DREAMers contributed to their determination to succeed in higher education. Three categories emerged which included using available opportunities (n = 2, 33%), breaking barriers/limits (n = 4, 66%), and building independence (n = 4, 66%). When participants spoke about their determination to succeed through available opportunities, Carlos mentioned that "like a lot of people give up easily and like, you know, you have a world full of opportunities and you don't take them just because you give up before you even try it." In the second category, Jose indicated that their determination to succeed was through breaking barriers:

"Being a DREAMer obviously you grow up different from everyone, you grow up different from other students around you…you see people that are able to do things that you can't do, and it sort of becomes… a driving force to say I want to be able… they say I can't do just because I don't have any papers. And that becomes a huge motivating factor… because you're not expected to actually do anything…the fact that you go far, go above high school, go above an associate's degree in opposed to working right away, and that's the only thing that motivates me to keep going to fulfill my education."

In the last category, Nari describes that their determination to succeed comes from building independence:

"I knew I was a DREAMer pretty young and like watching my parents really struggle to support our family and like go through what they had to go through, in order for me to be able to have this life. I think it, it makes me really determined to find a way to be able to support myself and my family later."

Discussion

The present study explored the lived experiences of undocumented students (i.e., DREAMers) in higher education. The study aimed to contribute to the literature on DREAMers in higher education settings and was purposely created to focus on nonpolitical factors. Hence, this study centered on the challenging, supportive, and mental health factors that DREAMers from diverse backgrounds encounter in their higher education trajectories. To explore the lived experiences of undocumented students, the UndocuCrit framework was used to contextualize DREAMers' experiences.

One of the main principles of UndocuCrit states that the caregiver(s) of undocumented students serve as great motivation for their resilience. Specifically, students witnessing their caregiver(s)' sacrifices bolsters their drive to succeed (Aguilar, 2018). The findings of this study supported this principle, as participants attributed the various sacrifices made by their parents, such as moving to the United States and working long hours, as what led them to have access to many educational opportunities. However, the study also demonstrated that the caregiver(s)' view of education as a pathway to a better life also resulted in caregiver(s) having high educational expectations of the participants. Further, the results of the present study are also consistent with Freeman and Valdivia's (2021) work on the importance of mentors, peers, and resource centers for DREAMers, given that they provide a great amount of guidance throughout their higher education journey. The results of this study also support Freeman and Valdivia's (2021) literature, as faculty, mentors, and fellow university students supported the educational experiences of DREAMers in higher education. Faculty and mentors guided

DREAMers towards resources and opportunities specifically aimed at undocumented students. This in turn contributed to DREAMers feeling supported and inspired to complete their degrees. In some cases, DREAMers were more open to considering the pursuit of a graduate education. Ultimately, those faculty and mentors who provided a safe space and allyship for DREAMers were a key factor in the participants' academic success.

Conversely, four main challenging factors appeared to have a major impact on the participants' academic journey. The results of this study provide supporting evidence that although staff and faculty are key to DREAMers' academic success, most are not trained on how to provide academic guidance and financial assistance to undocumented students. Faculty and staff are often not informed or are often misinformed about undocumented students' legal status and ways to help. According to our findings, this led to DREAMers feeling an indifference from university staff as their unwillingness to learn more about undocumented students' situations is perceived as a lack of care.

At the institutional level, previous literature highlights the challenges encountered from the lack of resources offered to DREAMers (Freeman & Valdivia, 2021). Present findings contribute to the existing literature by demonstrating that resources for undocumented students are extremely difficult to access at universities. Resources for DREAMers are scarce and those that are available are limited to a certain amount or are not being promoted successfully.

Additionally, past findings have underscored the need for institutions to increase the number of DREAMer allies and staff on their campuses and to further expand the resources available

to undocumented students. The lack of resources negatively impacts DREAMers' sense of belonging and decreased their willingness to disclose their legal status to peers (Freeman &

Valdivia, 2021). This study further demonstrates that undocumented students feel limited compared to their peers due to the insufficient DREAMer resources available at their higher education institutions. In turn, undocumented students experience a negative impact on their sense of belonging. Some DREAMers found it difficult to build deep connections with others due to fear of disclosing their legal status. Most DREAMers have safety concerns when disclosing their status, as some peers could react negatively toward them.

A primary focus of this study was to investigate how DREAMers' legal status affects their mental health throughout their academic journey. Throughout the study, findings reveal that DREAMers often encounter social isolation, feelings of hopelessness, and feelings of indifference from university staff. These findings are consistent with previous literature related to the impact of documentation status on DREAMers' psychosocial well-being (Nienhusser & Romandia, 2022). Moreover, the present study shows that undocumented students feel high levels of stress and pressure due to the uncertainty and limited opportunities imposed by their legal status. Undocumented students have to remain vigilant in the search for new opportunities, navigate loopholes, and adapt to ever-changing laws that govern what they can access. Consequently, undocumented students' legal status adversely largely impacts DREAMers' mental health, making it more difficult for them to complete higher education.

Despite these challenges, the results of this study demonstrate the perseverance and determination possessed by undocumented students. The findings are consistent with previous literature indicating that DREAMers are aware, from an early age, of the various structural limitations and barriers present. That said, this awareness appears to influence their motivation to find academic opportunities and alternatives that could help them succeed (Cortez & Winslade, 2018). Our findings highlight that throughout DREAMers' academic journeys, their tenacity in building independence through their academic careers has led them to continuously break barriers and limits imposed by their institutions. In other words, although they are limited in many ways, DREAMers continue searching for better opportunities – using their voice to push institutions and their staff to provide more possibilities and resources for them.

Future Studies

DREAMers continue to be disproportionately underrepresented in higher education and empirical research about their experiences in higher education. It is crucial to contribute to the literature on undocumented students to provide more resources and better understand their needs and concerns. In addition, it would be beneficial for future studies to have larger and more diverse sample populations. This will increase the likelihood of recruiting participants with various racial/ethnic backgrounds and documentation statuses.

Further, future studies should include participants from distinct geographic regions of the U.S., as resources, laws, and attitudes towards DREAMers widely vary across the nation. As every university provides different resources for undocumented students, DREAMers in different regions have unique needs depending on the university they attend.

Implications for Practice

It is important to recognize the importance of representation of DREAMers in research and higher education settings. This study demonstrates that university staff and faculty can make a significant difference in the academic success of undocumented students. In accordance with

the study's findings, faculty and staff must inform themselves about who DREAMers are and the challenges they encounter in higher education. By doing so, faculty and staff can become DREAMer allies to provide better guidance and support to undocumented students. Moreover, universities can implement a DREAMer ally training for faculty, staff, and students to become informed about DREAMers. Universities can also provide more mental health resources and hire professionals who have experience working with immigrants or undocumented individuals.

It is imperative to increase the number of DREAMer resource centers across universities, as the presence of these centers can have a significant positive impact on the educational experiences of undocumented students. In addition, to provide DREAMers with a better sense of belonging and a safer environment, it is encouraged for institutional campuses to make more DREAMer-friendly statements in tangible ways (e.g., murals, posters, badges). Institutions of higher education are encouraged to include DREAMers in diversity and inclusivity statements on university websites and informational sources.

Overall, it is fundamental not only to see DREAMers from an asset perspective but also to acknowledge their strengths and admirable characteristics. DREAMers' lived experiences significantly contribute to their determination to succeed in higher education. The perseverance and resilience of DREAMers are evident from the results of this study. They are driven to succeed in their academic journeys despite the barriers they encounter. Considering their distinctive potential, undocumented students can be some of the most competent and groundbreaking professionals in the United States, when given equitable support and guidance.

About the Authors:

Evelyn Ojeda earned her Bachelor of Arts in Psychology from the California State Polytechnic University, Pomona, where she excelled as both a McNair Scholar and a Sally Cassanova Scholar, and contributed to the Socioemotional Research Lab. During her undergraduate studies, Evelyn developed a profound commitment to the mental health of Latinx and underrepresented communities. Her focus has been on highlighting the critical need for mental health resources for first-generation students and immigrants. This dedication, combined with her experiences as a first-generation Latina and immigrant, motivated her to pursue a Master of Social Welfare at the University of California, Los Angeles. Throughout her academic journey and her personal life Evelyn hopes to be an advocate and bring light to the importance of mental health.

Dr. Tatiana Pumaccahua, an assistant professor in the Department of Psychology at the California State Polytechnic University, Pomona, is a proud first-generation Indigenous Latina. Dr. Pumaccahua is also the principal investigator of the Socioemotional Research Lab, where her work is dedicated to school-based mental health, socioemotional learning prevention and intervention programs, and the cultural adaptation of evidence-based practices by utilizing creative methods. Dr. Pumaccahua is dedicated to improving access to quality mental health services and advancing higher education opportunities for underrepresented students. Driven by their shared commitment to increasing the representation of undocumented students in higher education and raising awareness about their mental health, Evelyn and Dr. Pumaccahua have collaborated on a comprehensive investigation on the supportive and challenging factors impacting the mental health of undocumented students in higher education.

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Appendix A- Demographic Questionnaire

Dear participant: As noted in the consent form, the information you share in this questionnaire is confidential. Participation in this study is voluntary and you may refuse to answer any questions. Thank you!

1. What is your age? _____
2. What is your gender? _____
3. What is your major? _____
4. What is your class standing (e.g., sophomore, senior, etc.)? _____
5. What is your sexual orientation? _____
6. What is your race/ethnicity? _____
7. What is your country of origin? _____
8. What languages do you speak? _____
9. In what region of the United States is the university you are attending located (e.g., north, west, east, south)? _____
10. Are you the first in your family to attend a four-year university? _____
11. What is/are your caregiver(s) highest education level? _____ (Please specify relationship)
12. What is your current documentation status? (e.g., AB-540, DACA recipient, TPS, ISRT eligible, other) Please be specific: _____
13. How long have you had your documentation status? _____
14. How old were you when you arrived to the United States? _____

Appendix B- Interview Guide

Hello, my name is Evelyn Ojeda; I am an undergraduate student from the Psychology Department at the California State Polytechnic University, Pomona. I recently contacted you about participating in an online interview via zoom regarding the mental health challenges and supporting factors you have encountered as a DREAMer in higher education. Thank you again for agreeing to participate. As noted in the consent form, the information you share in this interview is confidential. Any identifying information will be removed from the transcript and pseudonyms will be used. Moreover, this study is voluntary, and you may refuse to answer any questions and/or discontinue the interview at any time. Let's begin.

Throughout this interview, the word DREAMer refers to students that identify themselves as undocumented, AB 540, DACA recipient, TPS, or ISRT eligible.

(Ensure that Zoom is working properly, if technical difficulties arise, re-schedule the interview with the participant.)

With that said, I would like to start this interview by asking you about the supportive factors you have encountered as a DREAMer in higher education…

1. In your view, how has your caregiver (s) impacted your academic journey? Probes include:

- What role has your caregiver(s) journey played in your desire to pursue higher education?

2. In your view, how has your institution supported your academic success? Probes Include:

- What roles have faculty, mentors, and fellow students played in your academic success?
- What kind of resources in your institution have been helpful in your academic journey?

Thank you for those answers. Now, I would like to ask about the factors that have been challenging in your academic journey…

3. In your view, how has your institution hindered your academic success? Probes include:

- Do you feel that your faculty/staff are well informed regarding DREAMers' documentation status and provide you with resources?
- Do you feel like your institution has enough resources for DREAMers?

4. In your view, what challenges have you encountered throughout your academic journey? Probes include:

- Have you ever felt excluded in your university because of your documentation status?
- Do you feel like it has been difficult for you to build a social support system because of your documentation status?

Thank you for sharing. Now, I would like to ask about the factors that have contributed to your mental health…

5. In your view, how has your institution contributed to your mental-health and well-being? Probes include:

- How has navigating being a DREAMer in higher education impacted your mental health and well-being?
- Does your institution provide mental health resources specifically for DREAMers?

Thank you for sharing that information with me. Lastly, I would like to ask about your perseverance in higher education…

6. In your view, what are your personal traits/characteristics that have driven you to succeed in your academic journey?

- What role has resiliency played in your academic journey? (*By resilience I mean your ability to overcome and adapt to challenges that have resulted from your current documentation status).*
- How have your lived experiences of being a DREAMer contributed to your determination to succeed in higher education?

EMPIRICAL RESEARCH

First-Generation College Students and Mental Health: Narrative Inquiry Into Help-Seeking, Community Support, and Perseverance

Author:

Pasha Sergeev
Ohio State University
Sergeev.2@osu.edu

Abstract

First-generation students report higher levels of anxiety and less frequent use of supportive institutional resources than their peers across U.S. colleges. Although an existing body of scholarship presents extensive accounts of first-generation students' experiences and challenges, scholarly works often describe students as lacking the knowledge and skills to succeed instead of focusing on students' assets. My study aims to explore narratives about the ways first-generation students engage in mental health help-seeking and the roles their families and communities play in these processes. Five first-generation undergraduate students from a large, public Midwestern institution shared their stories through interviews and photos. The study results revealed that students' learning about mental health was often surrounded by conflicts with their families and communities, which affected the ways they reexamined their help-seeking strategies in college. While offering many stories of hardships, participants often focused on how they persisted by utilizing support from their families/peers and cultivating internal strength, the processes that fostered new knowledge and skills affirming their mental well-being. Based on the findings, I suggest that more collaborative efforts between K-12 and higher education institutions could support first-generation students by educating families on student experiences and engaging students in reflexive practices.

Keywords: first-generation college students, help-seeking, mental health, asset-based

Introduction

Prior to the COVID-19 global pandemic, first-generation students demonstrated higher anxiety levels than their peers. Concerns have been raised that the consequences of multiple ongoing public health crises in the U.S. may further exacerbate mental health challenges among this group of students across higher education institutions (Liu et al., 2020; Stebleton et al., 2014). Additionally, first-generation students use institutional resources, including ones that aim to support and promote mental well-being, less frequently than their peers due to structural and cultural barriers in education (Richards, 2020). With documented connections between mental health and academic success, it is important to understand how first-generation students engage in help-seeking behaviors as we still operate and recover from the conditions of several pandemics (Eisenberg et al., 2009; Hunt & Eisenberg, 2010).

Considering the wide range of activities and strategies students can pursue while addressing mental health challenges, it is essential to explore their personal and environmental contexts (Garriott & Nisle, 2018). In this qualitative study, I examined first-generation undergraduate student experiences around seeking help with mental health concerns, including a variety of strategies that students choose, whether those are peer support, parental support, self-help, professional counseling, collegiate activities, or community involvement (Garriott et al., 2017; Garriott & Nisle, 2018; Stebleton et al., 2014; Sy et al., 2011; White, 1991). During my empirical investigation, I investigated how first-generation students applied the knowledge and skills gained from their families and communities to search for opportunities that could support their mental health. I adopted an asset-based approach rather than focusing on barriers and challenges students face.

I employed narrative inquiry as a methodological approach because it offered the flexibility needed to examine the multifaceted nature of these health-related processes and could reveal stories filled with meaningful events, relationships, and locations (Hurwitz & Charon, 2013). By offering the student narratives gathered from semi-structured interviews and photo-elicitation, I aimed to contribute meaningfully to the literature that examines contexts around first-generation student mental health, as well as the scholarship problematizing help-seeking amongst undergraduate students.

After conducting a literature review on first-generation student experiences, help-seeking contexts, and activities, in addition to synthesizing scholarly expertise with my own professional experiences supporting first-generation students, I developed a set of guiding questions for this project. The research questions within this study included:

- What role do families and communities play in the stories of first-generation undergraduate students who seek help with mental health concerns?
- How do help-seeking activities and strategies in the realm of mental well-being appear among first-generation undergraduate students?

First-Generation College Students and Help-Seeking Behaviors

First-generation students are a diverse group of individuals who represent a variety of backgrounds and experiences. Thus, in this study, first-generational college status is considered to be an identity that "may be unrelated to one's 'heritage' but relevant to lived experiences, others' perceptions of one's phenotype, or represent cultural capital/skills

required environmentally" (Samuels, 2009, p. 1604). Nonetheless, a rich body of scholarly work demonstrates that first-generation students experience college differently and leave higher education institutions without a degree more often than their peers with parents who hold a college degree (Mehta et al., 2011; Pascarella et al., 2004; Soria & Stebleton, 2012). Within this investigation, I used Peralta's and Klonowski's (2017) definition of a first-generation student "as an individual who is pursuing a higher education degree and whose parents or guardians do not have a postsecondary degree" (p. 635).

Several scholars attempted to explain the reasons behind the unique mental health challenges among first-generation students by highlighting certain factors (Garriott et al., 2017; House et al., 2020). Although there is no unified theory of help-seeking behavior, there is a wide variety of conceptual approaches that often focus on various aspects and characteristics. Rickwood and colleagues (2005) describe help-seeking behaviors as "communicating with other people to obtain help in terms of understanding, advice, information, treatment, and general support in response to a problem or distressing experience" (p. 4). Existing models approach the help-seeking process through various lenses by looking at individual characteristics (knowledge and attitudes around mental health), social structures (access to professional care), modes of receiving help (informal support and professional healthcare), and cultural aspects (Andersen, 1995; Boydell et al., 2013; Guo et al., 2015; Mason, 2010; Rosenstock, 1974; Saint Arnault, 2009).

Scholars cautioned that the fragmentation among approaches might obscure the complexity of individual pathways in which people address mental health concerns (Carpentier & Bernard, 2011). Reflecting on the complexities of individual pathways in addressing mental health concerns, Pescosolido and colleagues (2013) argued that it is essential to "capture both the underlying process or dynamic that drives the search for care and the social, cultural, medical, and organizational characteristics that shape the fate of persons dealing with mental health problems" (p. 505). Considering the goal of this research was to explore students' participation in activities, behaviors, and relationships around pursuing help with mental health concerns, the approach to help-seeking proposed by Pescosolido et al. (2013) offered a beneficial lens to investigate contextual elements through student narratives.

The existing scholarship often focused on specific factors around first-generation students' collegiate challenges and mental health struggles (House et al., 2020; Kiyama, 2011; Mejia et al., 2018). However, many studies utilized a deficit lens, through which "minority, low-income, and first-generation college students are characterized as lacking the skills and abilities necessary to succeed in higher education" (Green, 2006, p. 24). Although the focus is shifting, scholars and practitioners frequently highlight the lack of access to social and cultural capital, supportive environments, and resources rather than the ways first-generation students manage to achieve their aspirations in higher education (Hicks, 2003; Martin et al., 2020; Petty, 2014; Rubio et al., 2017; Unverferth et al., 2012). Reflecting on the dangers of the deficit approach in the realms of educational policy and efforts of student support, Kiyama and Rios-Aguilar (2017) stated that,

> *"The scholarship in higher education tends to assume individuals are able to control their own circumstances, have the freedom to make a variety of choices, and can respond to challenges in predictable, linear, and logical ways ... Our concern is that the field of higher education is perpetuating the idea that under-represented students (and their families and communities) are lacking or deficient simply because they are not doing what 'successful' students do. Since this is the lens through which services, programs, and policies were and are created, it is no wonder why participation, retention, and graduation rates remain painfully low for under-represented college students around the country (p. 4)."*

To combat such a notion, scholars suggest employing strengths-based or asset models that recognize the abilities, knowledge, and skills acquired by students in their communities and families (Kezar et al., 2020; Mein, 2018). By developing several theoretical models and frameworks, such as Community Cultural Wealth (Yosso & Burciaga, 2016), Family Capital (Gofen, 2009), and Funds of Knowledge (Kiyama, 2011), scholars proposed looking at first-generation student experiences with particular attention to the ways in which they employ a wealth of knowledge, support, and skills to succeed in higher education institutional structures that often fail to cater to their needs. Despite the existence of these strength-based approaches, there is still a lack of scholarship employing these theoretical lenses (Lebouef & Dworkin, 2021).

Following the call by researchers to pursue more empirical studies with asset-based perspectives, I exercised the assumption that first-generation students utilized various community, familial, and personal resources in the processes of engaging in behaviors and relationships around mental health. Furthermore, it is important to note that asset-based approaches align well with scholarship, highlighting the value of maintaining strong familial and community relationships in first-generation student experiences, which can shed light on the role of such social connections in the realm of personal mental health (Gibbons et al., 2019; Stieha, 2010). However, I was cautious about developing strong a priori hypotheses before listening to student stories due to the nature of the narrative approach, through which I will engage in efforts that are "…interpretive, and an interpretation is always personal, partial, and dynamic" (Lieblich et al., 1998, p. 10).

Research Design

For this exploration of first-generation student experiences, I chose to operate on the foundations of the interpretivist-constructivist paradigm because it aligns with my aspirations to "discover and understand how people feel, perceive, and experience the social world, aiming to gain in-depth meanings and particular motivation for their behaviors" (Chen et al., 2011, p. 129). This philosophical tradition operates on an ontological stance that departs from the realist perception of the world consisting of objective structures and processes independent of human perceptions. Instead, interpretivist-constructivist scholars believe that "truth" fluctuates based on contexts, views, and experiences because reality is socially constructed by individuals, leading to multiple interpretations of the same events (Van Der Walt, 2020).

I employed the interpretivist-constructivist paradigm as a foundation for several reasons. Firstly, my main goal was to explore the ways relationships, activities, and environments around mental health appeared in first-generation students' stories, and the interpretivist-constructivist approach offered a useful lens that depicts meanings around reality through a complex social interaction process (Schwandt, 1998). Moreover, my plan to depart from the deficit lens applied to educational settings demanded a deeper look at the individual perceptions and interpretations of strategies that first-generation students learned, developed, and utilized. Considering that realist research results often influence current educational policy, the interpretive scientific process aided me in combating the notion of seeing first-generation students as lacking resources, social capital, and skills to succeed in college (Eybers, 2016). Finally, the interpretive-constructivist paradigm bridged the gap between the researcher and the researched through critical reflexive processes and strong collaboration (Tekin & Kotaman, 2013). As a college educator and student supporter, I deemed it critical to build strong bonds with the students participating in the study. It was also essential to acknowledge that my professional experiences influenced the inquiry process through all phases, which I explored further in the article.

Narrative Inquiry

I utilized narrative inquiry as the primary methodology for this research study. There are many approaches to defining narrative inquiry due to the diversity of methodological practices within it. Conducting this study, I largely relied on the scholarly work around narrative research produced by D. Jean Clandinin (2016) and her colleagues. Reflecting on the development of narrative inquiry in social sciences, Clandinin and Rosiek (2007) stated that this methodological process is accompanied by "intensified talk about our stories, their function in our lives, and their place in composing our collective affairs" (p. 35). Defining the methodology, Clandinin and Connelly (2003) referred to narrative inquiry as,

> *"… A way of understanding experience. It is a collaboration between researcher and participants, over time, in a place or series of places, and in social interaction with milieus. An inquirer enters this matrix in the midst and progresses in the same spirit, concluding the inquiry still in the midst of living and telling, reliving and retelling, the stories of the experiences that made up people's lives, both individual and social. (p. 20)"*

Clandinin (2016) described four major processes involved in narrative research: living, telling, retelling, and reliving. In this study, the participants told me stories based on their lived experiences, which I presented in a specific manner to the audience by engaging in the process of retelling. Throughout the development of this narrative inquiry study, both the participants and I changed, leading to our reliving of shared stories. Clandinin (2016) also highlighted the significance of acknowledging specific considerations of the studied phenomena, specifically temporality, sociality, and space. Exploring events related to the phenomena of research interest, investigators must consider the temporal aspects within narratives that can reveal more about the past, present, and future in individual experiences. Exploring social conditions includes attention to cultural, familial, institutional, and linguistic narratives that can help us understand larger contexts around individual experiences. Finally, the geographical and physical aspects of narratives can provide insight into intersections between human experiences and places where events occur.

Study Site and Participants

A large public land-grant higher education institution in the Midwestern region of the United States served as the study site. To protect the participant's anonymity, I refer to the research site as Midwestern State University or MSU throughout this article. On average, MSU reported that approximately 20% of its total undergraduate enrollment is first-generation students. Before collecting data, I completed the necessary research certifications and acquired approval to conduct the study from the Institutional Review Board (IRB) to ensure that all procedures were in accordance with ethical standards and university policies.

To identify participants, I collaborated with a student club, the only registered student organization focusing on supporting first-generation students at Midwestern State University. I chose one student organization as the primary network for participant recruitment for several reasons. First, the uniqueness of the student organization drove my interest in the student body engaged in its activities. All students in the club self-identified as first-generation. This type of participant recruitment, purposeful sampling, is characterized by selecting "individuals and sites for study because they can purposefully inform an understanding of the research problem and central phenomenon in the study" (Creswell, 2007, p. 156). At my request, the organization's student leaders shared information about the study with student members. The participation eligibility criteria included: a) being an undergraduate student, b) being at least 18 years old, c)

being currently enrolled at MSU, and d) identified as a first-generation college student. I recruited five participants for the study (See Table 1 for Demographic Information).

Table 1: *Participant Information*

Pseudonym	Gender	Race & Ethnicity	Academic Major	Current year in college
Robert	Man	White	Civil Engineering	5th year
Amelia	Woman	Asian & Hispanic, Latinx, or of Spanish origin	Psychology	4th year
Grace	Woman	Black or African American	Undecided	1st year
Nina	Woman	White	Molecular Genetics	3rd year
Z	Woman	Asian	Health Sciences	2nd year

Data Generation

Data collection spanned multiple phases across four months (See Table 2). I collected all data during the spring semester of 2022, including conducting two semi-structured interviews and engaging in a creative photo activity with each participant. I scheduled the second interview about 45 or 60 days after the first interview.

Table 2: Data Generation Phases and Timelines

Phase	Data Generation Activities	Timeline
Phase One	Scheduling and conducting the first interviews Providing oral instructions for the photo activity Scheduling second interviews	January/February 2022
Phase Two	Providing written instructions for the photo activity Sending a check-in email	February/March 2022
Phase Three	Conducting second interviews	March/April 2022

Semi-Structured Interviews

I used qualitative interviews as the first data collection method for narrative inquiry (Stitt & Winsor, 2014). Each interview allowed me to consider students' analysis of the environments in which they operated, including larger educational, familial, political, institutional, and social contexts that

surrounded the ways students pursued resources and relationships supportive of their mental health. For this study, I employed semi-structured interviews that allowed the flexibility of avoiding a rigid questionnaire and relying on a topic guide instead (McIntosh & Morse, 2015).

To avoid the pitfall of losing significant information during a single interview with each student, I conducted two interviews with each participant. By using the interviewing method, I clarified ambiguous points from the first interview and ensured that the students felt more comfortable sharing their stories (Knox & Burkard, 2009). To capture the temporal aspects of the narratives, I focused the first interview on asking students about their upbringing and high school experiences with seeking help. The second interview centered on their college experiences. These recollections provided further perspectives on the students' development as they engaged with mental health topics and activities in various ways. Capturing the temporality of the progressive processes sheds light on students' evolving relationships in their familial and community dynamics due to their new educational status (Bettencourt et al., 2020).

The semi-structured interviews lasted between 36 and 55 minutes. To ensure easier scheduling and comfort for all participants, I conducted interviews via Zoom Video Communications Inc. platform (Zoom) and recorded them with the participants' consent. After completing the interviews, I transcribed them using the Zoom A.I. embedded transcription feature and edited the texts for accuracy and clarity, but I did not change the content. To ensure the privacy of all participants and build trusting relationships throughout this study, I employed the following ethical considerations. Once the data generation process was finished, I deidentified the data by removing any information that could lead to revealing the participants' identities. During the interviews, I asked the participants to choose a pseudonym that I would use to write up the results of the study. Four students selected their own pseudonyms, while one participant requested their alias to be chosen by me.

Photo-Elicitation

The second interview focused on photo elicitation. Students had a chance to share their stories in connection to the visual representation of the spaces, events, and individuals that were meaningful in their lives. Specifically, I applied photo-elicitation, a data collection method based on introducing photos in qualitative interviewing procedures (Clark-Ibáñez, 2004). Due to the complexity of cultural approaches to mental health, photo-elicitation was helpful for "freezing" a particular moment and exploring settings beyond the specific frame (Warren, 2018). Describing the possibilities of collecting data referred to as field texts, Clandinin (2016) highlighted photos as possible narrative artifacts that might serve as data and "only as triggers for telling stories" (p. 46). In this study, I used photos as both data and opportunities to elicit narrative accounts from participants.

Shortly after the first interview, I provided participants with a written description of the photo activity, in which I asked students to reflect on how they sought help with mental health challenges and use photographs to capture those thoughts and interpretations. Some examples of settings and people that students could capture could be spaces where students feel supported or challenged by peers, family, or instructors. I encouraged students to take pictures that included spaces, events, or situations that occurred on campus (e.g., classroom, dorm, library, etc.) or off-campus (e.g., home, place of worship, favorite coffee shop, etc.). The students were able to take as many pictures as they wanted during the time period between interviews and upload them to an individual folder before the second interview. The study participants submitted a total of 18 photos. As a measure of fostering participants' privacy, I blurred certain areas of photos that could reveal private information about the students.

Data Analysis

I used audio recordings, interview transcripts, and participant-submitted photos as field texts. After completing the interviews, I coded and analyzed the data from all participants. I followed the three-dimensional analytical approach to narrative data outlined by Clandinin (2016) in my investigative process. Clandinin (2016) described the scrupulous progression of exploring the narratives that moved through several stages, including the research puzzles, field, field texts, interim research texts, and, ultimately, research texts. The crucial aspects of this analytical process were of a relational nature and focused on the lives rather than themes to capture student engagement with places, people, and activities over time.

After collecting the field texts, I read and re-read the shared stories. After multiple engagements with the stories, I moved on to the initial coding procedure, which was a process of dissecting and categorizing the data before placing them together in meaningful ways (Elliott, 2018). Clandinin (2016) called for particular attention to the three dimensions of narratives – temporality, space, and sociality. Coding the available data, I looked for examples of events with descriptions of their contexts and significance in a story. This meticulous process resulted in continuous re-reading of the narratives and considerations of events only in their contexts.

While engaging in the three-dimensional analytical process, I also searched for specific events describing students learning about strategies and participating in seeking help with mental health. With stories from high school and college, I focused on the various contexts around acquiring these knowledge and skills. These insights aided me in developing a deeper understanding of the ways students interacted with their families and communities in mental health matters. Following the identification of each individual account, I moved on to the process of looking through the narratives to distinguish threads or narrative plots that appeared to be interwoven in stories through time and place (Clandinin, 2016). Through this iterative process, I investigated the narratives and common plotlines to depict the discovered narrative accounts and threads through writing while employing thick descriptions of participants' stories as empirical evidence of my interpretive findings.

Trustworthiness

Trustworthiness or rigor of research refers to "the degree of confidence in data, interpretation, and methods used to ensure the quality of a study" (Connelly, 2016, p. 435). I committed to several of the trustworthiness standards accepted in narrative inquiry to ensure that I provided the readers with enough evidence to make their judgment on the plausibility of my empirical claims (Polkinghorne, 2007). To ensure the transparency of the research process, I included a discussion of the trustworthiness considerations implemented.

I utilized two areas of conducting trustworthy narrative research proposed by Angen (2000), specifically ethical and substantive considerations. As an ethical matter, I designed the structure of this study to stay true to the posed research questions and the narrative approach by utilizing not only semi-structured interviews but also photo-elicitation that expanded the analytical opportunities (Anderson & Kirkpatrick, 2015). Another ethical concern compelled me to pledge to the usefulness of this study by committing to the ultimate objective of sharing the study results with the communities of practitioners working to improve the experiences of prospective and current first-generation college students. As a substantive consideration, I had to engage in practices of critical self-reflexivity around my subjective influences on every element of the study, which I recorded in the form of researcher memos, a reflexive process of documenting analytic thoughts, steps of selecting methodological tools, and engagement with data (Birks et al., 2008; Loh, 2015). At the end of this study, I wrote fifteen pages of research memos that allowed me to trace the transformations of my thoughts around the study.

My Reflexivity as a Researcher

The entire progression of this research project, from the initial ideas to the writing and publication processes, was related to my identities, experiences, and background. My interest in understanding the experiences of first-generation college students comes from several sources, including my identities as a student and a professional working with students who are the first in their families to attend a higher education institution. Within my personal experiences, it is important to mention that I learned about my first-generation status only later in adulthood, as such a definition is not utilized in the higher education system of the Russian Federation. It is a significant factor to consider in my engagement with students and the overall content of this study. Although I identify with certain experiential aspects of stories in empirical body and in stories of first-generation students, the circumstances of my undergraduate education differ in many ways due to the drastic variances between the political, sociocultural, educational, and economic contexts of the United States and Russia. These considerations are essential for me as I explore narratives while staying committed to reflexivity, which is a "self-critical sympathetic introspection and the self-conscious analytical scrutiny of the self as researcher" (England, 1994, p. 82).

Beyond my personal experiences, I also had to examine the power dynamics in my relationships with the narrating students and the stories they shared with me (Holloway & Freshwater, 2007). First, racial relations must be acknowledged as a crucial structure of power and (mis) trust. Considering that three students in this study represented various Communities of Color, I understand that I have privilege as a person perceived as White. Although I put great effort into building a strong connection with participants of color, I also comprehend that it might have resulted in building rapport but not trust (Best, 2003). Another aspect of power is my experience acquired over eight years of serving as a university educator, which pushed me to be cautious of utilizing the knowledge I gained through previous professional endeavors to remain true to the participants' perspectives. To be clear, I do not claim to be completely detached from my values and experiences because "self-reflexivity is not carried out to create an objectivity with which to more fully address the topic" (Angen, 2000, p. 383). My work in higher education influenced how I developed objectives, focus, and reflections throughout this study (Milner, 2008).

Stories Told by First-Generation Students

Study participants shared numerous stories of struggle and perseverance that allow us to gain a deeper understanding of complex processes around the everchanging engagement of students with mental health knowledge, skills, and attitudes. The particular benefit of this empirical inquiry is in the demonstration that first-generation college students are not simply victims of higher education structures that often fail them in providing supportive environments and initiatives to promote their success. Despite interpersonal conflicts, institutional barriers, and a lack of knowledge of collegiate practices, first-generation students continue to overcome struggles to achieve their academic, personal, and career objectives (Kiyama & Rios-Aguilar, 2017). In this section, I present some of the common threads interwoven into the narratives that the participants shared with me.

Navigating Familial and Community Attitudes Towards Mental Health

Relationships with family members and communities surrounding students played a significant role in establishing students' individual beliefs about mental health. Often, these stories revolved around conflicts that forced students to rethink the ways they communicate about mental illness and self-care practices, as well as how they identify people with whom they could safely share their private concerns.

Learning Into Silence Around Family Members' Mental Well-Being

All study participants described communicating with parents about mental health at various levels of frequency and involvement. One narrative plot, related to stories around family members' history of mental health challenges, outlined a noteworthy model of communication between students and their parents. In Robert's story, his older sister pursued individual counseling to address health concerns after several years of an official anxiety disorder diagnosis. However, the details of that process or conversations about the sister's mental well-being continue to be largely absent among the family members, even though all of them are aware of the ongoing use of behavioral healthcare services. Describing the current situation, Robert shared,

> *"I don't know anything other than that, it was a very much a 'Yep, she goes to therapy,' and then it was never acknowledged again."*

Another example of a similar situation, but with a parent, appeared in Nina's narratives. After sharing concerns about stress, depression, and even suicidal ideations with her older children, Nina's mother decided to seek out professional help, although without discussing details with the family members. Nina shared,

> *"So, eventually, she did start going to therapy, and she didn't talk about it a whole lot. … But the place that she was going to was 45 minutes away. I know because I used to work out by the place that she went to, and it was like a 45-minute drive. And one time, she pointed it out, and she was like, "I go to counseling here, and it's really far."*

In both cases depicted above, the students' families did not develop strong habits of discussing mental health concerns between parents and children, which could serve as one of the factors for the lack of normalization of discussions about help-seeking behaviors among family members. However, Amelia's story presents another side of this narrative plot, where the family engaged in many conversations about Amelia's youngest sister and her use of medication and therapy to treat mental health challenges. Here, the father has been supportive of his daughters' well-being while avoiding references to his struggles and receiving professional health. Amelia disclosed,

> *"This past year, he [Amelia's father] started his own medication as well. He went to see a therapist and finally started talking about that. He has not admitted to me, my older sister, or my mom that he is taking those medications. He has only mentioned it to my younger sister. I think he's still very nervous talking about anything related to his mental health. I think it makes him feel more insecure. Like he's not as strong of a father figure that he wants to be. So, it's not something he acknowledges. I mean, I know he's on it. And I'm pretty sure everybody in the house knows. We all know that it helps him, though. And so, it's something we kind of avoid bringing up. We just mention like, "Oh, do you need a medication refill? We can pick it up." But we don't mention what it is."*

Amelia described gender expectations as a feasible element of her father's fear of admitting why he has been taking his medications. Moreover, scholars reported the commonality of parents with mental health concerns shielding their children from information about their illness to create a "normal" childhood home environment (Nicholson et al., 2001; Nolte & Wren, 2016).

The question that emerges from these established communicative patterns of silence around family members' help-seeking efforts is about the ways students learn to navigate differences in holding dialogues about mental health with their peers versus with their parents. As students engage in collegiate activities and develop bonds with peers, they further expand their ability

to communicate their understanding of mental health with others. For instance, Robert and Amelia openly discussed mental health with their college peers and encouraged them to pursue professional support when needed. If students can discuss their personal concerns, challenges, and help-seeking experiences with their peers but not within family relationships, individuals may need to create their own style of communication that adjusts to conditions of silenced awareness of mental health. This developmental pattern may be seen as a form of cultural code-switching, a process of an individual linguistic shift to communicate in socially appropriate ways in a specific community and situation (Nilep, 2006). Such code-switching practices can support students' efforts to become more independent in maintaining their worldviews and life choices while maintaining strong ties to the family, a challenging balance that often weighs first-generation college students down (Orbe, 2008).

Negotiating Conflicts Around Mental Health Beliefs

Across the student narratives, several specific stories centered on situations where students' values and beliefs were in direct conflict with the attitudes of family members toward mental health. Some of these conflicts resolved over time, while others remained unsettled through the end of the study. In three life stories, family members who expressed personal health concerns served as the first real-life exposure to the topic of mental well-being for students. For instance, Robert's older sister was diagnosed with an anxiety disorder, which prompted a dialogue among family members that he had never experienced before. Robert disclosed,

> *"Generally, I don't think it [mental health] was ever once mentioned ever until one of my older sisters. Oh, we're all pretty mid to lower-income family. And she married rich though, she got the rich husband. And around that time is when she got diagnosed with anxiety. But we were all still from the rural background, so she was like, "Ah, but that's not real." And that was probably the first time I'd ever had someone in my family talk about it. And that was recently, I was probably 16 or 17 at that point… We all knew, but all of us, including her, were like, "It's not a thing." Basically, that was kind of the vibe, the messaging that I got about that. And the medication was brought up exactly once, and it was like, "No, this is dumb."*

Such familial conversations, rejecting the idea of the existence of a psychological disorder, heavily influenced Robert's early mental health concepts. He suggested that living in a rural environment populated by mostly politically conservative residents was the reason for the strong cultural stigma around mental health as a legitimate and significant topic for discussion.

In Robert's story, he challenged his attitudes about mental health influenced by the family through self-reflection, learning on social media, and peer engagement, but without direct confrontation of familial beliefs that he no longer shared. Similarly, Grace faced parental stances on mental health that she disagreed with without challenge after the high school community experienced a traumatic event. Grace shared,

> *"It was my sophomore year [of high school], and we found out that a student had attempted to take their own life. So, they sent out a newsletter and all to the parents. And so, when I came home to talk about it, the first kind of statement about it was, "Was the student White?" That was the first thing they thought to say about it. And the student was not White, and they were kind of surprised. And then, I think I had brought up that the student was Black, and I thought they were African. And after I brought that up, and they made these comments, "Oh, this is what America does. They were too Americanized." They said stuff like that in that situation. And I was like, "Oh, that's kind of weird to think."*

Following this event, Grace shared her mental health concerns with her parents only once and "didn't get any understanding," which prompted her to build trusting relationships with peers in high school and college who would support her through listening and providing advice. In both stories, students turned from attempting to discuss mental health with parents to building their own understanding of the topic and nurturing peer relationships with more aligning values around the topic of well-being.

Amelia, on the other hand, engaged in a prolonged conflict with her parents and older sister, advocating on behalf of her younger sister, who was demonstrating signs of distress, such as emotional distance, casual suicidal ideations, and lack of emotional expressiveness. This disagreement started when Amelia was in high school and continued through the first two years of college. Specifically, the major clash occurred around the issue of psychoactive medication. As Amelia put it,

> *"When my [younger] sister started therapy, her therapist had mentioned, "Hey, we should probably get you on some medication. I think it would really help." … She [older sister] was very nervous, very much so discouraging of my younger sister taking them. To the point where I had to talk her down. In a way, that made it so, if we're going to talk about our younger sister's prescriptions, just be neutral, don't discourage her. This is already hard enough time. We're just going to try it out. Just kind of stay neutral. So, if anything, we didn't mention it in front of her, just so it wouldn't be a tough time."*

Amelia took a proactive role in the conflict by not only arguing with the older sister and parents, but also enrolling in psychology classes in college. She elaborated,

> *"I came to college and that's when I was more focused on, "Hey, we should really look into this. One, for my younger sister. But two, also for me. Learn more about this subject, be a little bit more knowledgeable." Especially because my older sister was so against medications, it made me really be like, "Okay. Well, I'll look into it. I will figure it out. I will see the side effects, so I can reassure her." That was kind of my thought, but also to reassure myself. And so, I think that was a big thing for my first and second year – doing all that research myself, finding all that stuff out by myself."*

Ultimately, Amelia's academic approach to learning more about mental health assisted her not only in advocating for her younger sister but also in finding out that her personal struggles could be strongly tied to anxiety and depression and could be treated. This behavioral pattern shows the students' desire to grow and develop their own ideas about mental health. With the absence of opportunities to learn within the bounds of familial relationships, students use various community, peer, social media, and academic resources to ensure that they fulfill their needs for more knowledge, skills, support, and alignment of values regarding mental health.

Traversing Community Spaces and Expectations for Mental Health

As a part of the learning journey about mental health topics, such as signs of distress, disorders, coping strategies, and healthcare options, students functioned in the sociocultural environments of diverse families, communities, educational institutions, and peer groups. These spaces contained particular expectations for the acceptable behaviors of emotional expressiveness, mental health conversations, and help-seeking. In students' narratives, understanding these unwritten social conventions in high school became an important developmental task that influenced the ways the students engaged with the surrounding communities while in college.

Socioeconomic conditions serve as a significant factor in the educational experience, especially if the student comes from a low-income background. While describing the culture of forced

positivity in her high school environment, Z connected these community norms to the town's economic prosperity. This underlying expectation caused her to feel insecure during the times when she felt uneasy and struggled. Moreover, such a climate fostered the stigma of seeking help that affected her decision not to pursue counseling after experiencing anxiety attacks in middle and high school, even with a doctor's recommendation and support from her mother. Z shared,

> *"I guess when I was in high school, I noticed that the people I would see were always putting on a mask when they go to school. And some days, I would not be in the best mood, but I would see people around me always happy and stuff like that. They would play sports, they have friends, and I was like, "Why am I not feeling this way?" But then, I realized later that everyone is going through something, but they just can't say it out loud, or they can't show that. So, I guess it was always like this, where you have to always be happy when you go to school, or you can't show that you're going through something, or people would look at you. You live in such a good town; how could you feel this way? You live in a safe neighborhood; you can't be feeling this way. I would say there wasn't any bullying or anything like that. But if you just stand out in a group of people, you were kind of looked down upon, and I did see that a lot. So, I think people would try to fit into that standard of being accepted."*

In her first year of college, Z started to notice that she continued to compare herself to her former peers in high school. Seeing that they were "living their best life," as demonstrated through social media posts, Z engaged in self-reflection with the realization that the unwritten standards of positivity widespread at the high school were reinforced in her peers' social media accounts, specifically on Instagram. This reflection supported Z in her journey to accept herself as a person who faces psychological challenges without severe self-judgment. One of the strategies to practice the new outlook was unfollowing people whom Z found inauthentic or did not know well enough to understand their life circumstances beyond social media.

Robert presented another example of navigating the institutional culture's lack of mental health acknowledgment. Similar to Z, Robert described that engaging in dialogues around mental well-being could cause negative repercussions amongst peers, resulting in social ostracization. Robert shared,

> *"There were definitely students that were more open about dealing with depression and anxiety. Those students were definitely the ones that were already typecasted as being the weird kids or outsiders and already being othered for many other reasons. Those are the only people genuinely that I would ever hear talking about those things. There were definitely times when they did those topics in class presentations. I could see that happening, but I don't remember what they did specifically."*

Robert admitted that after growing up surrounded by such cultural expectations, he underwent a long process of undoing "a lot of that messaging" in college. Ultimately, he became a peer leader for other first-generation students as a junior in college to support peers who may come from environments comparable to his hometown. On this matter, Robert stated,

> *"I very much wanted to be as open as possible, because I knew there's a chance they might not succeed if they're having those feelings. So, I was pretty open about it. I'd be like, "So, how are you feeling about being at Midwestern State University? How is that making you feel like?" It was those types of questions. For certain students, especially from similar backgrounds to me, I couldn't be dropping technical terms or jumping right into it. So, I was very much having to ease into it, but I would say, I definitely had some success."*

These stories show the importance of considering the sociocultural, political, and economic dimensions in which first-generation students function before college and during their higher education careers. In their narratives, the students highlighted the importance of thorough reflection on their past experiences, which ultimately led to the transformation of the ways they participated in collegiate activities related to mental well-being. Considering that none of the students had extensive education on the topic of mental health during their K-12 educational experiences, the transition to the collegiate spaces fostered introspective processes. However, the level of exposure to thought-provoking situations, healthcare resources, and intensity of existing personal stigma largely influenced how much students were able to deconstruct the effects of the past environments on their current relationship with mental health, help-seeking behaviors, and coping strategies.

Making Sense of Coming-Of-Age: Autonomy, Interdependence, and Solitude

Throughout these stories, the theme of negotiating autonomy and independence gained after high school graduation appears at different points in students' life histories. The students talked about the challenges of managing new structures largely created by the students at college rather than by teachers, staff, and parents while in high school. The change in academic rigor pushed the students to re-evaluate their attitudes towards asking for help, which most did not do often or ever before college. Even intentions for pursuing higher education started to shift. Students described their initial desire to acquire a college degree as primarily rooted in satisfying family's encouragement and economic perspectives for both the student and the family, a common motivation among first-generation students (Bradbury & Mather, 2009; Bui, 2002). In several cases, the students emphasized getting to the point of dissatisfaction with collegiate experiences, which forced them to alter their focus from academics to their own mental well-being. Robert became immensely involved in student organizations and government on campus to feel more of a sense of belonging, even though his parents did not understand the benefits of such activities, whereas Amelia decided to take a year off college to address her health concerns.

Adjusting to New Responsibilities and Social Roles

Navigating the new lifestyle of creating a personal schedule around academics, work, and personal activities was challenging in the collegiate environment. Specifically, Amelia emphasized that the busyness of high school prevented her from thinking about the presence of mental health concerns, which worsened in college because she was able to build a schedule with breaks that allowed her to reflect on her health. Furthermore, Nina emphasized that in college, she began to spend a significant amount of time planning out her life around school. Considering that higher education often demands more intense academic engagement on top of social adjustment to new unknown environments, students felt the pressure to consistently organize their personal lives to be successful, which was very stressful and for which they had no training or preparation. The shifted circumstances of daily lives pushed students to reconsider their routines to not feel inadequate while in college. As Nina put it,

> *"I feel like in high school, I was able to do a lot more. I did sports, I worked a full-time job, I was in classes. I did a lot of things. In college, I struggled to keep up with just my classes. So, I'm recognizing that college is more difficult, and high school is very structured. Here, it's not structured, and so, I'm struggling. Instead of trying to do all the same things that I did in high school, I need to accept that my courses alone are going to take so much more effort. Because I have to create the structure myself, I have to sort of give up on doing sports or working while I'm in school."*

Living with peers in a residence hall on campus is often seen as a learning experience that enhances a sense of belonging for many students in higher education, as long as they feel that

their living environment is socially engaging and accepting of diverse backgrounds (Johnson et al., 2007). The challenge of entering this new living space is shaping the relationships and boundaries with peers living in the same room or suite. This process involves developing communication schemes and adjustment strategies that support students in the transition to unfamiliar living arrangements, where they must be more independent in their approach to addressing emerging challenges and conflicts. Grace explained that she had to learn to communicate more often, develop group expectations, and come up with an adaptive practice to meet her needs for private time. She elaborated,

> *"In my family, there's only four of us, including me. And the way my dorm is set up, there's about 10 of us. So, I guess getting used to that was a bit something. … For instance, one thing I had to work on was, I guess, communicating. If I brought someone over or something like that. Just making sure to let everybody know or asking if they're comfortable. … For a little while I would actually kind of stay up later, when everybody else was asleep. I guess just for the privacy, because nobody else was awake. So, because the bedroom area was closed off from the desk area, and I kind of just sat there and just, I guess, chill. Just because I am more comfortable being by myself. I guess I would set some time when I can just be by myself."*

When discussing their journey of feeling independent and autonomous, students often highlighted their struggles with the idea of asking for help. Scholars reported that first-generation students often rely on themselves to solve problems, and getting used to help-seeking in various life situations can be a challenging developmental path for students (Payne et al., 2021; Richards, 2020). Z shared that she did not feel comfortable seeking academic help until her second year in college, even though she experienced anxious episodes due to academic stress in the first year. Z disclosed,

> *"I think I realized that it's okay to ask for help. I always felt this sense of being independent. And I think I was just scared to ask for help growing up, maybe it's just being first-gen. But I got more comfortable asking questions with my professors and my peers. I think it was a sense of feeling embarrassed if I was to ask a dumb question. I didn't utilize office hours before my second year, and professors actually want to help, that's their job. I started doing that, because I wasn't doing really good in one of my science courses."*

So, I decided, "Okay, you just need to ask for help." And things got a lot better after that."

Searching for Privacy

Developing new boundaries for privacy became a consistent theme for all students, particularly reflected in photos. Amelia shared a photo of a communal workspace on campus (Figure 1) that reminded her of her apartment, where she felt most comfortable. The privacy in this space was not only convenient but an essential part of her coping strategies because she was able to keep the environment in a desirable order as a pathway to feeling in control of her life after sharing a living space with others for most of her life. Amelia shared,

> *"It reminds me a lot of my apartment, where it's small, it feels like it is my own space. And my apartment, it was the first time I've had my own space. Yeah, I feel I am in control of everything that is in this vicinity. It makes me feel very comforted. … One of my own mental health kind of checks that I would do was to clean every day, whether it's doing the dishes, vacuuming the floor really quick, folding the laundry, something like that to help me keep me feeling like I am making progress and staying healthy at the same time."*

Negotiating the new roles of family and community can be challenging for first-generation students entering higher education, especially if they were raised with collectivist values (Pratt et al., 2019).

All students in this study described the importance of family in their lives and the struggles that they went through while transforming their relationships with family members to balance personal and familial expectations. These challenges intensified due to the consistent pressures of Western individualism that often dominates the collegiate environments in the U. S. (Nuñez, 2005). Z's family immigrated from Central Asia when she was a child, and her cultural heritage came up a few times throughout her narratives, specifically the value of family and community. As part of the reflection on spaces that affirm her mental health, she chose a coffee shop (Figure 2), where she likes to spend time by herself. Upon further introspection, Z highlighted that up until this year, she had an internal desire to spend time with people she knew. Z elaborated,

> *"I was just doing homework, got my coffee, and I was just sitting on my own. I realized this year that it's okay to be alone and just enjoy my own space and time. Alone but not lonely. That's what one of the things I like to do in my free time. I just always felt that I had to be with another person, or that it was wrong to be alone. But I realized that it's okay to be alone. It's okay to do things alone sometimes and enjoy your own company. But it's also okay to be with friends."*

Having spent the first two years of college as a commuter student and with a mostly online mode of instruction delivery due to the COVID-19 pandemic, Z faced challenges in meeting people, causing her dissatisfaction with the overall collegiate experience. However, after managing to develop some bonds with college peers, Z normalized the time alone as a gratifying activity that used to trigger severe feelings of loneliness in her. This development shows the importance of promoting interdependence among first-generation students, allowing them to foster values that affirm their individual needs, as well as strong ties to their community and family (Hecht et al., 2021).

Exploring the Balance of Social Support and Self-Help for Mental Well-Being

All students described various personal habits that allowed them to maintain their mental well-being through stress relief, resilience building, development of coping skills, reflection, a sense of purpose, and belonging. These descriptions revolved around the intricate balance of intrapersonal work and interpersonal relationships, the integration of which produced varying results.

Figure 1: *Amelia's favorite public study space on campus*

Finding Power in Peer Relationships

All students highlighted the importance of their relationships with peers and community involvement as a factor in their well-being. Their sense of belonging to the larger university community and their satisfaction with collegiate experiences appeared to be related to their ability to find peers with similar experiences. For some students, finding such connections was easier due to the friendships with people on campus established before entering college, while others struggled due to the institutional structures or personal beliefs in focusing on academics rather than social integration.

Robert shared that becoming a peer leader for first-year students was an integral part of his transition from the moment when he nearly transferred to another college after two years to feeling that he belonged to the larger campus community. Robert stated,

"Why I was so ok with transferring away, mostly because up to that point my experience at Midwestern State University was pretty terrible academically. I was not involved with anything, I was not making friends, because I wasn't trying as hard as I could have been. I was all centered on academics, and my experience at the university, it didn't feel like they were very sympathetic to the experiences that I was having and the experiences I came to Midwestern State University with, I guess. Like I said, it was a lot of the weeding out, sink or swim feelings in the classes, unempathetic professors. I was like, "I can get a better education somewhere else and actually finish my degree."

***Figure 2:** In the coffee shop near Z's home*

Prior to finding fulfillment in his efforts mentoring other first-generation students, Robert faced severe academic challenges that he connected to the overall culture of "weeding out" in the engineering program with uncaring professors, academic advisors, and unrelatable peers. Instead of leaving the university, Robert became heavily involved in student organizations and student government on campus, which allowed him to support students who, similarly to him, came from low-income rural backgrounds. Robert highlighted the importance of his involvement in the campus community for his mental wellness by specifying that these activities offered him purpose and a sense of belonging, while the institutional academic environments made him feel ostracized and treated unfairly. By choosing a picture of his academic department (Figure 3), Robert emphasized that he strived to support his peers in overcoming the challenges that he faced. He shared,

"I still to this day probably would not have good things to say about my academic experience here. It's been a lot of not good things. Genuinely, to any first-gen student, I would tell them like, "You're going to have a tough time in engineering at Midwestern State University, because of how unempathetic a lot of professors are." That's just what my experience has been. I dreaded all my classes basically."

Other students also shared that their engagement in student clubs brought positive benefits. Amelia said her relationships with other multiracial and first-generation students provided her with a comforting notion of going through challenges that others can understand without extra details. She shared,

"I'd say near the end of my first year, a lot of my close friends were people who shared certain experiences with me. And it felt a lot easier to talk with them about the experiences we were going through. And I think it really helped build that sense of, "you are not alone here on campus."

Having grown up closely connected to the West African community, Grace wanted to continue to be involved by seeking out student clubs focusing on networks of Black, African American, and African students. Through these involvement opportunities and her on-campus friends from high school, she built trusting relationships with people who shared cultural values and lived experiences with her.

However, it is important to emphasize that students who were unable to build such peer connections centered on nurturing other relationships as a pathway to receiving support. Z was shocked that the collegiate culture did not match her expectations since she could only see that "nobody really talks." This antisocial climate and spending minimal time on campus due to

being a commuter student forced Z to rethink her preconceived notions of how much she would interact with her peers. She connected with some peers of the same ethnicity and immigration status, but these relationships were challenging to manage due to the constant need to plan time together only when Z was actually on campus. Therefore, Z continued to use the support of her mother as the strongest interpersonal method to maintain her mental well-being. Nina offered another pathway to supporting herself without strong bonds with peers on campus by stating,

> *"I still will call one of my best friends in hometown whenever I need to talk to this specific person, because there isn't somebody down here that can fill that role. She is first and foremost a girl, a female who I can talk to. And who I can relate to about things like guy problems, or body issues, or anything that you need to talk to a girlfriend about. Or if it's something like family issues that I know she can relate to. I call her, because we have pretty similar backgrounds, and because I know that she understands where I'm coming from. And I still do this."*

Utilizing Internal Resources to Persevere

Interestingly, all students centered their narratives on individual counseling when asked about strategies and habits to support themselves. Z and Grace considered pursuing therapy in the near future. Robert had a negative experience of being rejected as a patient by the campus counseling center. Nina is currently seeing a therapist, and Amelia used to see a therapist for about two years. However, after delving into more of the students' activities, examples of resolving challenges through supporting behaviors beyond therapy emerged. Such a consistent thought pattern throughout the group could be related to the dominating Western individualistic approach to mental health, with individual therapy as one of the most commonly suggested tools (Howell & Voronka, 2013). The students started practicing these habits after determining their effectiveness, mainly through experiential learning. After seeing the positive results of specific behavior, such as stress relief, processing challenging situations, or solving a problem causing significant distress, students internally committed their time and energy to that practice.

Figure 3: *The main building within Robert's major*

A set of supportive practices emerged in the interviews in connection with students' realization that they used to engage in a particular activity before college but stopped at some point. For Grace, journaling became integral to processing challenging emotions, conflicts with peers, and reflecting on recent life events. She took a photo of her journal to represent places and activities that affirmed her mental well-being (Figure 4). Even though finding privacy with many roommates in the residence hall suite could be challenging, Grace would stay up very late to devote alone time to journaling. Grace shared,

> *"I had actually done it a while back a little bit. Because I had a friend who would journal, and I was like, "Oh, that's so cool." Sometimes, if it's a situation where I might write about it before I talk about it. For instance, there is a little conflict in the group, I would write about it. And then, when I feel comfortable, I'd talk about it. Usually, every time there's something I'm feeling a little down about or something that's troubling me, I would write about it. And it's usually not right when it happens. Because I would deal with the emotions first, but it's usually at the end of the day. It could be 3am when I'm awake, I'm by myself, and I'm thinking about it again. That's when I write more about it."*

Robert and Z came to the realization that they wanted to return to activities that they enjoyed vastly before college – student club involvement and swimming, respectively. For Z, resuming physical activity through swimming and gym attendance paid off not only in stress release but also through playing a positive role in her internal body image transformation. Even though Z had to purchase a membership at another gym to avoid long commutes to the on-campus recreational facilities, she found these exercise spaces affirming, so she took photos there (Figure 5). Discussing the reasons for returning to the gym, Z shared,

> *"I was probably wanting to make a change in my lifestyle and just not wanting to compare myself constantly to people that were of a different size to me. And my mom told me that your body is going to change throughout the years, you're not going to stay with the same waist since you were 16. So, it's okay to see that change. I think I was always pretty active in middle school, and that kind of changed when I got to high school. I think it was about wanting to just change my lifestyle."*

***Figure 4:** Grace's journal*

Another important practice students described was utilizing available information to address concerns that cause excessive stress. For instance, Z experienced intense anxiety about her academic major and future professional path. Although she could not find any family connections in the healthcare field, she actively utilized social media and student organizations to address the lack of knowledge and social capital in the academic field. On this matter, Z elaborated,

> *"When I started to change my major from pharmaceutical to health sciences, on the P.A. track, I found a bunch of Instagram accounts with people that were on their P.A. journey or were applying to P.A. schools. And I think that was one of the ways where I'd familiarize myself with what being a P.A. like and the P.A. journey. Because I can't go to my parents for help. I don't know anybody that is a P.A. And I found a lot of opportunities with shadowing, which is one of those things for P.A. school I have to do. I ended up joining a P.A. student org after I changed my major. It was mostly just having P.A. schools come in and just talk about the requirements and what it's like to be a P.A. student at their school. That's really the only form of information I got besides these accounts."*

Similarly, Amelia experienced severe psychological distress due to anxiety about her professional future and the feeling that she was consistently behind due to a lack of understanding of academic structures as a first-generation student. However, by working with a therapist, Amelia could work on finding solutions on her own, even if she did not have resources available to her peers. Amelia reflected,

> *"One of my biggest things was I was thinking about being the physical therapist, maybe that'd be the major for me, I just don't know where to go. I have an idea, but I don't know where to go from there. And my therapist would say, "Hey, let's start small. Search different physical therapists in your area and write down their information. You're going to email them and say, 'Hey, I'm a student interested in physical therapy. Can I have a meeting with you over coffee? Can I maybe shadow you for a day or two to see what your practice is like?'" And just learning those simple steps of seeing something that you want and not knowing how to get there, and not feeling overwhelmed and overcoming that feeling was where I really worked on."*

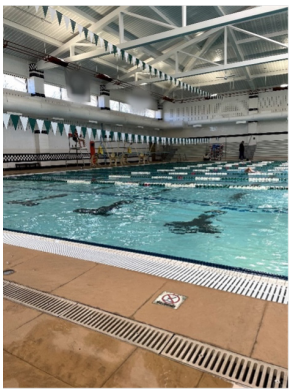

Figure 5: Z's Gym Near Home

What Can We Learn From These Stories?

By applying the asset-based lens to looking at these students' stories, we can recognize two fronts of ongoing narratives. On one side, we see students' challenges when they consistently engage with cultural expectations and interpersonal attitudes stigmatizing mental health and help-seeking behaviors within the bounds of their families, schools, and communities. On the other hand, we see the effort that students put into finding new sources and relationships, allowing them to learn more and practice the gained knowledge for their own advancement and wellness. This shows the importance of comprehensive efforts to not only challenge the continuous prevalence of mental health stigma in our communities and organizations, but also to recognize and expand students' critical thinking skills that allow them to pursue growth opportunities addressing their unique needs (Savoji & Ganji, 2013).

Throughout the narratives, all students highlighted the importance of the reflexive process, especially when faced with adversities and changing life circumstances. Considering such a drastic life change as entering higher education, we must remember the importance of reflective practice as a powerful tool for personal transformation, learning, and finding purpose (Morrison, 1996). The students in this study engaged in reflection on their needs and next steps in life by journaling, sharing with a friend, speaking with a therapist, arguing with parents, and many other ways. It is possible that students often connected the issue of privacy with opportunities for reflexivity because they frequently needed space and time to process the overwhelming amount of incoming information in a collegiate environment that often emphasizes communal integration rather than privacy.

Study Limitations and Opportunities for Future Research

The objective of the empirical study was to find common themes and universal narrative structures through the use of the narrative inquiry approach (Clandinin & Rosiek, 2007). Therefore, the results of this project should not be used to generalize ideas about mental health knowledge and help-seeking behaviors in higher education. Instead, communities of practice can use the described narrative threads as opportunities to delve deeper into understanding the processes that first-generation students undergo throughout times before college, during the transition, and after entering higher education. There are opportunities for further research around the ways students communicate with others about mental health and help-seeking. Specifically, it could be beneficial to explore the ways students engage with social media since this source of learning appeared across all student accounts. Furthermore, it could be beneficial to investigate particular educational initiatives in K-12 and higher education institutions to better comprehend the most valuable practices allowing students to maintain their mental well-being.

Concluding Thoughts and Implications for Practice

The temporality of the developmental processes around mental health and help-seeking in this project shows us the importance of creating comprehensive systems of support that would engage families, high schools, colleges, and first-generation students. Families played a significant role in establishing students' beliefs about mental health before college, although these processes often revolved around conflicts of values and ideas. In K-12 institutional

structures, schools can engage parents in wellness initiatives that provide parents with knowledge and language to implement efforts affirming students' holistic wellness at home (Hamlin & Flessa, 2018). Such a community engagement is particularly beneficial for families with parents or guardians experiencing mental illness, as they often struggle with communicating with children about their experiences (Nicholson et al., 2001; Nolte & Wren, 2016). In college, family involvement aids parents in understanding the common stressors of higher education experience, which can enhance their endeavors in supporting first-generation students (McCarron & Inkelas, 2006).

Educational institutions in K-12 and higher education systems need to continue designing and implementing evidence-based initiatives that allow students to develop new knowledge about mental health and the skills to maintain their well-being. Frequently, first-generation students come from under-resourced communities that lack funding to provide comprehensive behavioral support on school premises (Eiraldi et al., 2015). Connecting families to community resources, as well as utilizing available venues for school counselors and teacher in-service education around mental health can create a positive change in the overall school climate (Van Velsor & Orozco, 2007). Moreover, there needs to be a larger conversation turned into action around supporting teachers with educational efforts on how to communicate about mental health with students (Walter et al., 2006).

When it comes to colleges, there needs to be continuous education around the specific needs of first-generation students among staff and faculty members. In the realm of mental health, it is important to challenge the notions of the Western individualistic approach to mental well-being. Individual therapy should not be the first and only solution recommended to students (Howell & Voronka, 2013). As students demonstrated in their stories, their communities are an integral part of their mental health. Therefore, higher education institutions should consider creating educational initiatives that engage students in reflective processes, allowing them to better understand how their relationships and activities support or bring them down. Overall, it is significant to create action for organizational and cultural change that is two-fold. One direction is to continue to address the institutional barriers that prevent first-generation students from accessing and succeeding in higher education, while the second path is to uplift students by aiding them in activating their strengths and celebrating their successes, no matter how small.

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About the Author:

Pasha Sergeev is an educational policy doctoral candidate and a Residence Hall Director at the Ohio State University. Over the past 11 years, Pasha educated, advised, taught, supervised, and mentored college students from various backgrounds to support them in achieving their aspirations. Born and raised in Russia, Pasha values multicultural approaches in their work and research, including recognizing the assets of each individual's cultural background. These asset- and strength-based approaches to working with students became one of the major inspirations for the presented research project. Pasha's research and writing often aim to explore topics related to equity and justice in higher education through the lens of student affairs – staff's preparedness to support underrepresented students, trauma-informed care in colleges, and student affairs professional socialization and education. As a student affairs professional, Pasha employs stories shared by students and higher education staff to highlight the areas for improvement in campus practices and policies, as well as opportunities that already exist across higher education communities.

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EMPIRICAL RESEARCH

Reducing Educational Inequity? An Analysis of the TRIO Program for First-Generation Low Income Students' SAT Scores

Authors:

Megan Simila
Boise State University
megansimila@boisestate.edu

Sanghee Park
Indiana University Indianapolis
sangheep@iu.edu

Abstract

This study examines whether the federal TRIO Upward Bound program, one of the policies designed to improve educational disparities, has achieved its goal of improving SAT scores. Specifically, we evaluate the effect of teaching Greek and Latin roots on educational outcomes by comparing the SAT scores of students who did and did not receive the intervention and students who were first-generation and low-income as opposed to being first-generation or low-income. A Difference-in-Difference (DID) regression analysis of data from four high schools in Idaho's Treasure Valley (2015-2018) shows that SAT scores are significantly associated with race, English proficiency, and GPA. However, we did not find evidence that the Greek and Latin root intervention was statistically significant in improving the target group's educational attainment, which contradicts a prior study. The findings indicate that the intervention has not successfully improved SAT scores, and the social construction policy framework is better at explaining the effectiveness of TRIO Upward Bound programs than specific SAT interventions in helping first-generation, limited-income students access higher education.

Keywords: SAT, Social Construction Theory, TRIO Upward Bound

Introduction

While the overall education level of the United States has increased nationally, the increase is not equally distributed across all racial and socioeconomic groups. College enrollment rates among African American and Hispanic students have improved but still lag behind their White peers, and those underrepresented students fall behind in college graduation rates (Cahalan et al., 2021). Addressing the disparity in educational opportunities and degree attainments calls for policy initiatives and empirical research in both national and local settings. This research evaluates the effect of the federal TRIO programs, a set of federally funded grants designed to open access for underrepresented populations. They are called TRIO because there were initially three programs designed in the 1960s by Lyndon B. Johnson as part of the War Against Poverty. The three grant programs have grown to eight, expanded across the country, and now serve students from middle school up to those applying to graduate school at public and private agencies and institutions of higher education (Mission, 2011). In the 2022 appropriation bill, they were awarded over a billion dollars and received even more in the 2023 budget (Hoyler, M, 2022).

The TRIO programs have received favorable evaluations from professionals and researchers. At the national level, 86% of Upward Bound students enrolled in higher education, compared to 46% of students of the same demographic who received no services but were from the same population (Heuer et al., 2016). Upward Bound students have also been found to earn more high school credits (McElroy & Armesto, 1998). However, it is unclear whether the federal TRIO programs have reduced educational inequality among students with different backgrounds and whether a specific SAT intervention has been effective at the local level. Focusing on the two TRIO programs for high school students, i.e., Upward Bound (UB) and Educational Talent Search (ETS), we assess the effectiveness of two specific TRIO programs in the State of Idaho since 2015. Idaho provides an ideal location for examining the effect of the intervention for several reasons. First, in a relatively close geographical area of the Treasure Valley, high schools serve diverse student populations from urban, suburban, and rural areas with different socioeconomic backgrounds. Second, Idaho has a healthy economy with a growing population and income (Office of Policy Development and Research, 2018). However, educational attainment levels remain constant and have dropped through the COVID-19 pandemic, despite the state's efforts. Third, due to the high concentration of eligible students in those areas, the two federal TRIO programs implemented in Idaho are housed in the same university and serve some of the same high schools.

The TRIO programs, UB and ETS, aim to improve high school performance correlated with college success, leading to higher earning potential and breaking cycles of poverty (Bartik & Hershbein, 2018; Sawyer, 2013; Zwick, 2013a). Those two programs are positioned to help Idaho improve the enrollment rates for higher education. Each program seeks to help students overcome the barriers that inhibit access, such as lack of academic preparation, low SAT/ACT scores, lack of guidance counselors, and lack of scholarships to pay tuition. The federal grant guidelines require students to be first-generation and/or low-income (FGLI), providing students with an advisor or educational specialist who helps them through high school and prepares them for college. First-generation (FG) is defined as neither biological parent has a four-year degree, and low-income (LI) is defined as meeting the federal Department of Education's (DOE) poverty standards for the year students apply to the program (Council for Opportunity in Education — TRIO, 2020).

The next section of this article proceeds with an overview of Upward Bound and Educational Talent Search, which constitute an empirical setting. Then it will explore the disparities in educational attainment for FGLI populations and how that relates to the SAT score. Finally, the intervention of Greek and Latin roots on SAT scores will be discussed along with research hypotheses. The data, research methods, and findings follow in detail. The final section concludes with the implications and limitations of this study.

Literature Review

Policy Context: UB and ETS

Upward Bound (UB) grants determine a set number of students in the program at each school, and eligible students can apply annually. Each high school has an educational specialist who works with students to help them with career research, college research, financial literacy, tutoring, course selection, college tours, SAT/ACT prep, and volunteer hours. For example, the specialists at the four schools in this study teach an elective class called UB, where the services are provided to students (About TRIO Upward Bound, n.d.). The class allows UB specialists to have a significant amount of face time with students and provide more programming. In the summer, students live on the college campus for a residential program. During the day, students take high school-level classes such as English, economics, and psychology. In the evening, they participate in cultural activities such as rafting, the Shakespeare festival, providing food to individuals experiencing homelessness, planning a college carnival, and building strong relationships with peers from similar backgrounds. The summer program is an intense six weeks that significantly impacts a student's personal development and future goals.

The UB grants are written on five-year cycles and include an optional section titled the Competitive Priority Preference (CPP), where policymakers in Washington DC invite programs to write about how they will implement the federal DOE's current priorities. The DOE chooses the CPP topic for each grant cycle, which historically has included tutoring, STEM programming, and college mentoring. TRIO programs always write for the optional CPP because the extra points earned through the section can determine if the grant is funded. In 2016, writers were asked to use the What Works Clearinghouse, a database of education research hosted by the DOE, to find a successful practice and implement it in their own program.

The grant writers for the TRIO UB program in the study context chose an article by Holmes and Keffer (1995) from the What Works Clearinghouse that uses Greek and Latin roots to prepare students for the SAT in the state of Georgia. The study was chosen for the statistical significance of the intervention and the relatively low cost of implementation. However, the study included a small number of participants at one school and did not control for demographic factors such as race, which historically is correlated with test scores. The study also did not limit the participants to first-generation and/or low-income students that the TRIO program serves.

The other TRIO program, ETS, did not implement the Greek and Latin roots intervention. With similar goals to UB, ETS has a specialist assigned to each high school to help students with the college access processes through college information, financial literacy, scholarship application help, and SAT/ACT prep. However, ETS is different from UB in that ETS does not include high school classes with the specialist during the school year, or summer program, and more importantly, it does not use Greek and Latin roots as an intervention to improve SAT scores. Instead, ETS is a pull-out program where a specialist visits the school for one day/week, pulls the students from class to review the content, and then follows up at their next meeting. Another difference between the two programs is that UB cannot serve as many students due to the time-

intensive services provided. Therefore, the number of students served by UB is much lower, and the program has a higher per-student cost than ETS. Although both programs seek to help FG and LI students, only two-thirds of ETS's population needs to meet those criteria, which means some students in the program do not qualify as FG or LI. Table 1 shows the similarities and differences between the two programs implemented in the Treasure Valley of Idaho.

Table 1: *Explanation of similarities and differences between Upward Bound and ETS*

Upward Bound	Both Programs	ETS
Academic class at high school	Help with career exploration, college information, college applications, financial literacy, SAT/ACT prep, etc.	No class Pull out program
5-week residential summer program	Take students on college tours on school breaks	No summer program
Specialist serves 1 school	Specialists employees of university	Specialists serve 2-3 schools
High number of contact hours with students	Goals are improving high school graduation rates, college attendance rates, and college graduation rates	Fewer contact hours with students
Annually serve about 250 students	Students apply to join	Annually serves over 1000 students
Grant requires all students must qualify as being first-generation and/or low-income	In reality, most students are *both* first-generation and low-income	Grant requires 2/3 of students must qualify as being first-generation or low-income

Disparities in Educational Attainment

The National Scholastic Achievement Test (SAT) has been essential to college admission and scholarship decisions. It has been argued that the SAT demonstrates a student's testing ability, and testing is an important skill for collegiate success and is also correlated with student academic success (Buckley et al., 2018). Some policymakers believe that all students, regardless of their background, are on an equal playing field when evaluated solely based on academic merit. This merit is typically measured by factors such as GPA, class rank, the rigor of their class schedule, and SAT or ACT scores. They view standardized tests as a crucial indicator of merit, and implementing test-blind procedures appears to yield mixed results in enhancing the diversity of the student population (Belasco et al., 2015). However, a study by Felegi (2023) found that instituions that had a test-blind admissions policy increased minority enrollment by 15% and LI student enrollment by 7%.

FGLI students tend to underperform on the test compared to their wealthier peers (Everson & Millsap, 2004; Zwick, 2013b), and African American and Hispanic students do worse on the

test compared to their white peers (Dixon-Román et al., 2013). In addition, the College Board reported that FG student score lower than their non-FG peers in every section of the SAT and are the largest underrepresented group taking the test because FG includes race, gender, socioeconomic status (SES), and other demographic factors (Balemian, K., & Feng, J. 2013). Sackett et al. (2009) found a correlation of .42 between SES and test scores, suggesting that students from low-SES backgrounds score lower. However, later Sackett et al. (2012) analyzed over 143,000 students SAT test scores to determine their correlation with first year GPAs in college and found that SES had little impact. In addition, the admitted pool of college applicants reflected the same percentage of low-SES students who had applied, suggesting that the schools are not using test scores as a barrier, but rather students are excluding themselves from the college by not applying.

The disparities based on race, income, and parent education level have led education reformers to question the validity of the test in the college admissions process and scholarship decisions. Some argue it is not a strong indicator of student ability and other aspects, such as GPA and school attendance, have a higher correlation with college success than SAT scores (Black et al., 2016; Credé et al., 2010) and the SAT is culturally and statistically biased against underrepresented populations in higher education (Freedle, 2003). The SAT acts as a barrier for FGLI students, which may partially explain why FGLI students are more likely to attend a community college than a highly selective research institution (Dowd & Shieh, 2013). As affirmative action has declined across the country, some colleges have shifted to the SAT to determine who should have access to their institution (Oakes et al., 2002).

The closure of all testing venues in 2020 has forced college admissions to reevaluate the purpose of the SAT. Harvard saw a significant increase in applications due to the lack of SAT requirements for the 2021-2022 year. This suggests that many students see their low test scores as a barrier to applying, supporting the research that claims scores impact a student's academic self-concept (Penrose, 2002). A recent report by Dartmouth (Cascio et al., 2024) also found that FG students are more likely to exclude their test scores when applying even if their scores were above 1400, suggesting they also view the test as a barrier to admissions. Other institutions do not require it for admissions but use it for placement purposes in English and Math. Some other universities have reinstituted the test as an admissions requirement as schools and universities have opened back up for testing. The fluctuating policies regarding the SAT through the COVID-19 pandemic demonstrate how academic merit is socially constructed by higher education institutions and subject to change, with some schools moving to test-blind admissions.

H1: The degree of educational attainment as measured by SAT scores will be different across student groups by race, income, and parent education level.

The Greek and Latin Root Intervention

This study examines the effectiveness of TRIO Upward Bound's Greek and Latin root intervention with disadvantaged populations. Previous research has included SAT test prep as a relevant and replicable programming component for TRIO programs (Rodriguez et al., 2015; Walsh, 2011). The TRIO programs plan workshops, teach Greek and Latin roots, and assign study regimes to help students study for the test so they can have access to more rigorous higher education institutions and win the scholarships necessary to pay for tuition and fees. As discussed earlier, the UB program chose a Greek and Latin root intervention, according to Holmes and Keffer (1995). The study proposed an approach to address the cultural bias embedded in the test by teaching Greek and Latin roots as a method to improve understanding of language and the vocabulary tested by the SAT. Curriculum designers have argued that using Greek and Latin roots is a more efficient way to teach vocabulary because one root can be found in multiple

words (Rasinski et al., 2011). The test has entire sections devoted to English, Reading, and Writing (ERW), and the cultural foundation of Greek and Latin roots could help FGLI students score higher in those sections. Therefore, the TRIO Upward Bound program aimed to test if teaching roots improves vocabulary and SAT scores, thus enhancing capacity and reducing barriers to postsecondary access.

Considering the potential educational disparities among the target populations, we expect that the effect of TRIO Upward Bound intervention varies by the intersectionality of being first-generation and low-income as opposed to first-generation or low-income. The UB grant requires two-thirds of students to be both first-generation and low-income, and one-third to be first-generation or low-income. The ETS grant requires two-thirds of students to be first-generation and/or low-income, and the other third can be neither, creating a small population of students who are neither first-generation nor low-income in the program. In addition, given the limited resources available to FGLI students, we expect that the TRIO UB is more effective for those FGLI students compared to FG or LI students.

H2A: The degree of educational attainment as measured by SAT scores will be different between the Upward Bound students who were given the Greek and Latin roots treatment and the Educational Talent Search students who were not.

H2B: The Greek and Latin root intervention will be more effective in students who are both first-generation and low-income, compared to students who are either first-generation or low-income.

Data and Methods

Data

The data was collected through four academic years (2015-2018) at four different high schools in the Treasure Valley of Idaho as part of the grant reporting requirements. The schools chosen by the researcher are where both UB and ETS TRIO grants serve students, which sets up a quasi-experimental design. The TRIO grant writers determine the high schools served by identifying where the highest proportion of first-generation and low-income students in the area. The TRIO UB and ETS programs serve over 500 students annually at four different high schools. All UB participants were included in this study, but ETS students were randomly selected for comparison purposes to match the number of UB students. In our study, approximately 80 students were included for each year, and in total, 326 students were included in the analysis.

Table 2: *Participant Background Information (n=326)*

		n	%
TRIO Program	Upward Bound	156	48
	Educational Talent Search	170	52
	Total	326	100
Pre/Post Groups	UB Pre	76	23
	UB Post (root treatment)	80	25
	ETS Pre	91	28
	ETS Post	79	24
	Total	326	100
Biological Sex	Male	122	37.4
	Female	204	62.6
	Total	326	100
Minority	White	110	33.7
	Non-white	216	66.3
	Total	326	100
Limited English	Limited Proficiency	46	14.1
	Proficient	280	85.9
	Total	326	100
GPA	1.000-1.999	10	3
	2.000-2.999	132	40
	3.000-3.999	172	53
	4.000	12	4
	Total	326	100
Low-income	Low-income	293	90
	Not low-income	33	10
	Total	326	100
First-generation	First-generation	311	95.4
	Not first-generation	15	4.6
	Total	326	100
FGLI	First-Gen *and* Low-income	277	85
	First-Gen *or* Low-income	49	15
	Total	326	
School	Canyon County 1	86	26.4
	Canyon County 2	104	31.9
	Ada County 1	80	24.5
	Ada County 2	56	17.2
	Total	326	100

The students in UB received the intervention, and the ETS students were used as a control group. The control variables were from the database called Blumen, which includes information such as race (white or minority), biological sex (male or female), GPA (simple 4.0 scale), income level (determined by federal poverty guidelines), limited English proficiency (defined as qualifying for English as a second language service by the school), school (Canyon County 1, Canyon County 2, Ada County 1, and Ada County 2) and parental education level (defined as first-generation where neither biological parent has a 4-year degree). The participant's information is shown in Table 2. Table 3 shows the mean and standard deviation for each variable, and Pearson's correlation coefficients are presented in Table 4.

The dependent variable is ERW section scores from the SAT. We did not include math scores as they were irrelevant to the Greek and Latin root intervention. Although the grants do not collect SAT scores, they annually collect transcripts containing SAT scores broken down by ERW and math sections. Therefore, the high school transcripts of all participants were read as part of this research. The SAT information on the transcripts is detailed and indicates the number of times each student takes the SAT, and the highest scores were used for analysis to not penalize students for having a bad testing day. A majority of higher education institutions only look at a student's highest test score, which aligns with admissions practices because testing multiple times statistically leads to better outcomes. However, other researchers have found that underrepresented students are less likely to take the SAT multiple times, creating yet another inequality in the admissions process, which also applies to our data (Goodman et al., 2020). All students in the program take the SAT as a college entrance requirement on a mandatory state testing date, which means most students take the same version of the test.

Table 3: *Descriptive Statistics of Variables and Controls*

Variable	Obs	Mean	Std. Dev.	Min	Max
ERW Score	326	480.245	87.382	280	770
TRIO Program	326	.479	.5	0	1
Pre/Post	326	.488	.501	0	1
Root Intervention	326	.245	.431	0	1
Biological Sex	326	.626	.485	0	1
Minority	326	.663	.474	0	1
GPA	326	3.077	.553	1.6	4
Limited English	326	.141	.349	0	1
Low-Income (LI)	326	.899	.302	0	1
First-Gen (FG)	326	.954	.21	0	1
FGLI	326	.85	.358	0	1
School	326	2.325	1.046	1	4

The information from the Blumen database and the high school transcripts were all combined into a codebook in Excel as part of the data-gathering process. As the privacy of student academic information is paramount to the TRIO programs, the information is stored in a password-protected online system that passes security tests from the higher education institutions that house the TRIO programs. As an employee of TRIO, the primary author had access to the password-protected database and academic records that require dual authentication. There was only one codebook with identifying names, which was also kept in a password-protected location. The shared codebook includes only numeric identifiers to keep the anonymity of study subjects. The data used for this research were accessed with permission from grant directors and the analysis was not done on grant funds.

Table 4: *Pearson's Correlation Coefficients*

Variables	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
(1) ERW score	1.000									
(2) Upward Bound	-0.017	1.000								
(3) Biological Sex	0.150*	-0.084	1.000							
(4) Minority	0.248*	-0.099	0.042	1.000						
(5) GPA	0.509*	0.144*	0.233*	0.018	1.000					
(6) Limited English	-0.290*	0.000	-0.124*	-0.215*	-0.121*	1.000				
(7) School	-0.032	-0.010	-0.081	0.119*	-0.133*	0.110*	1.000			
(8) Income	-0.091	0.077	-0.007	-0.148*	-0.026	0.136*	0.124*	1.000		
(9) First-Gen	-0.172*	0.035	-0.019	-0.184*	-0.070	0.089	-0.058	-0.074	1.000	
(10) FGLI	-0.174*	0.094	-0.024	-0.226*	-0.072	0.146*	0.065	0.798*	0.522*	1.000

*** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$

Methods

The four high schools with both a TRIO UB and ETS programs create a quasi- experimental set up with a control group (ETS) and trial group (UB) in two time periods, before and after the Greek and Latin root intervention. This set up is ideal for the difference-in-difference (DID) method for statistical analysis to test our hypotheses (Callaway &. Sant' Anna, 2021). The DID is commonly used in education studies that compare groups of students before and after an intervention because it can statistically prove the intervention is causally linked to the outcome (Bowman et al., 2018; Hurwitz et al., 2017). In our study, we are testing if the Greek and Latin Root intervention is causally linked to higher test scores making the DID method appropriate for our hypotheses. Our data with four groups (i.e., program and control group by pre- and post-intervention) offers an ideal empirical setting for the DID analyses. The data includes four years from 2015 to 2018, with the first two years functioning as the program's pretreatment time frame and the last two as the post-treatment and control time frame. The UB students received the treatment, and the ETS students did not. Table 5 shows the four groups, of which approximately 80 students are included. The equation for double-difference regression is as follows:

$$Y = \beta_0 + \beta_1 \text{ Program} + \beta_2 \text{After} + \beta_3 \text{Program} * \text{After} + \gamma_{1x7} X_{7x1} + \varepsilon$$

where X is a column vector of seven control variables: minority, biological sex, income, GPA, school, parent education level, and English as a second language. There was no severe collinearity among independent variables.

Table 5: *Groups for Difference-in-Difference analysis*

	Upward Bound (Program with Greek and Latin roots)	ETS (Control)
2015-2016	Group 1 Pretreatment (Program)	Group 3 Pretreatment (Program)
2017-2018	Group 2 Treatment (Program*After)	Group 4 No Treatment (After)

Findings

First of all, we graphically present the trend graphs of the scores between the groups (UB and ETS), which varied across the four years. Figure 1 shows almost a parallel trend between the two lines before the intervention and no initial improvement in scores. Contrary to our expectations, scores dropped in the year the intervention started. One explanation for this counter-intuitive trend is that the test questions are not weighted equally for FGLI students compared to their middle and upper-class peers. For example, Freedle (2003) found the test questions designed to be easy were answered correctly by more white students than minority students. In contrast, the test questions designed to be hard were more frequently answered correctly by minority students than white students. Therefore, in 2017, the questions may have had weighting issues similar to those Freedle found in his study that led to a drop in scores among FGLI students. In addition, there may be external factors that are outside the scope of this research and are not being controlled for in the data. Further analysis of the coefficients and t-values supports those findings (see Table 6).

Figure1: *SAT scores (ERW section) before and after intervention*

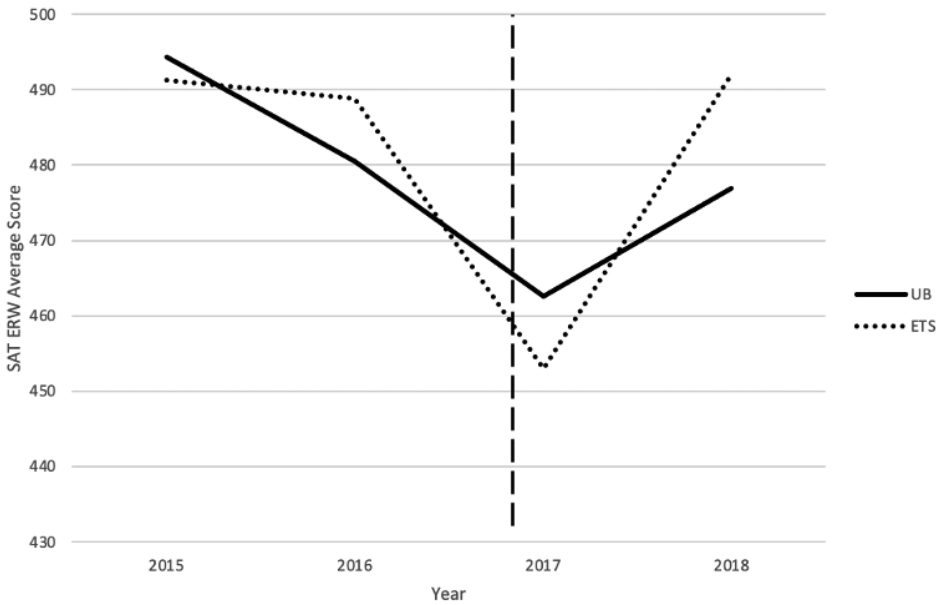

Table 6 shows a statistically significant relationship between SAT scores and minority, limited English proficiency, GPA, and FG. These findings indicate racial minorities are more likely to have lower test scores (Coefficient of -26.38 and SD of 8.918). Students needing additional English support due to their first language not being English also score lower on the ERW section of the SAT (Coefficient of -44.80 and SD of 12.12). GPA is also highly correlated with ERW scores (Coefficient of 78.29 and SD of 7.43), with those with higher GPAs scoring better on the test. There was also one school in Canyon County that had statistically significant results (Coefficient of -18.98 and SD of 10.67). First-generation was statistically significant (Coefficient of -39.18 and SD of 19.1) in the model that tested FG or LI and was not significant in the model that tested

FG and LI. The other results of the DID analysis found no significant findings in the interaction between the FG and LI groups. However, the statistical significance for being a racial minority, having limited English proficiency, and GPA held in the model that tested the interaction. Table 7 contains the results of the auxiliary regression analysis to test for serial collinearity and the robustness of the model. No collinearity was found between years, and the statistical findings for minority, GPA, and limited English proficiency were statistically significant. Similar findings demonstrate our analysis is reliable.

Table 6: *Results of DID Analysis Between SAT ERW Score and Student Indicators*

VARIABLES	No control variables	W/ control variables	Interaction of FGLI
Upward Bound	-2.259	-8.848	-8.777
	(13.57)	(11.22)	(11.22)
Time (Pre/Post)	-17.61	-11.13	-10.53
	(13.43)	(10.96)	(11.03)
Root Intervention	0.105	-9.161	-9.875
	(19.39)	(15.83)	(15.90)
Biological Sex		0.7886	0.988
		(8.403)	(8.421)
Minority		-26.38***	-26.27***
		(8.918)	(8.930)
GPA		78.29***	78.65***
		(7.434)	(7.462)
Limited English Proficiency		-44.80***	-43.92***
		(12.12)	(12.24)
Low-income		-5.954	-45.80
		(13.46)	(72.99)
First-generation		-39.18**	-78.95
		(19.10)	(74.12)
First-generation *and* low-income			39.89
			(71.83)
Canyon County 2		-18.98*	-19.18*
		(10.67)	(10.69)
Ada County 1		-7.072	-6.727
		(11.42)	(11.45)
Ada County 2		7.398	7.407
		(12.37)	(12.38)
Constant	489.9***	323.6***	335.6***
	(9.155)	(33.71)	(77.34)
Observations	326	325	325
R-squared	0.010	0.385	0.385

Standard errors in parentheses; *** p < 0.01, ** p < 0.05, * p < 0.10

Table 7: *Auxiliary Regression for Robustness Check of Serial Correlation*

	Coefficient	Standard Error	P-value
Year 1 (pre)	-5.491	18.467	0.766
Year 2 (pre)	-4.586	25.124	0.855
Year 3 (post)	-11.35	23.960	0.636
Year 4 (post w/ interventions)	-9.612	23.870	0.687
Biological Sex	-1.567	8.919	0.861
Minority	-28.150	9.483	0.003**
GPA	79.163	8.018	0.000***
Limited English	-45.547	12.658	0.000***
School	3.380	4.043	0.403
Low-income	-35.196	20.879	0.092*
First-Gen	-65.433	28.318	0.021**
FGLI	26.678	36.140	0.101

Standard errors in parentheses; *** $p < 0.01$, ** $p < 0.05$, * $p < 0.10$

The first hypothesis (H1) proposed a difference in SAT scores based on factors such as being a minority, income, and parent education, as suggested by previous studies. The findings support this hypothesis for being a minority with limited English proficiency and GPA but not for income or parent education level in the interaction model. The significant findings for these demographic factors are important because they were not controlled for in the original Holmes and Keffer (1995) study, and the factors frequently apply to the target population of the TRIO grants. This finding suggests that students in Idaho struggle with the same barriers as other studies have found. One explanation of the null finding for income may be the limited number of non-low-income and non-first-generation students included in the study. The TRIO programs primarily serve FGLI students, which means the data contains a limited number of students who only fit into one of the categories (only 33 were not low-income, and 15 were not first-generation). The limited sample size means our findings are descriptive of the students in the program but not indicative of the larger picture of FGLI students.

The second hypothesis expects that the Greek and Latin root intervention would be effective at raising scores for FGLI students (H2A), and the scores would be higher in first-generation and low-income students than in first-generation or low-income students (H2B). The findings were null for both hypotheses, with the intervention not being effective and the interaction variable not being statistically significant. These findings contradict Holmes and Keffer's (1995) study when conceptually reevaluated with FGLI students.

One possible explanation of the null findings is that the SAT is a multi-hour test and assesses many aspects of English besides vocabulary. Greek and Latin roots may have helped the students improve their vocabulary decoding ability, as Holmes and Keffer claimed, but the intervention alone was not enough to compensate for the other test challenges, such as reading speed, knowledge of grammar, and use of syntax, which are also assessed in the ERW section. The diverse set of questions on the SAT suggests simple vocabulary approaches may help, but not enough to make a statistically significant difference in overall ERW scores on SAT. Therefore, more complex methods of intervention may be necessary to address the multiple components of the ERW score. In addition, the SAT has gone through several iterations, and the test is not the same during our sample's time frame as it was in 1995 when Holmes and Keffer published their study. For example, the test in 1995 contained questions called analogies that required students to identify how words were related to each other with no outside context. Analogies are no longer included in the SAT, and vocabulary questions are all embedded in larger reading

passages. The drop in analogy questions is an example of how the difference in the types of questions asked may impact the effect of the Greek and Latin Roots intervention between when Holmes and Keffer used the intervention and now. Unfortunately, we were unable to test for changes in the type of questions asked, but we tested if the intervention is effective with current FGLI students and the current test.

The null findings that intersectionality between FG and LI, as opposed to FG or LI, was again contrary to our expectation but not inexplainable. Possible explanations for the lack of support for H2B relate to the lower number of students who met the "or" requirement. Among the total 326 students included in the data, 49 were FG or LI, and all other 277 were FG and LI. The low number in the sample is due to the grant requirements, which require two-thirds of the students served to be both FG and LI. There were no students in this study who were mid-income with college-educated parents. Therefore, for comparison purposes, all students in this study were FG, LI, or FGLI. Future studies could portray more detailed findings by expanding the data to increase the sample population, including more students with FG or LI alone, non-FGLI, and mid- and high-SES students who are not part of TRIO.

Discussion

The null findings for the intervention suggest the effectiveness of TRIO programs is not solely based on their ability to improve students' SAT scores but includes assisting students to overcome barriers that limit their capacity in other ways. Schneider and Ingram (1993, 2019) offered a social construction framework for understanding the effectiveness of TRIO without improving SAT scores. This section discusses policy implications for the effectiveness of the TRIO Upward Bound regarding how the policy design moves a traditionally dependent population into the advantaged category of social constructionism.

First, the policy provides rigid boundaries around who is served and not served. As defined by federal policy, the target population is FGLI students. Research has shown that FGLI students face more barriers to education due to the lack of social and financial capital needed to overcome the access barrier (Dennis et al., 2005; Engle et al., 2006; McCarron & Inkelas, 2006; Pérez & McDonough, 2008; Thayer, 2000; Tieken, 2016; Wildhagen, 2015). Additionally, those populations generally have lower citizen engagement in the democratic arena, which has suppressed their voices in the political and policy processes (Schneider & Ingram, 1993, 2019). Therefore, FGLI students are generally viewed as powerless but not harming society, which qualifies as dependent on the social construction framework (Schneider and Ingram, 1993).

Second, the dependent category predicts that society carries the burden and cost of the services (Schneider & Ingram, 1993). The burden of cost falling on society is observed in all education policies for K-12 and the Pell grants for postsecondary education. However, FGLI students are also burdened by the income lost for educational pursuits and the future payoff for the service, which portrays the burden as a more fair and equitable distribution.

Third, due to the physical and political distance from the policymaker and the lack of their engagement, policies benefiting dependents are generally passed to earn political favor but are the first to be cut when budgets are shrunk. Recognizing the weaknesses, TRIO professionals formed a coalition named the Council for Opportunities in Education in 1981 (Council for Opportunity in Education — Who We Are, 2020). The Council seeks to constantly inform state senators and representatives of the effectiveness of the programs in their home region. Therefore, the professional organization allows the target population to be more proximate to the policymakers and regulators than other dependent policies. This proximity emulates the advantaged groups more than the disadvantaged groups.

Fourth, the tools by which the policy motivates the target populations primarily relate to capacity building to narrow the gap between dependents and the advantaged (Schneider & Ingram, 1993). The TRIO programs seek to increase capacity by educating students to make informed decisions about their future, which is again similar to the advantaged rather than dependents who are assumed to be irrational, thus requiring sanctions and force. College access professionals work with the target population through relationships and mentoring to build a community of students from similar backgrounds (Graham, 2011). The program also creates a network of alumni that can help students who lack social capital from their families, which sets up a structured format where students can work on applications and scholarships. Dansby and Dansby-Giles (2011) argue that this community is effective because it shows students that they are not alone, there are resources to help them, and these practices make some participants wish their high schools were more like Upward Bound.

Finally, the implicit message of the TRIO program is that students can overcome barriers to access and graduate from higher education, which contradicts what most dependent policies portray. According to Schneider and Ingram (1993), dependents are to be pitied by the government, which leads to disinterest in government policies and low political participation. TRIO acknowledges the challenges and barriers faced by historically underrepresented populations and seeks to remove them. TRIO programs provide grant funds to local communities who can design programming to motivate, which characterizes policies for advantaged groups.

The social construction of FGLI populations is complex, and TRIO is able to assist the students in a variety of ways to move their participants from the dependent to the more advantaged category of the social construction framework. While the SAT scores did not significantly change with the intervention, the program may still be effective because it addresses the barrier from multiple angles. When students view themselves as not being powerless like a dependent but empowered like the advantaged, lower SAT scores are not seen as a significant barrier to their educational attainment in the long term, and the TRIO students are still more likely to attend college than their FGLI peers. Instead, capacity is built through teaching resiliency and the ability to overcome challenges. Multiple postsecondary options are discussed for students who may not be as successful in traditional schooling models but still want to work towards better career outcomes. Through mentoring, career information, assistance with college funding, and other interventions, the higher educational attainment outcomes for FGLI TRIO students can still be improved, even without significantly impacting SAT scores.

Conclusion

The TRIO programs seek to remedy the educational disparity between FGLI students and their mid- and high-SES peers using a variety of interventions. These interventions play a positive role in changing the social constructions of the target population from the dependent to the advantaged category. However, the success reported in prior studies (Graham, 2011; Heuer et al., 2016) is not necessarily due to the particular intervention of Greek and Latin roots, which was the focus of this study. Using the data from the four high schools in the Treasure Valley in Idaho over four academic years (2015-2018), this study evaluated whether the Greek and Latin root intervention was effective in improving the SAT scores for TRIO students as the program intended. There are several noteworthy aspects to our findings that can help practitioners and policy makers.

First, this study contributes to our understanding of TRIO programs by reassessing the claims of Holmes and Keffer (1995). Contrary to their findings, the study did not find a significant effect of the TRIO UB intervention. We found statistical significance for racial minorities, GPA, and

English as a secondary language in the interaction model. However, the findings did not support the effect of the Greek and Latin root intervention, income, parent education level, and the intersectionality between being FG and LI. This suggests the cultural barriers written into the SAT cannot be overcome with Greek and Latin roots alone. Culture is a broad term that includes language, customs, symbols, and traditions passed through generations. SAT interventions may require more proactive measures to alleviate the cultural bias written into the test, which is evident in the differences based on being a racial minority, GPA, and language factors that can be included in the culture of a student, family, and community. Thus, the findings of this study call attention to barriers faced by students from diverse backgrounds and suggest these barriers are present and may be contributing to why some cultures are underrepresented in higher education.

Second, the findings can inform high school and university practitioners of the TRIO program's effectiveness and potential biases on SAT scores. SAT scores continue to be a complex indicator of high school student success. The stubbornness of improving SAT scores and their general correlation with GPAs suggests that other indicators may be just as helpful for colleges seeking to learn more about the students they are admitting. Because merit, the indicator SAT scores are frequently used to measure, is socially constructed by institutions, colleges and universities can choose how they want to define it. If institutions want to increase enrollment of FGLI students, it is important to consider what their definition of merit is and how they choose to define it impacts the FGLI students' perceptions of whether the school is an attainable choice. This raises important questions for colleges, such as whether they are creating inequality in the applicant pool by requiring a minimum SAT score, whether SAT scores are a good indicator of future success, or whether other indicators such as writing ability, school attendance, and GPA are equally valid (Allensworth & Clark, 2020).

Recently, some higher education institutions began reinstating SAT score requirements for admissions, claiming that using scores helps diversify their student body. The selective institutions can assess student test scores post-acceptance, even for students who opted not to include their SAT scores in the admissions process. Dartmouth released a recent report arguing that students who chose not to include their scores should have done so because their scores were high enough to improve their likelihood of admissions (Cascio et al., 2024). The report also highlighted the ongoing disadvantage faced by minority students due to the lack of resources, such as counselors who can help them with their essays and write competitive letters of recommendation. The report distinguished between advantaged and non-advantaged high schools, and used a score of 1400 as the example SAT score that should be submitted if attending a non-advantaged high school. This raises future research questions, including what constitutes a reasonable SAT score expectation for a FGLI student from a non-advantaged school, and what narratives contribute to students choosing not to report their scores.

One of the concerns of this study is the limited variation of students in the sample due to grant requirements and the limited number of schools qualified for the study implementing both UB and ETS. The four schools included in the study provide a snapshot but are not generalizable to the larger population. The limited number of students available for data means these results are not necessarily generalizable to the whole population. Additionally, the impact of students taking multiple SAT tests introduces a testing effect, where an increase in the ERW score can not solely be attributed to the intervention. The findings of this study using quantitative methods could be complemented by qualitative research, such as in-depth interviews with students after taking the SAT to understand the barriers they perceived with the test. Research should also look at other indicators contributing to success in college to determine if the SAT is a valid indicator or if it can be replaced by other indicators perceived as more attainable by students from FGLI backgrounds, such as attendance.

Finally, the use of Greek and Latin Roots as an intervention could be reconsidered by TRIO grant writers and those who manage the What Works Clearinghouse. While it is commendable that the federal government encourages the TRIO grants to use research-based practices, the What Works Clearinghouse should vet the studies more rigorously to ensure effective interventions for diverse demographics. Encouraging grants to base their practice on one study likely fails to consider various indicators, such as race and SES, as the findings of one study cannot be transferred into another context with guaranteed results.

About the Authors:

Dr. Megan Simila has ten years of experience as a TRIO Educational Specialist and is currently focused on exploring the trends she observed among her students and the requirements set forth by the Department of Education. Her research centers on college access and support for underrepresented populations, particularly low-income and first-generation students. Dr. Simila is passionate about mentoring relationships and their potential to enhance student success. This research is a key component of her dissertation project as a PhD student at Boise State University, with Dr. Sanghee Park serving on her committee.

Dr. Sanghee Park is an Associate Professor at the Paul H. O'Neill School of Public and Environmental Affairs, Indiana University Indianapolis. Her research focuses on public management, public policy, representation, and social equity, particularly in improving policy outcomes for socially marginalized groups, including women, racial and ethnic minorities, people with disabilities, immigrants, and low-income populations. Together, Dr. Simila and Dr. Park bring complementary expertise to this collaborative research, aiming to deepen the understanding of how to create more equitable systems for first-generation and low-income college students. This research contributes insights to the field of education policy and practice, and more broadly policy and administration.

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End Note

1. In 2016, Idaho spent $1.2 million on a statewide contract that allowed all 10th graders to take the PSAT and 11th graders to take the SAT for free (Gewertz, 2016). Before the COVID 19 pandemic, the test was an admission requirement for all two and four-year colleges in the state, which was tied to scholarship funding at two state universities. A 2010 task force declared that 60% of Idahoans between the ages of 25-34 need to have a college degree by 2025 to sustain Idaho's economic growth. However, only 42% of Idahoans between the ages of 25-34 had a college degree as of 2018. The legislature has supported the 60% goal and invested over $113 million into policies designed to improve the state's education attainment level (Richert, 2019). These policies have funded more school counselors, scholarships, and marketing campaigns designed to shift the narrative surrounding college attendance.

2. The What Works Clearinghouse is a collection of academic articles that evaluate various programs, products, practices, and policies in the field of education. It seeks to be a resource of evidence-based research that practitioners can use and organizes content-based topics relevant to education such as behavior, subjects, and grade. An article receives a seal of approval from the Clearinghouse by including statistically significant findings that can be expanded to other populations.

3. Schneider and Ingram (1993, 2019) used several factors to evaluate the policy in question: the definition of the target population, the attributes of the policy, the location of the target group, the tools through which the policy motivates the target population, and the messages implicit within the policy. The social construction grid has four categories that explain how society views populations and their ability for civic engagement: dependents (deserving but weak, such as children), advantaged (deserving and strong, such as the middle class), contenders (less deserving and strong, such as oil companies), and deviants (less deserving and weak, such as terrorists).

4. The Council encourages alums to share their stories about how they were impacted by the policy at the annual policy seminar in Washington D.C. and works with the program monitors to modify the rules hindering the program's effectiveness. Some rules require legislative approval, and some others can be changed by the Department of Education, but the Council navigates the bureaucratic system for the target population.

EMPIRICAL RESEARCH

Lowering Obstacles: How Aligning Satisfactory Academic Progress Policy to Federal Student Aid Minimums Increased Community College Student Retention and Equity

Authors:

Zachary Taylor
University of Southern Mississippi
z.w.taylor@usm.edu

Christina Tangalakis
Glendale Community College
dr.tangalakis@proton.me

Sarah Pauter, M.P.P
John Burton Advocates for Youth
Sarah@jbay.org

Abstract

Yearly, thousands of college students do not make satisfactory academic progress (SAP) and lose eligibility for federal student aid (John Burton Advocates for Youth, 2023). Answering calls of prior literature, this practitioner-led case study applies a Critical Race Theory framework to understand how Desert Alpine Community College changed their institutional SAP policy toward equity for Students of Color, aligning with federal minimum standards. Results suggest that this policy shift produced greater percentages of students making SAP, successfully filing SAP appeals, remaining eligible for federal financial aid, and persisting at the institution. Implications for practice, policy, and research are addressed.

Keywords: Financial aid, college students, satisfactory academic progress, financial aid policy, Critical Race Theory

Introduction

As of early 2023, many institutions of higher education are dealing with substantial enrollment declines, partially owed to the after-effects of the COVID-19 pandemic and a population shift resulting in fewer high school graduates and prospective college students (National Student Clearinghouse Research Center, 2023). These effects have been especially pronounced in community college settings, as research has found that the COVID-19 pandemic had a disproportionate impact on community college enrollment (Academic Senate for California Community Colleges, 2023; Bulman & Fairlie, 2022; Lackner, 2023), with some describing the outcome for community college enrollment as "dismal" (Sutton, 2021, p. 8). Unfortunately, this impact has further minoritized community college Students of Color, low-income students, and first-generation college students, as the highest percentage of students leaving community college after the pandemic have belonged to these groups (Bulman & Fairlie, 2022).

Although many studies have analyzed community college student persistence and retention (Lackner, 2023; Reyes et al., 2019), few studies have investigated the role that satisfactory academic progress (SAP) policies have in contributing to community college student persistence and retention (Ocean, 2017, 2021). Simply put, federal SAP regulations require recipients of federal student aid to maintain minimum grade-point averages, course completion rates, and complete their degree within maximum timeframes to remain eligible for federal student aid (Federal Student Aid, 2023). Research has already documented the heavy toll that the pandemic had on college student access and achievement (Lackner, 2023; Thomas & Allen, 2024), yet little is known about how SAP regulations and institutional SAP policies may contribute to students leaving higher education—or more specifically, community college—due to federal financial aid ineligibility. Moreover, many state aid programs and other funding opportunities for community college students are tied to a student's SAP status (John Burton Advocates for Youth, 2021, 2023), meaning that if a student becomes ineligible for federal aid, they likely lose eligibility for all types of aid.

Recognizing the difficult situation that community college students may face regarding SAP either during or after the COVID-19 pandemic period, one community college in California decided to review their SAP policy and advocate for equitable change to promote community college student persistence, especially among Students of Color. As a result, this case study reports on a multi-year policy intervention pre- and mid-pandemic conducted by Desert Alpine Community College (DACC, a pseudonym), where DACC's financial aid leadership modified their institutional SAP policy to align with federal minimums. Results indicated that after the policy change, students were more likely to file SAP appeals and succeed in their appeal, while SAP dismissal decreased across several populations of Students of Color, foster youth, and English-as-a-Second Language (ESL) students. Implications for research, policy advocacy, practice, and equity are addressed.

Literature Review

As SAP is a subprocess within a subunit in higher education, many readers may not be familiar with how SAP was established by law, how SAP is commonly defined, and how a negative SAP status can lead to several other student statuses related to federal student aid eligibility. From here, we will provide a brief overview of SAP, different aid eligibility types, and student processes. Then, we will move to the main literature review, which provides empirical insight into student experiences on SAP and institutional SAP policies and interventions.

What is Satisfactory Academic Progress?

Satisfactory academic progress is a term that first appeared in 1976 as an amendment to the Higher Education Act of 1965, and its guidelines are in Section 34 of the Code of Federal Regulations (Federal Student Aid, 2023). The regulations require postsecondary institutions to establish and follow a policy of progress composed of qualitative and quantitative measures. In this case, qualitative means quality, as measured by a student's cumulative grade point average. For programs of more than two academic years, the SAP policy must specify that students have at least a 2.0 cumulative GPA at the end of their second year or have academic standing consistent with the institution's requirements for graduation. The quantitative measure is time-related, as in credits earned toward timely degree progress, and must include a maximum timeframe for completion that is defined as no longer than 150% of the published length of the educational program (e.g., a 60-credit program must be completed within 90 attempted credits). Additionally, the quantitative measure must specify a cumulative unit completion or "pace of progression" standard (i.e., the percentage of units attempted that are successfully completed) that allows the student to complete their program within the 150% maximum timeframe. As a result, this is typically set at a minimum 67% cumulative completion rate.

It should be noted that while the federal statutes and regulations establish minimum standards for qualitative and quantitative measures, each individual institution is provided significant discretion in how SAP is defined and applied, including the ability to impose standards that are stricter than federally required. Failure to meet one or more of these criteria for two consecutive terms or one academic year can lead to termination of financial aid (Federal Student Aid, 2023).

Federal regulations require institutions to evaluate SAP either at the end of each payment period or annually (Federal Student Aid, 2023). Institutions that review SAP at the end of each payment period (usually semesterly) may first place a student in a financial aid warning status for one term when their grades or earned hours fall below required thresholds. Financial aid warning status requires improving one's grades, earning a higher percentage of one's enrolled credits, or other measures required by the institution (Federal Student Aid, 2023).

If a student's grades or credit completion criteria do not improve at the end of the term in which they are on warning status, their financial aid must be terminated and can only be reinstated by subsequently meeting their institution's SAP standards without the benefit of financial aid or through a financial aid appeal. A successful appeal yields the label of financial aid probation with a limit of one academic term which allows students access to one probationary term of financial aid. Subsequently, students on financial aid probation must meet SAP in a subsequent academic term by raising their grades or course completion rates to regain financial aid eligibility (Federal Student Aid, 2023). If it is determined during the appeal process that a student cannot meet SAP by the end of the probation period, they must develop an academic plan that ensures they can meet the institution's SAP standards by a specified point in time (Federal Student Aid, 2023).

Finally, it is important to note that Title IV institutions of higher education partner with Federal Student Aid to participate in negotiated rulemaking, allowing institutions to provide input and ask Federal Student Aid clarifying questions related to program integrity to ensure federal compliance. Typically, Federal Student Aid will respond to institutional questions via a Questions and Answers document on the Department of Education website, taking practitioner feedback into account when updating SAP policy regulations and program integrity guidelines (Federal Student Aid, 2011).

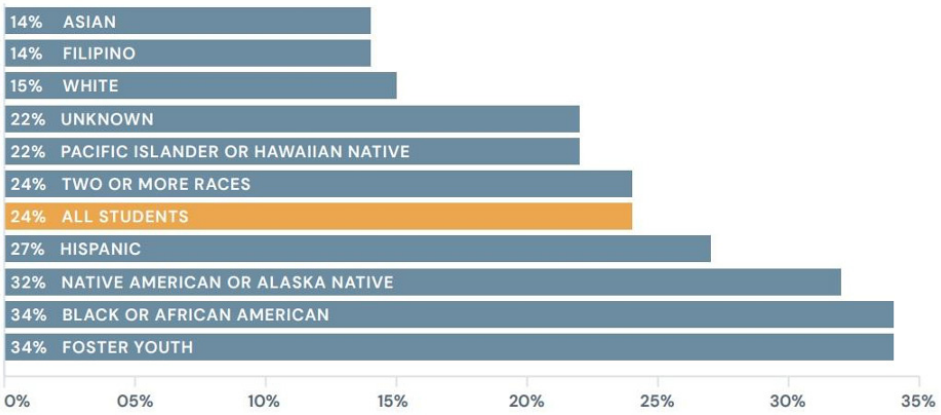
Research Related to Institutional SAP Policies and Interventions

Although SAP has been known to be a complex topic in higher education, little research has studied the effects of being placed on SAP status through quantitative methods (Dozier, 2017; McNair & Taylor, 1988) or policy articulation (Bennett & Grothe, 1982; Schudde & Scott-Clayton, 2016; Siebenmorgen & McCullough, 1990). Of the most recent and generalizable quantitative study related to SAP, publicly available National Postsecondary Student Aid Survey (NPSAS) data from the 2015/2016 academic year suggested that among all Pell Grant recipients nationally, 20.2 percent fell below a 2.0 GPA and did not meet federal SAP minimums. At public 2-year institutions, 23.8 percent of students fell below a 2.0 GPA, and public 4-year institutions had a 15.2 percent rate (Radwin et al., 2018). The rates at private non-profit 4-year institutions were somewhat lower at 13.6 percent. The rates at private non-profit 4-year institutions were noted as unreliable and, therefore, were not reported. As the NPSAS data does not include course completion rates, it is likely that the combined rate of SAP failure is higher than these numbers when both criteria are incorporated (Radwin et al., 2018), suggesting that much more support could be provided for students struggling to make SAP. Moreover, institutions have also used more stringent standards than federal minimums, likely increasing the number of students who struggle with SAP (Radwin et al., 2018).

Alternatively, no studies have explored how a change in institutional SAP policy may influence community college students' access to federal student aid and, subsequently, retention at an institution. In fact, most research related to SAP are dissertations focused on individual institutional case studies of SAP policy implementation (Audet, 2010; Beggs, 2015; Brochet, 2020; Clemmons, 2017; Cox, 2019; Harrison, 2018; Ortiz-Harvey, 2022; Vaughn, 2020) and not any form of policy change. Other studies have suggested that institutional academic and financial aid departments need to partner to better communicate policies to students (Taylor et al., 2023), especially as academic probation and SAP policies often do not align and may cause student confusion (Taylor & Pauter, 2024).

However, John Burton Advocates for Youth (JBAY; 2021, 2023) began researching institutional SAP policies as part of policy advocacy in the state of California to increase college access for minoritized student populations, including foster youth and students experiencing homelessness. In their report, The Overlooked Obstacle: How Satisfactory Academic Progress Policies Impede Student Success and Equity, JBAY received aggregated data from Cal-PASS Plus, a statewide data system funded by the California Community College Chancellor's Office. The data set included 76,125 students, all of whom received a Pell Grant and attended a California Community College for the first time in Fall 2017. Overall, nearly one in four students did not meet SAP for their first two consecutive semesters, jeopardizing their continued access to financial aid. For African American (34 percent) and Native American (32 percent) students, the rates of financial aid disqualification due to SAP were twice that of White (15 percent) and Asian (14 percent) students (John Burton Advocates for Youth, 2021).

Figure 1: *Percentage of community college students who remained enrolled after their first two consecutive terms and did not make SAP in both terms*



**Note: Figure reproduced with permission from John Burton Advocates for Youth*

Of the students who did not meet SAP, only 13 percent remained enrolled and continued to receive financial aid in their third term, indicating the enormous impact of SAP standards on community college students who struggle academically during their first year. However, beyond the work of JBAY (2021, 2023) and few qualitative studies (Audet, 2010; Beggs, 2015; Brochet, 2020; Clemmons, 2017; Cox, 2019; Harrison, 2018; Ocean, 2017, 2021; Ortiz-Harvey, 2022; Vaughn, 2020), no studies have examined how institutional SAP policy changes may increase student retention, especially when policies are aligned with federal minimums, necessitating this work.

Theoretical Framework

Critical Race Theory (CRT) is the theoretical lens through which policy change and data were evaluated for this study. Pioneered by Bell (1995) and Crenshaw (1991), CRT is a critical framework for describing and analyzing ways that racist systems persist in American society and continue to inform policy, law, and social attitudes. Delgado and Stefancic (2012) explained that CRT, finding its origins in legal critical theory, successfully applies across academic and professional disciplines, including studies of higher education. They explained, "racism is ordinary" (p. 7); racism serves to hold supreme the privilege of whiteness. And, to the same extent that racism is endemic in all social structures, CRT is an appropriate lens through which to study these phenomena across all disciplines.

Later, Ladson-Billings (1998) introduced the central tenets of CRT that expanded from its beginnings in legal theory to theoretical study in education. First, Ladson-Billings (1998) asserted that racism is normal in American society, including the education system, where predominately White school leaders have created and enacted policies that disproportionately harm Students of Color. Second, per Ladson-Billings (1998), CRT leverages experiential storytelling to dismantle the mythology surrounding a shared or common American experience, including the lived experiences of People of Color in racist, hegemonic education systems. Third, Ladson-Billings (1998) explained that liberalism is insufficient in strength and pace to mount a successful offense against racism, asserting that collectivistic efforts through research, practice, and policy

advocacy must occur in education to strive toward equity for People of Color. Fourth, Ladson-Billings (1998) posed a critique of the modern civil rights movement as having disproportionately benefited more Whites than Blacks. Here, many institutional higher education policies have been developed and maintained to disproportionately benefit more Whites than People of Color, including SAP policies, which have had disproportionately negative impacts on People of Color (JBAY, 2021, 2023).

From a Critical Race perspective, this study offers a theoretical space for students whose academic dreams were interrupted by implicitly racist systems, including the U.S. Department of Education's Office of Federal Student Aid. This study explores the way systemic racism continues to work against students at society's margins of race, ethnicity, gender, disability, and language. Critical Race Theory is not a neutral academic exercise; employment of the CRT theoretical framework is necessary to examine the patterns of racism and oppression that persist in higher education policy to begin the process of dismantling them, including policy analysis to uncover inequities and advocacy for policy change, as is the case in this study.

Moreover, Crenshaw (1991) informed this study by reminding researchers that intra-group differences are often overlooked in traditional inquiries on race and gender, deemed as one's intersectionality. She explained, "My focus on the intersections of race and gender only highlights the need to account for multiple grounds of identity when considering how the social world is constructed" (p. 1245). In this study, we sought to understand how institutional SAP policies affected students with minoritized intersectional identities, unearthing the struggle that certain students experience due to their minoritized identities, primarily Students of Color.

Research Narrative

Case Study Method and Site

This research adopted a case study approach to explore how a SAP policy intervention may increase student equity for minoritized community college students. Desert Alpine Community College (DACC) is a public 2-year institution in a single college district belonging to the city of Desert Alpine. According recent estimates by the U.S. Census Bureau (2022), Desert Alpine is a midsized community of 192,366 that is adjacent to a larger metropolitan urban area. DACC serves its local community and commonly enrolls students from the adjacent locales. The total population of for-credit students enrolled as of spring term 2022 was just over eleven thousand.

DACC offers federal and state aid programs to its financial aid applicants based on program eligibility. About 65% of DACC's for-credit enrolled students access some form of financial assistance beyond family resources. DACC evaluates students' SAP after every payment period. Students who do not meet SAP are given one warning term to correct the academic deficit, either in grade point average, pace of progress, maximum timeframe, or any combination of the three SAP measurements. After the warning term, if the student still does not meet the established evaluation criteria, the student is placed on SAP dismissal. SAP dismissal status prevents a student from receiving federal and most state aid until the dismissal is resolved. SAP dismissal may be resolved by improved academic performance without the benefit of most federal and state financial support, or the student may appeal their SAP dismissal status.

Policy Change Intervention

After the arrival of a new director of financial aid on the DACC campus in April 2018, the director (a member of the research team) began the process of reviewing all departmental policies and

procedures for currency and compliance with federal regulation and implications for student enrollment, retention, and success. To begin the pre-policy change evaluation, researchers accessed SAP appeal quantitative data from the student information system of record at DACC. With the assistance of institutional research staff, study researchers were able to access SAP appeal submissions for the 2016-2017 aid year. This was the most recent and complete aid year prior to the application of interventions. Data retrieved included the number of SAP appeals submitted and completed, as well as demographic data for the students who were submitting appeals.

While reviewing departmental SAP policy and procedure, the director uncovered a system of evaluation that exceeded the federal minimum pace of progression standard of 66.67% (Federal Student Aid, 2023). Additionally, the director observed evaluation standards that exceeded the federal minimum standard in the 150% maximum timeframe evaluation. It was learned that appeal processing at that time was driven by the personal ideologies of the reviewer rather than by a rational and equitable framework or standardized rubric to ensure the equity and integrity of the process.

By the end of the policy and procedure review, the director implemented immediate changes in the Spring 2020 semester. Those changes included resetting all evaluation standards to the allowable federal minimums: grade point average must be 2.0 or better, pace of progress must be 66.67% or greater, and students must complete their academic program within 150% of the published program length. The other interventions—allowable by federal guidance and consistent with a CRT framework—that were made prior to the decrease in overall SAP dismissal rates were 1) exclusion of repeated courses from the pace of progress, 2) exclusion of all ESL courses, 3) exclusion of up to 30 credits of remedial courses, 4) expanding the allowable reasons for appealing SAP disqualification, 5) removal of prior low or failing grades, withdrawals, and courses not applicable to degree or program, and 6) removing incomplete marks from the pace of progression and GPA calculation, including a rounding up on any SAP measurements for both qualitative and quantitative components, permitted by Federal Student Aid (Federal Student Aid, 2023),

Additionally, the director established an appeal review process that reframed the positionality of the review as a restorative process. Consistent with a CRT framework, the punitive framework which existed prior to the intervention was replaced with appeal reviewing that centered on students' lived experiences. There were also unique characteristics of DACC's student population. DACC is a community that has a large population of Students of Color and English-as-a-Second Language (ESL) students, and the community includes a significant immigrant population with students emigrating from Eastern Europe and Western Asia. As a result, the DACC team operated under two main hypotheses, consistent with a CRT framework (Bell, 1995; Crenshaw, 1991; Ladson-Billings, 1998):

- SAP policy changes will decrease the number of SAP dismissals among students of Color.
- SAP policy changes will decrease the number of SAP dismissals among English-as-a-Second Language (ESL) students.

Ultimately, with the assistance of DACC's Office of Institutional Research, the committee collected quantitative and qualitative data representing the total number of completed SAP appeals received by the Office of Financial Aid in the most recently completed aid year after the SAP policy change. The DACC team used an aid year that represented a time period after immediate SAP interventions were in effect, 2020-2021, and compared to the year prior to the interventions, 2016-2017.

Results

Descriptive statistics of 2016-2017 DACC student demographics and SAP policy outcomes can be found in Table 1 below:

Table 1: *DACC Students Awarded Aid in 2016-2017 and SAP Outcomes*

	Total	Students Awarded Federal Aid in 2016-2017		Students on SAP Dismissal in 2016-2017		Students Appealing SAP in 2016-2017		Students SAP Dismissed and Re-enrolling at DACC After Dismissal and Appeal in 2016-2017		Students SAP Dismissed and Re-enrolling at DACC Any Time After Dismissal		
	n	n	% of Total	n	% of Awarded Aid	n	Appeal Rate	n	% of Total	n	Re-enroll Rate	Attrition Rate
Asian American / Pacific Islander	1,789	505	28.2%	91	18.0%	6	6.6%	6	100.0%	63	69.2%	30.8%
Black / African American	713	366	51.3%	98	26.8%	8	8.2%	6	75.0%	51	52.0%	48.0%
Latinx	5,780	3,203	55.4%	883	27.6%	47	5.3%	46	97.9%	647	73.3%	26.7%
Woman	12,838	7,137	55.6%	1,180	16.5%	102	8.6%	93	91.2%	824	69.8%	30.2%
Man	10,616	4,963	46.8%	1,008	20.3%	78	7.7%	74	94.9%	727	72.1%	27.9%
Not Disclosed or Unknown Gender	528	260	49.2%	40	15.3%	2	5.0%	2	100.0%	25	62.5%	37.5%
Age												
Under 21	5,636	2,805	49.8%	357	12.7%	32	9.0%	30	93.8%	264	73.9%	26.1%
21 to 25	8,222	4,131	50.2%	998	24.1%	58	5.8%	55	94.8%	748	74.9%	25.1%
26 to 30	3,654	1,846	50.5%	437	23.7%	36	8.2%	36	100.0%	297	68.0%	32.0%
31 to 40	3,240	1,748	54.0%	251	14.4%	27	10.8%	24	88.9%	170	67.7%	32.3%
41 to 50	1,610	925	57.5%	90	9.7%	10	11.1%	7	70.0%	48	53.3%	46.7%
Over 50	1,619	905	55.9%	95	10.3%	19	20.0%	17	89.5%	56	58.9%	41.1%
Students with Disabilities	1,434	764	53.3%	177	23.2%	18	10.2%	15	83.3%	140	79.1%	20.9%
Foster Youth	54	50	92.6%	17	34.0%	3	17.6%	3	100.0%	12	70.6%	29.4%
Veterans	208	90	43.3%	14	15.6%	4	28.6%	3	75.0%	11	78.6%	21.4%
Credit ESL Students	12,808	8,429	65.8%	1,472	17.5%	154	10.5%	145	94.2%	1,187	80.6%	19.4%
Noncredit ESL Students	2,625	2,205	84.0%	215	9.6%	30	14.0%	28	93.3%	157	73.0%	27.0%
Overall	23,982	12,360	51.5%	2,228	18.0%	182	8.2%	169	92.9%	1,583	71.1%	28.9%

Notes: Appeal rate is the percentage of SAP dismissal students appealing dismissal in the same year; Re-enroll rate is the percentage of SAP dismissal students re-enrolling at DACC any time after dismissal; Attrition rate is the percentage of SAP dismissal students who do not re-enroll at DACC after dismissal.

As evidenced by data in Table 1, the highest percentage of DACC students on SAP dismissal were foster youth (34.0%), Latinx students (27.6%), and Black/African American students (26.8%). Moreover, Black/African American students were the least likely to re-enroll after being dismissed for SAP (52%), compared to students from other racial backgrounds, such as Latinx students (73.3%) and Asian American/Pacific Islander students (69.2%). There were also various differences in SAP outcomes between students within age categories, students with disabilities, veterans, and ESL students, suggesting that the institution was more or less supportive of different student groups regarding navigation of SAP policies and processes.

Table 2: *DACC Students Awarded Aid in 2020-2021 and SAP Outcomes*

	Total	Students Awarded Federal Aid in 2020-2021		Students on SAP Dismissal in 2020-2021		Students Appealing SAP in 2020-2021		Students SAP Dismissed and Re-enrolling at DACC After Dismissal and Appeal in 2020-2021		Students SAP Dismissed and Re-enrolling at DACC Any Time After Dismissal		
	n	n	% of Total	n	% of Awarded Aid	n	Appeal Rate	n	% of Total	n	Re-enroll Rate	Attrition Rate
Asian American /Pacific Islander	1,788	407	22.8%	48	11.8%	2	4.2%	1	50.0%	31	64.6%	35.4%
Black / African American	578	278	48.1%	61	21.9%	2	3.3%	2	100.0%	35	57.4%	42.6%
Latinx	4,201	2,241	53.3%	585	26.1%	42	7.2%	41	97.6%	415	70.9%	29.1%
Woman	12,111	6,198	51.2%	853	13.8%	58	6.8%	54	93.1%	582	68.2%	31.8%
Man	10,053	4,067	40.5%	585	14.4%	44	7.5%	42	95.5%	416	71.1%	28.9%
Not Disclosed or Unknown	498	263	52.8%	37	14.1%	3	8.1%	3	100.0%	28	75.7%	24.3%
Age												
Under 21	5,704	2,494	43.7%	272	10.9%	14	5.1%	13	92.9%	196	72.1%	27.9%
21 to 25	7,265	2,739	37.7%	555	20.3%	46	8.3%	45	97.8%	415	74.8%	25.2%
26 to 30	3,218	1,515	47.1%	289	19.1%	18	6.2%	17	94.4%	197	68.2%	31.8%
31 to 40	3,209	1,805	56.2%	232	12.9%	19	8.2%	17	89.5%	141	60.8%	39.2%
41 to 50	1,642	949	57.8%	76	8.0%	5	6.6%	4	80.0%	49	64.5%	35.5%
Over 50	1,624	1,026	63.2%	51	5.0%	3	5.9%	3	100.0%	28	54.9%	45.1%
Students with Disabilities	1,086	634	58.4%	131	20.7%	17	13.0%	17	100.0%	103	78.6%	21.4%
Foster Youth	36	32	88.9%	10	31.3%	1	10.0%	1	100.0%	8	80.0%	20.0%
Veterans	188	82	43.6%	12	14.6%	2	16.7%	2	100.0%	10	83.3%	16.7%
Credit ESL Students	11,668	7,592	65.1%	1,027	13.5%	90	8.8%	85	94.4%	815	79.4%	20.6%
Noncredit ESL Students	2,193	1,837	83.8%	136	7.4%	12	8.8%	11	91.7%	103	75.7%	24.3%
Overall	22,662	10,528	46.5%	1,475	14.0%	105	7.1%	99	94.3%	1,026	69.6%	30.4%

Notes: Appeal rate is the percentage of SAP dismissal students appealing dismissal in the same year. Re-enroll rate is the percentage of SAP dismissal students re-enrolling at DACC any time after dismissal. Attrition rate is the percentage of SAP dismissal students who do not re-enroll at DACC after dismissal.

After the SAP policy intervention, evidenced by data in Table 2, the highest percentage of DACC students on SAP dismissal were still foster youth (31.3%), Latinx students (26.1%), and Black/African American students (21.9%), although these figures represented declines across all demographics. Moreover, Black/African American students were still the least likely to re-enroll after being dismissed for SAP (57.4%), compared to students from other racial backgrounds, such as Latinx students (70.9%) and Asian American/Pacific Islander students (64.6%). However, all student racial groups increased their re-enrollment rate at DACC after the SAP policy intervention. There were also notable increases in re-enrollment at DACC among students with disabilities, foster youth, and ESL students after the SAP policy intervention.

Independent t-test results comparing differences in SAP cases and dismissals between the 2016-2017 and 2020-2021 academic years by term can be found in Table 3 below:

Table 3: *Independent samples t-tests of SAP cases and dismissals by academic term across AY17 and AY21*

Term	t	df	p	Cohen's d	SE Cohen's d
Fall Cases	-3.375	46642	<.001***	0.031	0.009
Fall Dismissals	-8.759	46642	<.001***	0.081	0.009
Spring Cases	-2.887	46642	0.004**	0.027	0.009
Spring Dismissals	-12.399	46642	<.001***	0.115	0.009
Summer Cases	-0.828	46642	0.408	0.008	0.009
Summer Dismissals	-0.803	46642	0.422	0.007	0.009
Year-to-Year Cases	-3.912	46642	<.001***	0.036	0.009
Year-to-Year Dismissals	-10.994	46642	<.001***	0.102	0.009

*Note: Term to term designates AY17 term to AY21 term; * = p < 0.05, ** = p < 0.01, *** = p < 0.001*

Data in Table 3 suggest statistically significant decreases in SAP cases and decreases in SAP dismissals across all terms but summer. The largest changes occurred in the decreases in Spring dismissals from AY17 to AY21 (t = -12.399) and overall decreases in academic year-to-academic year dismissals (t = -10.994)—suggesting that many DACC students were able to either successfully appeal their SAP status or were able to remediate their academic standing to make SAP, resulting in significantly fewer SAP dismissals from AY17 to AY21. The only term unaffected by the SAP policy intervention was summer, as data suggests both summer SAP cases and dismissals did not decrease at a statistically significant rate between AY17 and AY21.

Differences in SAP cases and dismissals by demographic as a result of DACC's SAP policy intervention can be found in Table 4 below:

Table 4: *Differences in SAP cases and dismissals by demographic*

Demographic	Cases AY17	Dismissal % AY17	Cases AY21	Dismissal % AY21	% Decrease	Statistical Significance^
Asian American / Pacific Islander	91	5.1%	48	2.7%	-47.1%	0.003**
Black / African American	98	13.7%	61	10.6%	-22.6%	0.08
Latinx	883	15.3%	585	13.9%	-33.7%	0.11
Woman	1,180	9.2%	853	7.0%	-27.7%	0.000***
Man	1,008	9.5%	585	5.8%	-41.9%	0.000***
Not Disclosed or Unknown Gender	40	7.6%	37	7.4%	-7.5%	0.34
Age						
Under 21	357	6.3%	272	4.8%	-23.8%	0.02*
21 to 25	998	12.1%	555	7.6%	-44.4%	0.000***
26 to 30	437	12.0%	289	9.0%	-33.9%	0.000***
31 to 40	251	7.7%	232	7.2%	-7.6%	0.10
41 to 50	90	5.6%	76	4.6%	-15.6%	0.10
Over 50	95	5.9%	51	3.1%	-46.3%	0.000***
Students with Disabilities	177	12.3%	131	12.1%	-25.9%	0.13
Foster Youth	17	31.5%	10	27.8%	-41.2%	0.40
Veterans	14	6.7%	12	6.4%	-14.2%	0.43
Credit ESL	1,472	11.5%	1,027	8.8%	-30.2%	0.000***
Noncredit ESL	215	8.2%	136	6.2%	-36.7%	0.004**
All students	2,228	9.3%	1,475	6.5%	-33.8%	0.000***

*Note: Dismissal percentages calculated using intergroup populations (ex: 883 Latinx students on SAP Dismissal in AY17 represents 15.3% of 5,780 Latinx students enrolled at DACC in AY17 receiving federal aid); ^ Statistical significance calculated to 95% confidence intervals relative to intergroup population size; * = $p < 0.05$, ** = $p < 0.01$, *** = $p < 0.001$*

Data in Table 4 suggest that all student subgroups experienced a decline in SAP dismissals from the pre-policy change 2016-2017 academic year compared to the 2020-2021 post-policy change academic year. Data in Table 4 also confirms both of this study's hypotheses related to SAP policy intervention effects on Students of Color and ESL students. For example, the largest decrease was among Asian Americans and Pacific Islanders, with a statistically significant 47.1% decrease ($p = 0.003$). Also, students over 50 years old (-46.3%), students between 21 and 25 years old (-44.4%), men (-41.9%), and foster youth (-41.2%) experienced large decreases in SAP dismissals.

Pertinent to this study's goals and confirming this study's first hypothesis, SAP policy changes resulted in large decreases in SAP dismissals among all groups of Students of Color, as well as among credit-taking and noncredit-taking ESL students. Black and African American students experienced a 22.6% decrease, while Latinx students experienced a 33.7% decrease in SAP dismissals. Additionally, confirming this study's second hypothesis, credit-taking and noncredit-taking ESL students experienced statistically significant decreases in SAP dismissals after the policy change. Credit-taking ESL students experienced a 30.2% decrease ($p < 0.000$), while noncredit-taking ESL students experienced a 36.7% decrease ($p = 0.004$). Overall, DACC students experienced a statistically significant 33.8% decrease in SAP dismissals ($p < 0.000$)—suggesting that the SAP policy change benefitted the entire DACC campus.

Discussion and Implications

As this study successfully documented an institutional SAP policy change, which produced equitable results for minoritized students, there are many implications for research and financial aid practice that emerge.

Discussion and Implications for Research

To begin, this study finds that Students of Color and ESL students at DACC were being disproportionately impacted by inequitable, overly stringent institutional SAP policies, and these students benefited from SAP policy changes. However, the SAP policy change positively impacted other minoritized groups, such as nontraditional adult students, students with disabilities, foster youth, and veterans. Although not all SAP dismissal decreases were statistically significant across all student subgroups, this study reveals that researchers could investigate the lived experiences of students from these subgroups as they navigate their academic careers and institutional SAP policies. Moreover, researchers could explore whether institutions have specific programs or policies in place to support these minoritized students, especially as it relates to understanding and acting upon institutional policy. Ultimately, within a CRT framework (Bell, 1995; Crenshaw, 1991; Ladson-Billings, 1998), this study finds that institutional policies were effectively discriminating against Students of Color and other minoritized groups, necessitating more critical inquiries into areas of institutional and federal policy.

Prior studies focusing on Pell Grant recipients have found that roughly 20% of all Pell Grant recipients nationwide do not meet federal SAP minimums, with 21.3% of community college Pell Grant Recipients not meeting federal SAP minimums (Radwin et al., 2018). JBAY's (2021) report found that within California's community colleges, roughly 25% of all Pell Grant recipients did not make SAP for their first two consecutive semesters, with African American and Native American students not making SAP at nearly twice the rates of White and Asian American students (John Burton Advocates for Youth, 2021). This study found that 9.3% of all DACC students experienced a SAP dismissal, with Black/African American students (10.6%) and Latinx students (13.9%) experiencing SAP dismissal at four or five times the rate of Asian American/Pacific

Islander students (2.7%), even after DACC's SAP policy change. This discrepancy is troubling, even though DACC's policy change resulted in SAP dismissal decreases across all student subgroups. Ocean's (2021) prior work hinted at this study's findings, as Ocean learned that students struggling with SAP often originate from lower-income and minoritized backgrounds, finding themselves also marginalized by institutional policy. From here, future research must engage with Black/African American and Latinx students to better understand their experiences navigating institutional SAP policies and aid eligibility processes.

Additionally, this study finds that ESL students may be particularly impacted by more equitable SAP policies, most prominently DACC's policy change to exclude ESL and remedial coursework from SAP maximum timeframe calculations and to exclude courses not applicable to students' academic program from GPA and pace of progress calculations. After DACC's SAP policy change, ESL students experienced statistically significant decreases in SAP dismissal rates, suggesting that researchers could better investigate institutional policies relevant to ESL students and explore how these policies could be made more equitable.

Discussion and Implications for Financial Aid Practitioners

Given the results of the SAP policy change to reflect federal minimum standards, there are many implications of this work for both institutional practitioners and federal policy advocates. As previously noted in JBAY's Overlooked Obstacle 2 report, many higher education institutions in California have SAP policies that are more stringent than the federal regulations, which results in disadvantaged students being unfairly prevented from accessing higher education (John Burton Advocates for Youth, 2023). The Community of Practice's findings support the recommendations made in The Overlooked Obstacle report, which suggest that financial aid maintenance criteria should be established (John Burton Advocates for Youth, 2021). While each institution should conduct its own analysis to determine how to best support student persistence and retention, the first step is to eliminate barriers created by unnecessarily strict SAP policies. Campuses should evaluate SAP using only cumulative measures, rather than both cumulative and individual term-based measures. Additionally, institutions should adopt policies that set the qualitative and quantitative standards at the minimum thresholds, which are a 2.0 GPA and a 67 percent course completion rate for programs lasting longer than two academic years. Institutions should also consider implementing escalated GPA and course completion standards that allow newly matriculated students to meet thresholds below the federal minimum requirements early in their academic careers, resulting in a longer onramp to academic success.

The Community of Practice also made an important discovery regarding the proportion of students who appeal financial aid disqualification. Some large campuses provided data to JBAY, which showed that the appeal approval rate varied between 80 and 98 percent across institutions (John Burton Advocates for Youth, 2023). This suggests that most completed appeals are approved. However, only 15 to 39 percent of students who were disqualified from financial aid submitted an appeal (John Burton Advocates for Youth, 2023). The low rates may be due to various factors, such as a lack of knowledge about the appeal option, difficulty in completing the appeal process, or limited timeframes for submission. To make the appeal process easier for students, financial aid administrators should make information about appeals easily accessible and understandable on the institution's website, proactively communicate with students who are close to the SAP threshold, broaden the allowable bases for appeals, and not require a burdensome amount of time or information from students to complete the appeal process.

Additionally, institutions should avoid requiring SAP knowledge tests or extensive documentation, including third-party documentation that may be difficult to obtain for students experiencing homelessness or mental health concerns. Instead, campuses should allow students to provide

a signed statement as documentation to attest to their extenuating circumstances. As a result, institutions will likely provide the greatest level of support to the most minoritized students—including Students of Color, low-income students, and foster youth—to ensure they are given every opportunity to maintain their aid and persist at their institution.

Limitations

It is critical to know that this study, as a single institution case study, is limited by its research methodology, its timeline, and its single institution focus. It is difficult to conduct satisfactory academic policy studies across multiple institutions, as according to the Federal Student Aid handbook, institutions are afforded ample flexibility to establish many different parameters of institutional SAP policies (Federal Student Aid, 2023). However, future studies should attempt to compare and contrast SAP studies across similar institution types and expand the timeline of policy implementation and data collection across multiple institutions in an attempt to better generalize how institutions of higher education across the country can adopt equitable SAP policies for Students of Color.

Conclusion

Ultimately, this study suggests that institutions ought to review their internal financial aid policies, specifically their SAP criteria and standards, and ensure the institution is doing everything in their power to align these criteria and standards to what is actually required by the federal government. Moreover, financial aid departments and offices should partner with institutional research offices to understand which students are being disproportionately and negatively impacted by inequitable institutional SAP policies (Taylor et al., 2023). Through a CRT lens, our research team knew that Students of Color and ESL were being inequitably treated, and our analysis of this study's data and intervention quantified this inequity. Therefore, although paradoxical, this study found that adhering to federal minimums may have maximized the institution's and their students' resources to increase student persistence and re-enrollment at the institution. As a result, other institutions should follow DACC's lead and strictly follow federal minimum SAP standards to strive toward equity for our most minoritized students.

Conflict of Interest Statement: The authors declare no conflict of interest.

About the Authors:

Dr. Z.W. (Zachary) Taylor is an assistant professor at The University of Southern Mississippi. Dr. Christina Tangalakis is the former Associate Dean of Student Financial Aid at Glendale Community College in California. Sarah Pauter is a Senior Project Manager with John Burton Advocates for Youth in California. Together, this research team is passionate about ensuring equity through financial aid practices and policies, especially as these policies affect low-income students, foster youth, students of Color, and English language learners.

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PRACTICE BRIEF

Creating a Sense of Belonging for URM Students in STEM Education: Best Practices from Successful Cohort Programs

Author:

Bishoy Yacoub
Williams College
bishoywaheedyacoub@gmail.com

Abstract

This practice brief explores the lack of representation of Black, Hispanic, and American Indians or Underrepresented Minorities in post-secondary STEM education and the overall STEM workforce. Such disparity may be attributed to the "chilly climate" theory proposed by Hall & Sandler (1982), whereby underrepresented minorities (URM) often feel isolated in higher education's STEM environments. This practice brief will provide a condensed overview of three successful cohort programs that have produced a significant number of URM STEM majors and post-secondary STEM graduates: the Meyerhoff Scholarship Program at the University of Maryland Baltimore County, the Program for Research Initiatives in Science and Mathematics (PRISM) at John Jay College, and the Federal TRIO McNair Scholars Program. This brief will then look at four common best practices cited in qualitative studies on these cohort programs that help create a sense of belonging for URM STEM students: The first includes developing a social community of support between students, faculty, and staff. The second is institutional buy-in and a commitment to investing financially in these students' success. The third is creating an environment in which a URM STEM student can identify as a scientist through research exposure, professional development, and networking opportunities. The final best practice is breaking financial barriers by providing monetary aid to students so that they can focus on school.

Keywords: Meyerhoff Scholars Program, Minority Serving Institutions, Student Success, URM STEM support program, McNair Scholars Program

Introduction and Background

The Science, Technology, Engineering, and Mathematics (STEM) workforce comprised approximately 34.9 million adults in 2021 (National Science Foundation, 2021). This marked a 20% increase over a decade and is expected to grow by an additional 10% by 2032 (Bureau of Labor Statistics, 2024). Unfortunately, there are significant disparities in STEM representation for underrepresented minorities (URM). Despite making up 37% of the college-age population, Blacks, Latinos, and Asians contribute 8.6%, 15%, and 1% respectively to the total STEM workforce (National Science Board, National Science Foundation, 2021). To meet the demands of the increasing STEM workforce, STEM degree-holders from diverse backgrounds are vital. Indeed, STEM education will determine whether or not the US remains at the forefront of technological and scientific innovation across industries (Benish, 2016). Those who come from diverse backgrounds are able to develop solutions that cater to a variety of demographic needs (NCBI, 2023).

However, only about one-fifth of URM students, who start college intending to study STEM, eventually earn a STEM degree (National Science Board, 2018). According to Palid et al. (2023), for over four and a half decades, research has highlighted the disparity in racial diversity within STEM fields. The Pew Research Center emphasizes that despite concerted efforts, the current trajectory of STEM degree attainment seems unlikely to substantially bridge these racial gaps (Fry et al., 2021). The causes that influence these issues link back to a lack of mentorship experiences, academic outlooks, negative attitudes toward STEM, and pertinent familial socio-economic obligations (Kanny et al., 2014).

It's concerning, but hardly surprising, that many minoritized students find the atmosphere of higher education STEM programs rather inhospitable (Palid et al., 2023). The "chilly climate" theory, introduced by Hall & Sandler (1982), discusses how subtle forms of discrimination in and out of the classroom create an unwelcoming environment. Regrettably, this phenomenon still resonates over forty years later. Many URM students encounter prejudice throughout their college journey—from peer interactions to engagements with faculty and administrative staff (Bottia et al., 2021). The unwelcoming culture within these environments often subtly sanctions bias and antagonism (McGee et al., 2016).

When combatting this negative environment, many scholars look to Vincent Tinto's interactive model of student departure (Tinto, 1993). His theory breaks down the determinants of student integration during their inaugural academic year into three pivotal areas: personal and psychological attributes of the student, academic elements, and factors related to social interactions and relationships (Tinto, 2017). Within the model, the psychological and personal characteristics spotlight the individual determinants that push students either to continue their studies or abandon them (Tinto, 2003). Academic integration, according to Tinto, goes beyond merely passing classes. It often requires tailored academic counseling and instruction that align with the student's career and educational aspirations (Engle & Tinto, 2008). Tinto's model pushes for institutions to consider ways in which to ease the academic transition for students.

As for social integration, Tinto dives into the nuances of interactions students have with peers, faculty, and the broader academic community to create a cohort. This cohort-style model fosters a sense of belonging, anchoring students more firmly to their institutions. Central to understanding STEM persistence and success is the concept of the academic mindset: the internal psychological framework of a student (Rattan et al., 2015). It is their "sense of belonging" in STEM. This is a sentiment of acceptance and alignment with the field. A student's sense of belonging is gauged by their feelings of acceptance, inclusivity, and their perception of being a valuable part of an academic setting (Goodenow, 1993). It also encompasses their feeling of

being recognized and integrated by peers and educators in academic spaces. As a result, they view themselves as vital contributors to the classroom's dynamics and activities (Palid et al., 2023).

This practice brief will provide a condensed overview of three successful cohort programs that have produced a significant number of URM STEM majors and post-secondary STEM graduates: the Meyerhoff Scholarship Program at the University of Maryland Baltimore County, the Program for Research Initiatives in Science and Mathematics (PRISM) at John Jay College, and the Federal TRIO McNair Scholars. This brief will then look at four common best practices cited in qualitative studies on these cohort programs that help create a sense of belonging for URM STEM students: A Social Community, Identifying as A Scientist, Financial Aid, and Institutional Buy-In. These four aspects are essential for creating a sense of belonging that can heavily contribute to an increased STEM degree completion for URM.

Overview Of STEM Cohort Programs

Meyerhoff Scholarship Program at the University of Maryland Baltimore County

In 1988, Freeman Hrabowski, president of the University of Maryland, Baltimore County (UMBC), collaborated with philanthropists Robert and Jane Meyerhoff to establish the Meyerhoff Scholars Program (Suran, 2021). Seeking the Meyerhoffs' support, Hrabowski envisioned a scholarship scheme aimed at molding young African American men for prominent careers in scientific research (Stolle-McAllister et al., 2011). In response, the Meyerhoffs not only pledged financial aid but also ensured their consistent personal interaction with the scholars. The Meyerhoff Scholars program, driven by its proven formula for success, is rooted in thirteen foundational components. Unlike top scholars at various institutions who thrive in competitive atmospheres, Meyerhoff students flourish through a unique paradigm of mutual support (UMBC, 2024). The Meyerhoff Scholars Program has earned its reputation as one of the most successful efforts aimed at bolstering STEM diversity. Since its inception in 1993, over 1400 students have graduated under its auspices. The program has proudly produced 426 Ph.D. and 160 MD/DO degrees.

The Program for Research Initiatives in Science and Mathematics (PRISM) at John Jay College

PRISM was established in 2006 to support the diverse undergraduate student body at John Jay; now, PRISM continues to prepare students to become professionals in STEM, health, and education (Carpi et al., 2016). PRISM is a collaborative effort by individual faculty members and John Jay College's administration to centralize and improve retention and graduation rates for students majoring in forensic science at John Jay (Carpi et al., 2013). At its core, PRISM emphasizes relationship-building between students, faculty mentors, and PRISM staff members. The program engages students in hands-on scientific activities and provides academic support through peer cohorts and professional development opportunities (Carpi et al., 2016). This approach is designed to set students up for success. Crucially, PRISM acknowledges and values the unique backgrounds of the students it serves at John Jay College. Since adopting comprehensive research mentoring, undergraduate graduation rates in the sciences at John Jay have tripled, according to the Program website (CUNY John Jay, 2024). This growth includes a four-fold rise in Black and Hispanic student graduations. Additionally, there's a notable uptick in undergraduates pursuing postgraduate programs in STEM and health fields: a ten-fold increase for programs like Ph.D., MD, DO, and VMD, and a fifteen-fold increase for a broader range of postgraduate STEM and health fields. Over the last decade, more than 90 undergraduate researchers from John Jay, with a significant majority being women and nearly half from minority backgrounds, have entered postgraduate programs in STEM and health fields.

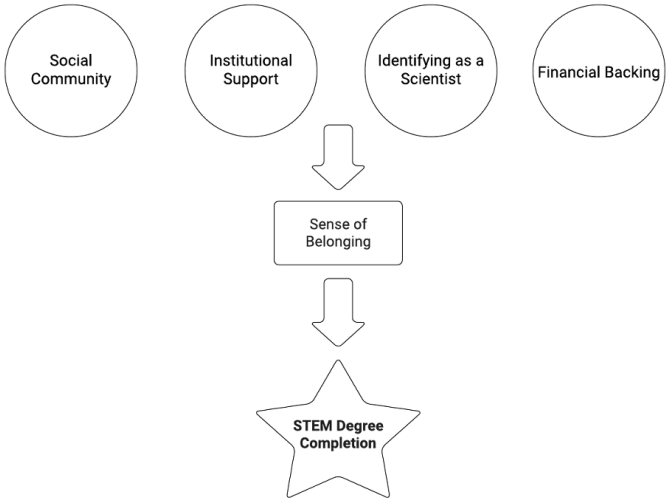
Federal TRIO McNair Scholars Program:

The Federal TRIO Programs (TRIO), established at the national level, offer a suite of outreach and support initiatives for disadvantaged individuals (U.S. D.O.E, 2024). Spanning eight programs, TRIO aids low-income, first-generation college students and those with disabilities throughout their educational journey, from middle school to postgraduate studies. One of those programs is the Ronald E. McNair Postbaccalaureate Achievement (McNair) Program which awards grants to institutions of higher education for projects designed to provide disadvantaged college students with effective preparation for doctoral study. All McNair projects must provide the following activities: opportunities for research or other scholarly activities; summer internships; seminars and other educational activities designed to prepare students for doctoral study; tutoring; academic counseling; and activities designed to assist students participating in the project in securing admission to and financial assistance for enrollment in graduate programs. The McNair Scholars Program has showcased notable results, especially when examined against broader national averages (The Pell Institute, 2022). Analyzing against a control group, McNair scholars shone brightly with a commendable 69% graduate school enrollment rate within the same three-year period as those of similar backgrounds. This suggests that McNair scholars were 50% more likely to pursue further education than the national average. Moreover, a study on five cohorts of STEM McNair Scholars at the University of Alabama at Birmingham found that over 90% had a GPA of 3.0 or higher, approximately 75% received their bachelor's degree within three years, and 66% of four cohorts enrolled in STEM graduate programs (Fifolt, Engler, & Abbott, 2014).

Best Practices for Creating A Sense of Belonging

Various qualitative studies investigated what factors helped these programs ensure a successful pipeline for URM into the STEM workforce and post-secondary STEM enrollment. This section highlights the four best practices that created a sense of belonging for URM STEM students shared across these cohort programs. Figure 1 provides a conceptual model to showcase how these four elements work in unison so that URM can succeed in STEM.

Figure 1: *Conceptual Model of Four Best Practices That Create a Sense of Belonging and Success for URM in STEM*



Building A Social Community

One recurring best practice to create a sense of belonging was offering a social network between students, faculty, and staff. A study on the Program for Research Initiatives in Science and Mathematics (PRISM) at John Jay discerned how students from underrepresented groups and faculty perception of the cohort program and how PRISM influenced students' decision-making in pursuing STEM careers (Capri et al., 2016). A recurring theme in the qualitative interviews was how much these students felt like they were involved in the science community. PRISM staff led these social community innovations through monthly general meetings and group field trips. Faculty took these students under their wing for 1-3 years providing them research opportunities, career planning opportunities, and personal guidance. In interviews, one student cited how this was one of the most fulfilling opportunities of the program and another stated how their mentor instilled confidence in them to pursue graduate school (Capri et al., 2016).

Similarly to PRISM, the Meyerhoff Scholars Program's (MSP) success is heavily attributed to its community and culture (Stolle-McAllister et al., 2011). In a study that aimed to understand how MSP functions and how various students perceived the program, three cohorts of Scholars were interviewed: Summer Bridge participants, current students, and MSP alumni (Stolle-McAllister et al., 2011). The results of this study showcased how MSP builds a familiar atmosphere. Peers were referred to as siblings and staff as parental figures. This concept is cultivated starting from the Summer Bridge program, a transitionary period from high school into UMBC. Scholars would take two classes for credit. In qualitative interviews, students highlighted the program's role in easing the transition to college life and navigating STEM fields (Stolle-McAllister et al., 2011). It allowed them to be vulnerable, to be able to reach out if they struggled, so that they knew that everybody was with them along their journey. They felt the program was a haven and fostered a culture of collaboration over competition. Moreover, this family extended well past their time in school but lasted throughout generations of Meyerhoff Scholars. One student stated that the friends they made in the program are still their closest support network 20 years later.

As for McNair's Scholars, a qualitative study showcased similar findings on how the community helped create a sense of belonging for students (Clayton et al., 2023). This study interviewed 13 Black students across three McNair Scholars Programs to investigate how the program influenced their goals of attending graduate school. In qualitative interviews, many students cited the importance of belonging to a peer group with similar racial and ethnic backgrounds. This not only alleviated feelings of isolation but also provided a platform for discussing research and graduate school without fear of scrutiny. Clayton et al., (2023) revealed the profound impact of personalized mentorship and support offered by the program's faculty and staff. The one-on-one meetings with staff helped demystify the planning, application, and financing of graduate studies. Moreover, staff further facilitated connections with STEM professionals and networking opportunities with alumni.

Institutional Support

Both Clayton et al. (2021) and Capri et al. (2016) mention the many barriers to institutional support across higher education and how necessary it is to invest in these cohort programs. According to Clayton et al. (2021), McNair programs thrive when there is substantial funding and long-term strategic planning. However, institutions may struggle to secure enough resources, fail to align their internal processes, or receive faculty pushback on adopting such support programs. This can lead to missed opportunities in providing the necessary infrastructure to under resourced students in STEM (Clayton et al., 2021). Capri et al. (2023) echo how the financial and infrastructural constraints further exacerbate these barriers. For Minority Serving Institutions, there is a lack of a robust scientific community due to a scarcity of graduate and postdoctoral students who can mentor their junior peers. This places an excessive burden on

faculty. Yet these faculty are already juggling their teaching responsibilities and the demands of conducting research. Providing an additional obligation for mentorship may overload them (Capri et al., 2023).

However, both a financial investment and an outspoken commitment to keep URM in STEM have had a transformative impact at both UAB and John Jay. At UAB, a study tracked McNair scholars' GRE scores before and after participating in a GRE prep course. Students in the program for one year averaged a 93-point gain, while those in the program for two years averaged a 132.3-point gain. This highlights the effectiveness of sustained investment in URM students for graduate school success (Fifolt, Engler, & Abbott, 2014). Additionally, Capri et al. (2023) have shown through the institution's commitment to PRISM, the college has expanded mentorship opportunities and growth in department resources. They restructured departmental missions to prioritize student-centered research and increased faculty involvement in mentoring. This intentionality led to an increase in graduation rates among Black and Hispanic STEM students.

Identifying as a Scientist

Throughout these qualitative studies, students "identifying as scientists" was paramount in their sense of belonging to STEM communities. At Meyerhoff, this identity was developed as early as Selection Weekend, an event designed for recruitment and selection (Stolle-McAllister et al., 2011). Scholars begin to develop a strong, shared identity as "Meyerhoffs" or "Ms" from the outset. This identity showcased that these scholars belonged somewhere and that they were leaders in both their academic and personal pursuits. It is then reinforced by the program's engagement in research, graduate study preparation, academic excellence, and professionalism. During the summer bridge program, students visit multiple research labs, and network with principal investigators, to gain a holistic understanding that breaks down what research can look like. Many students have cited how inspiring it was to see people who look like them do this and how they felt like it was possible for them as well.

PRISM participants felt similar about how the program helped them identify as scientists, specifically as it pertained to research (Carpi et al., 2016). Initially, many students had doubts about their ability to succeed in science due to lacking exposure to STEM research labs. Through faculty-guided research and the program's commitment to ensure that these students have the skill set to succeed in STEM, these worries were relieved. One student said that while they are unsure of what their future career would look like, they are confident that they can go to grad school. Others revealed how they love being in a STEM lab and how it exposed them to pursuing graduate school. One student even stated how this experience was life-changing and plans on pursuing STEM in the future as a result.

McNair Scholars echoed these sentiments. Renbarger and Beaujean (2020) conducted a meta-analysis to evaluate the impact of the Ronald E. McNair Post-Baccalaureate Achievement Program on graduate school enrollment, finding that McNair Scholars were nearly six times more likely to enroll in graduate programs compared to a comparison group. One common theme that arose during the meta-analysis was the firsthand experience demystified the process and realities of conducting research and pursuing advanced degrees. A student stated how McNair's research opportunities replicated what a day in life in graduate school looks like (Clayton et al., 2023). As a result, they were able to envision conducting research for several years for master's or doctoral degrees after McNair. Moreover, the opportunity to present their research at conferences enabled scholars to network, share their findings, and visualize themselves as part of the scholarly community. McNair would also facilitate graduate school campus tours which many students stated as beneficial in deciding which graduate school to pursue. Ultimately, all these cohort programs through multiple levels of support reinforced the self-efficacy of these students as scientists.

Financial Backing

Financial Aid is essential to ensure that students feel like they belong not only as scientists but in higher education together. A major factor driving students to apply and accept offers from the Meyerhoff Scholars was the financial aid offered (Stolle-McAllister et al., 2011). This support alleviated the potential financial burden on students and their families. A scholar in a qualitative study stated how financial support enabled them to pursue their studies without the worry of accruing debt. The Meyerhoff Program further financed research and professional development opportunities. This aspect of the program reassured scholars that Meyerhoff would provide a pathway to graduate studies. Students testified that if the program cared to invest that much in them, then they would be set up for success.

As for PRISM at John Jay, the program recognizes the importance of student commitment and the potential financial challenges they face (Capri et al., 2016). That is why they provide stipends to students to alleviate the need for outside employment that could detract from academic focus. Moreover, they want to legitimize their student's research endeavors and treat them with the same respect as full-time researchers. PRISM also covers expenses such as accommodations, tickets, and meals to conferences. This fosters their development into emerging professionals in their respective scientific fields. As for McNair Scholars, a qualitative study highlighted how application fee waivers and stipends provided by the program significantly reduced the financial burden on participants (Clayton et al., 2023). One participant noted how they saved nearly $1,000 on application materials such as the GRE prep books and fees. Furthermore, the distribution of both semesterly and summer stipends was particularly valuable. Like PRISM students, this allowed them to concentrate on their research interests and graduate school preparation without seeking external employment (Clayton et al., 2023).

Conclusion

From analyzing qualitative studies, the foundation of a successful program lies in creating a sense of belonging through social support networks, institutional buy-in, allowing students to identify as scientists, and providing them with financial backing. Figure 1 provides a conceptual model showcasing how crucial these four elements are. They must exist in unison for URM to feel like they belong in STEM classes, departments, and the wider disciplinary fields. This holistic support system is necessary for URM success in STEM. This work, although illuminating, is but a chapter in an ongoing narrative. There's a need for constant revision and adaptation to ensure that these best practices deployed are adaptable to the changing dynamics of public policy and URM student needs. Through further evaluation, implementation, and improvement of such cohort programs, we can take meaningful strides toward a STEM environment that embraces the richness of diversity and equity.

About the Author:

Bishoy Yacoub is a medical student at the Icahn School of Medicine at Mount Sinai in NYC. He received his B.A. in Sociology with a concentration in Public Health from Williams College. There, Bishoy championed fellow BIPOC, low-income, and first generation college students interested in pursuing STEM. After the onset of COVID-19, the declining rates of Black students in these fields alarmed him. Bishoy has spent most of his time at Williams providing support systems for marginalized students by working with the Office of Institutional Diversity Equity and Inclusion, STEM faculty, and the Dean of First-Generation College Students. He was able to grow Black in STEM retention by 50% during his time and was the only graduating senior awarded the Sentinels Public Policy Fellowship. Through this grant, he worked with national leaders and legislators in the space to create a model cohort program to support URM in STEM. Bishoy is passionate about building and reinforcing the STEM pipelines and ensuring that future physicians are as diverse as the patients they will serve. He hopes to continues this work at his medical school through its STEP and CSTEP programing.

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NARRATIVE WORKS

Lived Experiences of a Southeast Asian Practitioner: A Call for Further Exploration of Southeast Asian American Communities

Author:

Hieu Lê
Oklahoma State University
hieu@tulsaempowered.org

Abstract

The term "Asian" often evokes images of high test scores, college enrollment rates, and job attainment, celebrating diverse cultures and rich foods. However, this narrative overlooks the unique challenges faced by Southeast Asian American (SEAA) communities, such as Cambodian, Thai, Burmese, and Vietnamese. These communities struggle with systemic oppressions that hinder educational and career progress, leading to disparities in income, education, and poverty rates. Despite being among the top high-achieving communities in bachelor's degree attainment, SEAA voices remain unheard, and equitable services are lacking due to the Model Minority Myth. Disaggregating data and prioritizing SEAA-specific support are crucial steps to address these issues and uplift SEAA voices in education and beyond. Drawing from personal experiences, the author underscores the importance of research, disaggregated data, community spaces, and institutional acknowledgment to support SEAA communities effectively.

Introduction

When you think of the term "Asian," what comes to mind? Asian Americans are often recognized for their high test scores, college enrollment rates, and job attainment. Additionally, Asians are celebrated for their rich foods, diverse cultures, and distinctive physical appearances. Despite these achievements, there exists a significant gap in research addressing equity for the Southeast Asian American community. Similar to other marginalized communities of color, Southeast Asian Americans (SEAA) have historically faced systemic and institutional oppressions that hinder their progress in education and career fields. Consequently, many young SEAA students are unable to access equitable services in both K-12 and Higher Education.

My Lived Experience

When I arrived in the United States from Vietnam at ten, my teacher paired me with another Asian student to learn English. Despite our language barrier, the teacher assumed our similar appearance would suffice for communication. In high school, I was placed in advanced classes solely because I was Asian. When I didn't conform to the Model Minority Myth, I was seen as the odd one out.

As a Higher Education practitioner, I observed that stereotypes and high expectations often prevent Asian American students from receiving the support they need. As a first-generation, low-income immigrant, I witnessed firsthand the persistence of institutional racism and stereotypes against Asian American students and staff. Even though it seems like racism has subsided, it has merely taken on new forms.

In my role as a nonprofit leader, my efforts to advocate for equitable services for SEAA were often dismissed. Recruiting board members and volunteers was challenging, as even my Asian peers felt that advocating for a small subgroup wasn't worth their time, especially in a conservative state like Oklahoma.

Research and Challenges that Southeast Asians Face

The challenge confronting SEAA communities lies in the lumping of education and career attainment data with other high-achieving Asian-American groups. This grouping overlooks the distinctive needs of SEAA communities, including Cambodian, Thai, Burmese, Vietnamese, Filipinos, Nepalese, Hmong, and many others, who require urgent support. The lack of focus from institutions, coupled with intentional neglect and constant comparisons with other communities of color, leaves SEAA students in a state of limbo between the past and the future. According to Pew Research Center (2021), "fewer than one in five Laotians (18%) and Bhutanese (15%) have at least a bachelor's degree." Furthermore, both Bhutanese (36%) and Burmese (38%), groups with large populations of recently arrived immigrants, exhibit some of the lowest rates of English proficiency. As shown in Figure 1, between the years 2000 and 2019, a variety of SEAA communities, such as Vietnamese, Cambodian, Burmese, Laotian, and Bhutanese, have a lower percentage of individuals with some college experience or a Bachelor's degree or higher.

College enrollment rates also show these inequities. SEAA students have notably lower enrollment rates, with only 57% of SEAA students aged 18-24 enrolled in college, compared to 73% for

East Asian students and 68% for South Asian students (Ngo, 2022). These statistics highlight the urgent need for tailored support and policies that address the unique challenges SEAA students face, which are often overshadowed by the successes of other Asian American subgroups.

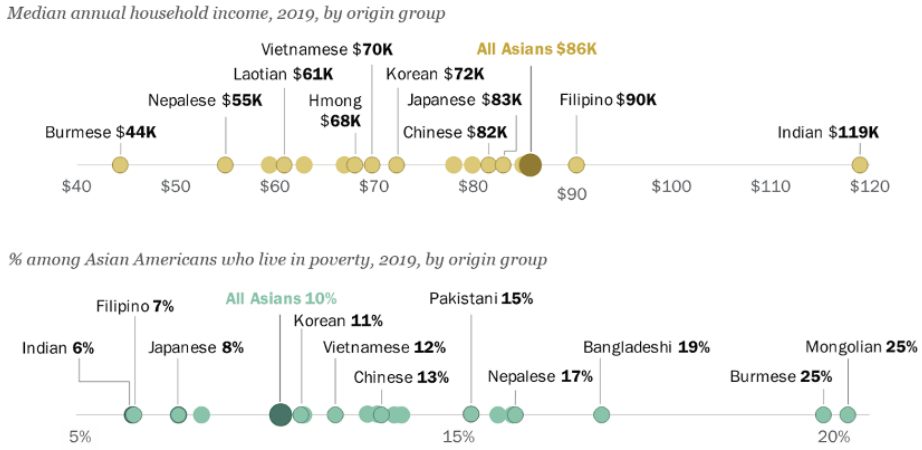
Figure 1: *U.S. Educational Attainment by Asian Origin Group, 2000-2019.*

U.S. Educational Attainment by Asian Origin Group, 2000-2019			
Origin Group	**High School or Less**	**Some College**	**Bachelor's or Higher**
All Asians	**27%**	**19%**	**54%**
All Americans	**39%**	**29%**	**33%**
Indian	15%	10%	75%
Malaysian	21%	14%	65%
Mongolian	18%	22%	60%
Sri Lankan	20%	20%	60%
Korean	23%	20%	57%
Chinese	29%	14%	57%
Pakistani	26%	17%	57%
Indonesians	25%	23%	53%
Japanese	21%	27%	52%
Bangladeshis	35%	16%	49%
Filipino	22%	30%	48%
Thai	34%	21%	45%
Nepalese	42%	13%	44%
Vietnamese	45%	23%	32%
Cambodians	55%	24%	21%
Hmong	46%	31%	23%
Burmese	65%	12%	23%
Laotians	56%	27%	18%
Bhutanese	75%	10%	15%

Note. From "AANHPI in Higher Education: Facts and Statistics," by J. Nam, 2023, BestColleges, (https://www.bestcolleges.com/research/aanhpi-asian-student-statistics/). Copyright 2023 by BestColleges.

Furthermore, national data often overlooks crucial disparities in income, education, and poverty rates within various Asian groups. For instance, while the U.S. average household income is $68,000, Burmese and Nepalese households report significantly lower average incomes of $44,400 and $55,000, respectively, as show in Figure 2 (Pew Research Center, 2021). Despite an overall Asian American poverty rate of 10% in 2019, which is 3 percentage points lower than the U.S. average, SEAA households generally have lower median incomes. For example, Laotian and Cambodian families have median household incomes of approximately $55,000 and $60,000, respectively, compared to the broader Asian American median of $97,626 (Pew Research Center, 2021). These income disparities contribute to higher poverty rates within SEAA communities, with 37% of Hmong and 29% of Cambodian families living below the poverty line (USA Facts, 2021).

Figure 2: *Median household income varies widely among Asian origin groups in the US.*



Note. From "Key facts about Asian origin groups in the U.S." by A. Budiman and N.G. Ruiz, 2021, Pew Research Center, p.8 (https://www.pewresearch.org/fact-tank/2021/04/29/key-facts-about-asian-origin-groups-in-the-u-s/). Copyright 2021 by Pew Research Center.

Model Minority Myth and Its Implications

The Model Minority Myth suggests that all Asian Americans are thriving, economically and educationally. However, this narrative is misleading and harmful. According to the Simms (2022), while some Asian subgroups like Asian Indians and Chinese have high median incomes and educational attainment, others, such as Vietnamese and Cambodians, struggle significantly. For instance, one-fifth of Vietnamese Americans have less than a high school diploma, and similar numbers work in low-paying jobs (Simms, 2022).

Moreover, Blackburn (2019) highlights that this myth ignores the substantial income disparities within the Asian American community. For every dollar a white man earns, a Burmese woman

earns only 50 cents, starkly illustrating the economic challenges many SEAAs face. The myth is extremely dangerous for SEAA in two ways, first, the pressure of living up to the image can lead to depression and suicide, and second, the image of model success can mean Asian-Americans become overlooked in the distribution of needed resources (Hartlep, 2023, p. 14-15).

The myth not only obscures the struggles of SEAAs but also perpetuates harmful stereotypes that contribute to racial tensions. It creates an illusion that Asian Americans do not experience racism and that their success is a result of their cultural values and hard work alone. In higher education institutions, the most experienced assumption by Asian college students was intelligent, followed by likely to pursue a prestigious career, hardworking, good at math, and polite (Kim, Agrawal, Kang, Nakamura-Koyama, & Porter, 2023, p.148). This narrative is dangerous because it invalidates the systemic barriers that SEAAs and other minority groups face.

Furthermore, this myth can lead to increased mental health issues among Asian American students, who feel immense pressure to meet these unrealistic standards (Blackburn, 2019). Ever since the COVID-19 pandemic, mental health problems faced by Asian college students have been exacerbated along with the surge of hate crimes against Asians (Gover et al., 2020; Han et al., 2023; Tessler et al., 2020; Yan et al., 2021). This has put many Asian college students in American universities in a uniquely vulnerable position, leading to additional mental health burdens (Kim et al., 2023).

Why Does This Matter?

Given the increased number of Asian American immigrants entering the United States, particularly the rising influx of SEA immigrants, “Hmong, Burmese, and Nepalese Americans are the youngest Asian origin groups in the U.S.” (Pew Research Center, 2021, p. 4-5). The influx of Asian immigrants to the United States over the past few decades has brought significant diversity within the Asian American community, particularly among SEAA. This diversity underscores the necessity of addressing the distinct experiences and needs of SEAA groups, who are often overlooked when Asians are treated as a monolithic entity.

The experiences of Asian Americans are far from uniform. For instance, while some Asian subgroups like Chinese and Indian Americans often achieve higher socioeconomic status, many SEAA groups, such as Cambodians, Laotians, and Hmong, face substantial challenges. According to Pew Research Center (2021), the educational attainment and income levels among these SEAA groups are significantly lower compared to their East and South Asian counterparts. This variation highlights the critical need for targeted support and policies that acknowledge these differences.

Lumping all Asians together in national data obscures the unique needs of SEAA communities. For example, aggregated data often portrays Asian Americans as the “model minority” who excel in education and economic success, masking the disparities within the community. The Century Foundation points out that this misleading portrayal results in the neglect of SEAA students who face higher rates of poverty and lower educational attainment (Ngo, 2022). Without disaggregated data, SEAA groups remain invisible in the policy-making process, leading to inequitable distribution of services.

Additionally, the mental health of SEAA individuals is another critical issue that is often overlooked due to the Model Minority Myth. Research shows that the pressures of conforming to this myth can lead to significant mental health issues, including higher rates of depression and anxiety among SEAA students (Blackburn, 2019). In fact, Blackburn (2019) reports that Asian American college students experience higher rates of attempted suicide compared to other groups, underscoring the severe impact of unmet mental health needs. These mental health challenges are exacerbated when SEAA individuals do not receive adequate support due to the generalized treatment of Asians in national data.

Recommendations

Firstly, the implementation of more research for SEAA communities is crucial. Such scholarly work will uplift SEAA voices and create spaces for individuals to share their stories. As a SEAA practitioner, I have observed that conversations regarding SEAA experiences are scarce; therefore, there should be more platforms for SEAA scholars to discuss their work and experiences.

Secondly, the need to disaggregate data is of utmost importance, especially for younger SEAA and immigrant students. National data on Asian Americans hinders the need for support for SEAA by perpetuating the ideology that all Asian students are successful through the belief in the Model Minority Myth. Higher education practitioners should prioritize providing services rather than viewing SEAA as statistical numbers.

Thirdly, creating spaces for SEAA students and professionals to speak and discuss their experiences is vital. SEAA communities are diverse, and our experiences vary from one ethnic group to another. Therefore, higher education institutions and spaces should offer us a platform to showcase our experiences as a whole.

Lastly, institutions should look beyond national data when providing services for SEAA. In my experience, several institutions have purposely neglected the entire Asian American community in their 2030 plans because Asians are not seen as an underserved community. Institutional research should delve deeper into understanding their institution's demographic and make an effort to learn more about Asian American experiences.

About the Author:

Hieu Lê is the Founder of Empower-ED, an organization dedicated to advancing educational equity and access for underrepresented students. As a proud TRIO alumnus of the Upward Bound program, Hieu's journey has been deeply shaped by his experiences as an immigrant, first-generation, and low-income student. These identities have fueled his passion for education and inspired his commitment to helping others navigate similar challenges. After completing his undergraduate studies, Hieu began his career as an academic counselor for the Educational Opportunity Center (EOC), where he worked closely with individuals from disadvantaged backgrounds, guiding them through the complexities of the educational system. His dedication to student success led him to serve as the Director of the Upward Bound Program, where he had the privilege of mentoring and supporting students as they prepared for higher education.

Hieu's research interests focus on demystifying the Model Minority Myth and advocating for the disaggregation of data for Southeast Asian American students. He believes that by challenging stereotypes and highlighting the unique experiences of these students, more inclusive and equitable educational environments can be created. As the first in his family to attend college and to complete a master's program, Hieu understands the transformative power of education. His work is driven by a desire to ensure that all students, regardless of their background, have the opportunity to succeed. Through Empower-ED, he strives to empower the next generation of leaders and to create pathways for their success.

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NARRATIVE WORKS

Exploring the Intersections of Immigrant Identity: A Counselor's Narrative

Author:

Moya N. Malcolm
American University
mmalcolm@american.edu

Abstract

College access counseling is deeply personal work, often sparking reflection on one's own pre-college journey and the impactful experiences that shaped it. This narrative conveys one scholar-practitioner's awakening to how her personal and professional experiences advising ethnically diverse students and families centrally positioned her second-generation immigrant identity as salient and prompted cross-racial understanding, empathy, and solidarity. Through reflection, the author also identifies how family and community-based ethnic capital fostered her aspirations for academic achievement and higher education. The narrative concludes by positioning asset-based perspectives as affirming frameworks to understand the lived experiences of immigrant students of color and their families who, despite myriad obstacles, often leverage their hopes, expectations, and ethnic networks toward higher education.

Keywords: college access; precollege students and families; immigrants; counselors; narratives

Introduction

The first time I personally identified with the term "immigrant" was in my mid-20s, when I started working as a college access counselor in ethnically diverse Silver Spring, Maryland.

Our program's student population was majority immigrant-origin, either they were born abroad (i.e., first-generation) or they were U.S.-born children with immigrant parents (i.e., second-generation) (Batalova & Feldblum, 2020). Most of our immigrant families were newcomers, recent arrivals from Central and South America, with a strong representation from Southeast Asia and East and West Africa. A critical issue that often emerged during counseling was acculturation differences between students and their parents/caregivers. Parents and caregivers struggled to navigate raising children in a context where some of the values learned in school conflicted with the traditions, values, and expectations taught at home. Many students experienced great pressure to do well academically, an expectation often illustrated by parents emphasizing, "We moved to this country so that you can have a better life." Parents and caregivers also made clear their expectations for their children to maintain an identity that adhered to the family's culture and country of origin: the way "we do things back home." As a result, parents and their children often experienced a cultural disconnect, or acculturation gap, that at times caused stress and conflict in their relationship (Kim et al., 2020; Phinney et al., 2000).

Although my parents were from Jamaica and I was a Black woman born and raised in the United States, I realized I had more in common with my Central and South American, Asian, and African families than I previously thought. I was surprised by how much I resonated with my students' frustrations: "My parents just don't get it." I was drawn into vivid teenage memories and feelings of annoyance and resentment toward my parents. For example, after receiving an invitation to a birthday sleepover, I recall my father quickly and firmly shutting that down, replying with disdain, "You're becoming too American." I imagine that, in his view, sleeping at my best friend's house was not something a "respectful" girl would be allowed to do. I remember thinking my "respectful" American friends often had sleepovers, so what was the big deal? This was one of the many moments of cultural dissonance I attributed to my "in-betweenness." As a kid, I primarily identified as African American, but this category had always felt limiting. It did not fully capture who I thought I was. In essence, I recall feeling like a foreigner trying to fit in two worlds but belonging nowhere: I was "too American" for my parents and "too Jamaican" for my African American friends who did not share my Caribbean heritage.

As an educator and an aunt to teenage nieces and nephews, I also began to understand the perspective of the immigrant parents and caregivers I served. I imagined what it must have been like for my parents to raise four daughters in a culture and social system vastly different from what they knew. I presumed my parents felt a sense of sadness and cultural loss when their girls adopted certain practices that were strange to them and hard to understand. I empathized with my students and their families, and I developed a broader sense of understanding, connection, and solidarity with immigrants that spanned racial and ethnic boundaries. I also experienced my own process of identity exploration, reconceptualizing my understanding of what it meant to be a second-generation immigrant in the United States. I reflected on elements of my upbringing that shaped my educational aspirations, including family migration stories, a close-knit co-ethnic faith community, and the "gifted" label that followed me throughout my schooling. Despite growing up in challenging circumstances, these experiences anchored my hopes and aspirations for my future. As a result of my self-exploration, I began to see these elements more clearly in the ethnically diverse immigrant families I served.

Love God, Obey Your Parents, Do Well in School

These were the primary messages I received growing up. During my childhood, I was socialized within three achievement-oriented settings: family, church, and school. At home, my parents constantly spoke about their life in Jamaica and all they gave up to migrate. My parents settled in Washington, DC, so my mother could continue her postsecondary education at Howard University, a historically Black institution they learned about from their college instructors in Jamaica. While my parents diligently pursued their educational goals, they also ensured that their U.S.-born daughters took full advantage of seemingly every free or low-cost enrichment opportunity available in their community: summer reading programs at the library, piano and violin lessons, and annual visits to the Smithsonian. My parents learned about many of these activities from members of our Seventh Day Adventist church, most of whom were fellow migrants from Jamaica and other West Indian countries like Grenada, Barbados, and Trinidad and Tobago. Our church family served a critical role in our lives, providing spiritual nurturing and fellowship in a social space where West Indian cultural traditions were respected, shared, and celebrated. The youth in our congregation would get special recognition for being on the honor roll, like stickers or a certificate. These acknowledgments were small, but they evidenced the high regard placed on academic achievement in our faith community. In fact, our elders framed the pursuit of school success as a way for us youth to reach our full godly potential.

Growing up in the Malcolm household and within our larger church family, my identity as an achiever developed and served as a foundation for my school experiences. I did well, often receiving praise from teachers for my mannerly comportment, diligence, and high proficiency on assessments. In second grade, I was tested for the Talented and Gifted program and thereafter placed in an accelerated reading group. Little did I know that the label “gifted” was affixed to my permanent school file. Due to family struggles during my youth, I moved around quite a bit. I later realized that the gifted identifier followed me from the DC public school system to school districts in Maryland, Massachusetts, and then Florida, where I completed high school. Although I attended low-performing under resourced schools in these areas, being identified as “gifted” opened doors to the best resources the schools could offer. Throughout my childhood and K–12 experience, family, church, and school provided me with various forms of social capital that shaped my early aspirations for college and my path to higher education.

Deconstructing the “American Dream”

As a college graduate, some might say that I have attained the mythical “American Dream”—that I am proof that the United States is a place where children from immigrant families, working-class individuals, and People of Color can survive and thrive in a society that, inequities withstanding, provides an abundance of opportunities for social mobility. I have earned postsecondary degrees and enjoy a career that provides financial stability and personal and professional fulfillment. I live comfortably in a home I own, have traveled the world, and enjoy fulfilling social relationships. In many ways, despite humble family beginnings, I have achieved the vision my parents had for me. “This can happen only in America,” some would say.

As a college access and equity scholar, I reflect on my own narrative, and in many ways, I realize I have bought into the myth of the “American Dream.” Like a camera lens, my view foregrounds experiences that align with meritocratic ideals fulfilled in my personal life and the lives of many students I served. Yet, without depth of field, my camera lens overlooks the experiences of fellow Caribbean immigrants from my neighborhood whose life trajectory differed from my own. When

I think about the students I served, I tend to remember those who earned their diplomas and graduated from college and forget those who did not.

Through my scholarly work, I am challenged to deconstruct the myth of immigrant exceptionalism and attend to the broader social factors that position high-achieving immigrants as extraordinary yet ignore the reality of systemic racism and classism that blocks opportunity for People of Color.

I have come to better understand and appreciate the systemic factors that worked in my favor to spawn and support my aspirations. I realize that this confluence of factors does not apply to every immigrant. I am a child of immigrants who commenced postsecondary schooling in their homeland and migrated to the U.S. in the 1960s to pursue higher education further. As a result of the Immigration Act of 1965, there were increased opportunities for citizens of non-European countries to migrate to the U.S. My parents were in that initial wave of skilled laborers and professionals who migrated from the Caribbean, settling in a diverse metropolis with other migrants from the region. Although my parents arrived in the U.S. with little money, they were rich in aspirations for themselves and the children they hoped to have in the future.

Our church played a central role in my parents' resettlement and cultural adjustment. Our congregation not only fostered Christian fellowship and ministry, it was a place where newcomers like my parents received emotional and social support to cope with the stress of adjusting to a new society. Our church was also a coethnic hub of valuable information. Our congregation included teachers, taxicab drivers, nurses, physicians, and business owners.

Many were professionals who had earned advanced degrees before migrating or after arriving in the United States. Through this socioeconomically diverse network, newcomers learned about employment opportunities and how to navigate basic resources, such as social services, transportation, and education systems –information that might not be readily accessible outside our coethnic network. The youth of our church also benefitted from this intergenerational network. We were cared for and disciplined by our church family, and we developed a sense of pride in our culture, religion, and educational achievements. In many ways, my family and church socialization primed me to succeed despite growing up in a larger social system that regarded White middle-class U.S. values as the norm.

Every immigrant's narrative is different. Their pre-migration experiences greatly influence their journey, arrival, and resettlement in the United States. Certainly, sociopolitical factors and public attitudes toward migrants affect how they are regarded and received in their new environment. And importantly, their new environment matters greatly. My parents were able to migrate to an ethnically diverse area where their coethnic network helped them resettle. This may not be the case for every newcomer family, and their distinct experiences have important implications for their adjustment and needs.

Our Challenge

As educators who are committed to advancing equity, our challenge is to recognize and investigate the structures and inequities that impact education broadly and college access more specifically. Our challenge is to change structures and open doors for all students, no matter their circumstances. When hearing stories of students who "beat the odds," one's psychological resilience, grit, and self-awareness tend to emerge as internal assets relied upon to succeed.

Although I hold an assumption of personal agency, I remain curious about the social factors that foster these and other psychological characteristics of our students. For example, what school conditions might engender resilience in one child and constrain the development of resilience in another?

I am challenged to take a more critical approach to my research and practice, and I challenge my college access colleagues to do so as well. First, we must explore our own educational narratives, the identities we hold, and the opportunities that were earned or unearned along our path to higher education. Second, we must consider the role of power and privilege in K-16 systems and interrogate our assumptions about achievement and who gets to go to college. Finally, I encourage practitioners to engage asset-based models such as community cultural wealth (CCW; Yosso, 2005) and funds of knowledge (Moll et al., 1992) to frame our college access work with immigrant families. As an example, CCW decenters Western cultural norms and shifts focus to the skills, knowledge, and assets nurtured within Communities of Color, regarding them as cultural wealth. In this manner, CCW offers a perspective that recognizes and values the social networks that operate within Black and Brown immigrant communities, such as the "grapevine" that transmitted valuable information and resources to newcomer families in my childhood church community.

Educators would be wise to partner with faith-based and other community organizations that serve immigrant families. Such partnerships can counter a deficit approach by honoring cultural knowledge and skills nurtured within immigrant networks. If educators can recognize and celebrate the cultural wealth that operates at the intersections of immigrants' identities, we can best serve our students and families in genuine partnership and collaboration.

About the Author:

Dr. Moya Malcolm is a postdoctoral fellow in the School of Education at American University in Washington, DC, where she teaches both undergraduate and dually enrolled pre-college high school scholars from DC Public Schools. A former TRIO Upward Bound Coordinator, Dr. Moya has dedicated much of her scholarship and practice to championing college access and equity for low-income/first-generation students, immigrant youth, and students of color. Dr. Moya earned her Master of Education in school counseling from the University of Maryland (UMD) and a Bachelor of Science in psychology from Howard University. She earned her doctorate in student affairs/higher education from UMD.

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NARRATIVE WORKS

From Adversity to Achievement: A Journey of Transformation in TRIO Student Support Services K-12 Teacher Preparation

Author:

Jorden Melton
University of Louisiana at Lafayette
jorden.melton@louisiana.edu

Abstract

This narrative paper details the life-changing experience of a young man, Ray, who was referred to the University of Louisiana at Lafayette's (UL Lafayette) Teacher Preparation K–12 Student Support Services Program (TPSSS). With the goal of assisting participants in pursuing prosperous careers as educators, the TPSSS Program seeks to improve participants' academic standing, college retention, and graduation rates (College of Education & Human Development, 2022). The narrative describes Ray's experiences as a TRIO student, highlighting the significant effects of community support, mentorship, and resilience on their academic and career paths through personal tales and reflections. Ray's journey, which included overcoming personal loss and health issues to earning a doctorate and mentoring others, demonstrates the transformational power of TRIO programs in encouraging academic success and enabling people to achieve their goals.

Keywords: TRIO programs, Teacher Preparation K-12 Student Support Services Program, mentorship, resilience, community support

Introduction

A young man, Ray[1], faced a world of unknowns and scarce resources when he started his academic journey at the University of Louisiana at Lafayette in the summer of 2012. Being a first-generation, low-income student qualified for Pell grants, he struggled with uncertainties about his ability to succeed in a university setting. But in the midst of his fears, he found a glint of hope in the Teacher Preparation Student Support Services K–12 program (TPSSS), an exceptional effort unmatched in Louisiana. This program would prove to be his beacon of guidance, showing him the way to both personal and academic advancement.

Teacher Preparation K–12 Student Support Services Program (TPSSS)

Student Support Services (SSS) funds are awarded to higher education institutions through a grant competition to support students' academic growth (US Department of Education, 2024). A crucial tool for assisting students on their path to academic achievement and future careers in education is the TPSSS program. Administered by the Department of Special Services and the College of Education and Human Development at the University of Louisiana at Lafayette, the TPSSS program strives to raise participant graduation rates, improve academic standing, and increase college retention rates (College of Education & Human Development, 2022). By providing various wraparound services, TPSSS helps students meet the demands of post-secondary education and gives them the tools and resources they need to succeed in their academic studies (College of Education & Human Development, 2022). Some services offered include peer tutoring, computer lab access, academic and career counseling, and grant aid for qualified participants.

Furthermore, TPSSS provides specialized assistance through study skills classes, teacher mentor-mentee programs, and test preparation workshops for exams such as the Praxis Series Test. Students majoring in education at the College of Education and Human Development or those who are undeclared but interested in careers as K–12 teachers attending the University of Louisiana at Lafayette are welcome to participate in TPSSS (College of Education & Human Development, 2022). Participants who meet the eligibility requirements usually originate from underprivileged backgrounds, such as Pell Grant recipients and first-generation college students (College of Education & Human Development, 2022). TPSSS is essential in helping students from underprivileged communities achieve academic success and transition to rewarding careers in education by offering customized support and guidance (College of Education & Human Development, 2022). Students in TPSSS with profiles similar to that of Ray, as referenced in this narrative, are likely to benefit significantly from these services.

During Ray's participation in TPSSS, students had the opportunity to participate in various efforts. The program was committed to service, not only to those in the program but also to the community. One event that TPSSS always contributed to was "Stuff the Bus," which provided school supplies for underserved K-12 students at the beginning of each new school year. The program prepared care baskets to donate to community programs that provided services to people experiencing homelessness. This project helped students understand poverty from a future teacher's perspective. Another impactful community service event for TPSSS was assisting local public schools. The participants were able to join a community-wide effort that helped set up an elementary school's Science Symposium. TPSSS participants assisted with building, decorating, and painting to bring the symposium to life for the elementary school

[1] *Ray is a pseudonym used to protect the identity of the individual in this story.*

students. These efforts instilled the significance of community service and giving back as future educators, cultivating lifelong learning, and fostering a culture of community. Many of the engagement opportunities TRIO provided to Ray helped move him forward and fostered many supportive friendships among participants who had shared their first-generation experiences.

TRIO as a Foundation for Empowerment Amid Challenges and Changes

During Ray's first semester of college, he faced a significant challenge when medical issues required a prolonged hospital stay of two to three weeks. Ray suffered from severe pneumonia due to an enlarged spleen, marking his first extended hospitalization—a new and daunting experience, much like navigating the unfamiliar terrain of college life. In these moments of uncertainty, Ray found solace and strength in the unwavering support of TRIO. SSS counselors promptly made phone calls and provided detailed instructions on notifying the university about his unforeseen circumstances, ensuring effective communication with instructors regarding his grades. Through collaborative efforts between Ray and the TRIO staff, he successfully completed his courses and returned to school the following semester.

On another occasion, TRIO received a distressing phone call informing them that Ray had been in an accident, resulting in a concussion and temporary memory loss. During this uncertain period, the possibility of permanent memory loss weighed heavily. A visit from a familiar TRIO staff member brought comfort and reassurance to Ray's family during his hospital stay, offering invaluable support and kindness. In addition to health challenges, Ray also encountered challenging periods of loss during his studies. Despite experiencing personal tragedies such as the devastating loss of both his mother and grandmother due to cancer during his freshman and sophomore years, TRIO continued to be a constant source of support in his life.

Support from TRIO also included valuable resources and opportunities for Ray's development as a scholar, academic, and professional. TRIO helped Ray secure his first work-study opportunity, a rewarding experience that gave him a sense of purpose and invaluable professional skills that would be helpful in all his future endeavors. Ray worked two other jobs outside of school, which did not allow him to study as much. According to Longwell-Grice (2002), working-class, first-generation college students lacked significant support systems for their efforts during college. TPSSS filled that gap with holistic wraparound services that acted as a guide for Ray's success. Ray felt more independent and capable with his academics with this student worker position. There was a change in Ray's motivation during this time. He felt more confident, valued, and connected as he could focus on academics, gain professional skills, and reduce the number of hours he worked off-campus. Work-study helped Ray develop a sense of belonging at the university. This positively impacted Ray's personal growth, empowering him to be responsible with balancing his time management.

Ray also participated in many TPSSS financial aid and scholarship workshops throughout his undergraduate studies. Representatives would speak from the financial aid office and explain how Pell grants and loans worked to pay for college each semester. There were many guest speakers from local banks and credit unions to provide students with essential banking knowledge. Attending these workshops was a requirement for participants to be considered for additional funding. As a Pell grant recipient, Ray benefited from obtaining grant aid through TPSSS, which helped with hidden costs such as books, gas to commute, and Praxis exams fees.

In addition, Ray was able to attend his first educational research conference through TPSSS. This was a significant factor in increasing his self-assurance and skills at adjusting to new

circumstances. At the time, Ray aspired to be a middle school mathematics teacher. The conference that Ray attended was the Louisiana Education Research Association (LERA). Initially, Ray was nervous about not fitting in. TRIO prepped him on conference etiquette, professional dress, and note-taking. Ray was able to sit in on poster sessions, plenaries, and keynotes regarding best practices in education and effective teaching strategies. This experience expanded his horizons and gave him a renewed sense of confidence in his abilities, which set the stage for his success in the future. This conference experience allowed Ray to reflect on his own graduate and professional ventures. As a result of LERA's conference participation, Ray is now a national conference presenter.

With these experiences in mind, Tinto (1997) underscored the relationship between social and academic support that are needed for students to persist, especially those who commute and are in urban settings. Ray was able to develop a sense of belonging to campus through the structure that TPSSS and work-study provided. TPSSS constantly reached out and made resources visibly available to Ray, whether it was academic, social, mental health, health, or financial. As Tinto's (1997) research suggests, with social and academic support, students will produce quality effort. In this case, TRIO's resolute faith in Ray's ability and tenacity provided him with motivation and strengthened his resolve to end his family's tradition of low academic success.

Rising Above Through Reciprocity

Ray committed himself to helping underserved communities after earning his bachelor's degree, using his education to have a positive influence. TRIO provided Ray with continued support with informing him about graduate school, providing letters of recommendation, and assistance with application processes. Motivated by his encounters and a wish to bring about significant transformation, he sought additional education and set out to obtain a master's degree in human services administration. Motivated by the challenges, barriers, and supports he experienced, he moved into a middle school teaching position in a rural area, where he directly saw the vital role that mentoring plays in determining the academic paths of students. This group of students had fewer resources than he had during his upbringing. At that point, he just wanted to show those students everything the world had to offer. After realizing the significant influence that mentoring has on students' academic achievement through his work as an educator, he developed a strong commitment to assisting and empowering students. Ray would always reach out to TRIO and ask for advice on supporting students. He enjoyed staying after school making himself accessible to students and their parents to ensure resources were available and modeled after the care that TPSSS showed as an undergraduate student. His teaching experiences strengthened his conviction in the transformational potential of mentoring and affirmed his dedication to advocating for the educational needs of underserved communities.

His path completed a full circle when he took on the position of Academic Counselor for TRIO programs, giving back the assistance and direction he had previously received. It was his turn to pay it forward, guiding students who shared similar backgrounds and circumstances as his. As a matter of fact, while working with the Educational Talent Search program, Ray was able to bring those students at the middle school on a cultural field trip which gave them the opportunity to visit another state. Being able to do that was what he knew his TRIO family had done for him. Now, many of those students have gone on to college, studied abroad, and even graduated.

Ray eventually enrolled in a Doctor of Education program while surrounded by his TRIO family, motivated by their unwavering support and faith in his abilities. He was able to return the favor to the community that had raised and assisted him during his academic career by working as an academic counselor. Ray's decision to enroll in a Doctor of Education program was

evidence of his dedication to lifelong learning and his will to keep having a positive influence in the educational field. He was incredibly appreciative of his TRIO family's support during this life-changing experience, as their faith in him drove him toward academic and professional success.

Reflecting on his journey, Ray considers it a privilege to assist low-income and Pell-eligible students from the New Orleans region in completing their degrees through his current position with the Louisiana Educate Program. Drawing on his extensive experiences as both a TRIO professional and a former TRIO student, he possesses the necessary expertise, abilities, and empathy to effectively mentor and support his students. His involvement with TRIO programs has provided him with a comprehensive understanding of the specific challenges faced by underrepresented student populations, enabling him to tailor his support to meet their unique needs. Dedicated to leveraging his knowledge and compassion, Ray strives to empower his pupils to overcome obstacles and achieve academic success. He works diligently to uphold the legacy of mentorship and support that has defined his own educational journey.

Ray embodies the life-changing potential of TRIO programs and, as an African American male, stands as a testimony to the transformative power of mentorship and community support. He persevered in the face of early doubts and uncertainties and accomplished the amazing feat of receiving his doctorate at the age of 29. His story offers hope and inspiration to others who want to pursue higher education, especially those from underrepresented backgrounds. In addition to being a personal victory, his achievement marks a significant turning point for the TPSSS program at the University of Louisiana at Lafayette. Being the only graduate of the TPSSS program to date with a doctorate, he has broken down barriers and opened doors for students in the future.

Ray's recognition by his state's TRIO association as a TRIO Achiever is particularly noteworthy. This achievement underscores the crucial role of mentoring and support in fostering academic success, especially among underrepresented groups. Through his unwavering commitment and perseverance, Ray has not only achieved his own goals but has also become a mentor for others navigating the challenges of higher education. His story exemplifies fortitude, resilience, and a steadfast belief in the transformative power of education to enhance lives and strengthen communities. Ray has paved the way for opportunity and empowerment, breaking new ground and inspiring others to pursue their academic aspirations with courage and conviction. His ongoing dedication to supporting access to higher education and fostering student achievement reflects his profound commitment to the TRIO mission.

Concluding Thoughts

Ray's journey stands as a poignant testament to the transformative impact of TRIO programs, illustrating their ability to empower individuals and foster academic success. Grateful for the chance to shape the next generation of TRIO achievers, Ray, alongside fellow TPSSS alumni, celebrates their collective successes and continues to collaborate professionally. His personal experiences have provided him with invaluable insights into the struggles and victories that TRIO participants face, allowing him to provide supportive and helpful assistance. Dedicated to unlocking the full potential of every student he encounters, Ray's commitment to promoting educational attainment and accessibility exemplifies the core mission of TRIO. His ongoing advocacy and mentorship embody a community-centered approach, emphasizing empowerment through education. As he looks to the future, he remains fixed in his assurances in the transformative potential of education and the importance of establishing an accepting and inclusive atmosphere for learning for every student.

About the Author:

Dr. Jorden R. Melton Jr. serves as the Academic Success Coach for the Louisiana Educate Program (LEP) at the University of Louisiana at Lafayette, where he is committed to fostering the success of first-generation and underrepresented students. In addition to his role in student success, Dr. Melton is an Instructor at various institutions, teaching courses such as Mastering the First Year, which helps first-year students transition smoothly into college life, and social justice, where he educates students on cultural awareness and equity. Dr. Melton's work has earned him significant recognition, including being named a Rising Professional of the Year by one of his state associations and receiving national acclaim for his research on the scarcity of Black male faculty in post-secondary education, which was awarded Dissertation of the Year. He has also been honored by PDK International as one of the nation's four Emerging Leaders in education. A proud TRiO Collegiate Alumnus, class of 2016, Dr. Melton's experiences in the program have profoundly shaped his professional journey. He has held key roles as an Academic Counselor in Educational Talent Search, Student Support Services, and Upward Bound, where he mentored students and guided them toward achieving their academic and personal goals. His ongoing involvement with TRiO through his services to campus reflects his deep commitment to providing continuous support and advocacy for the next generation of students. Dr. Melton's research interests encompass social justice, student success, DEI initiatives, BIPOC groups in higher education, and supports for underrepresented populations. His work is characterized by a strong dedication to creating inclusive and supportive educational environments, driven by his own experiences and a desire to give back to the community that has shaped his path.

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