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An Action Based Approach to Analyze Factors That Impact Academic Major and Career Choice of Low-Income First-Generation College Students

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DEDICATION

This dissertation is dedicated to all first-generation students, faculty, and those who are the underdogs in their collegiate environments. This body of work is also dedicated to the memories of my late grandparents Ledora Winfield and James E. Winfield, Sr., whose love and support pushed me to further my education.

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ABSTRACT

This action research study analyzed career and major choice perceptions among low-income first-generation college students or FGCS while using self-efficacy as the primary metric. This study instituted a mixed-methods methodology to understand further student-related challenges and factors that affected their career and major decisions. Using a pretest-posttest design, participants' self-efficacy levels were assessed using the Career Decision Self-Efficacy Assessment - Short Form (CDSE-SF). After analyzing the student performance in the five sub-factors of this instrument, these data were used to inform the individual interviews and focus groups. All participants were first-year students enrolled in a federally funded TRIO program, which explicitly supports first-generation college students. The study's purpose was to examine the impact that TRIO Programs have on FGCS major and career decisions and exposure. Findings from the study indicate that financial support, supportive advising and mental health resources are essential to provide effective support for FGCS as they pursue their career goals.

Keywords: first-generation college students, career self-efficacy, TRIO, action research

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

LIST OF ABBREVIATIONS

CDSE-SF..... Career Decision Self-Efficacy Scale – Short Form

FAFSA .....Free Application for Federal Student Aid

FGCS..... First-generation College Student(s)

NACE..... National Association of Colleges and Employers

SCCT.....Social Cognitive Career Theory

SSS..... Student Support Services (TRIO Program)

CHAPTER ONE

INTRODUCTION

Access and success are rising terms, in the field of higher education. When using these terms, it often encompasses many protected classes and races, varying abilities, those of low-socioeconomic status, and *first-generation college students* (FGCS). According to a 2019 report from The Pell Institute for the Study of Opportunity in Higher Education, the percentage of "students with the potential to be first-generation college students" sits at 60% across all races (The Pell Institute for the Study of Opportunity in Higher Education, 2019, p. 22). This is a decrease from the longitudinal report that shows this number being 75% in 2010 (Pell Institute, 2019). Also, about half of FGCS go on to complete a bachelor's degree (Redford & Hoyer, 2017).

The United States Department of Education (n.d.) addresses the disparity of closing the *"academic achievement gaps"* and recognizing *structural barriers* that exist that impede this goal. In an economic and globally competitive society, one must acknowledge that more students are being educated according to subject-based standards and *career-readiness* (U.S. Department of Education, n.d.). As students are gaining the necessary education to enter college, then they must acquire the appropriate skills and awareness to succeed after college.

If postsecondary education is necessary to obtain work that pays a living wage, then all individuals, regardless of family income, parents' education,

socioeconomic status, or other demographic characteristics, should have equal opportunity to participate, complete, and benefit (Pell Institute, 2019).

Across the United States, students continue to enroll in colleges and universities in hopes of earning a college degree that ultimately leads to a well-paying job. As higher education continues to prove itself as a common pathway to career success, a population within this growing pipeline of diverse students are first-generation college students (Manzoni & Streib, 2017). In this context, FGCS are students who are the first in their immediate family to earn a baccalaureate degree from a four-year institution of higher education (Quinn, Cornelius-White, MacGregor, & Uribe-Zarain, 2019). Manzoni and Streib (2017) affirm that FGCS like many other students will pursue a degree in hopes of securing employment, but the first step is to select an academic major that aligns with students' interests, strengths, and passions. Fostering this awareness is typically the task of academic advisers who see students usually one to three times an academic semester.

Problem of Practice

Literature asserts that FGCS are more prone to delaying selecting academic majors, less likely to engage in co-curricular experiences, and may not seek faculty assistance, ultimately leading to their attrition (DeFreitas & Anne Rinn, 2013). These considerations, combined with external factors of household income and familial obligations, can influence how students navigate college and professional environments. A 2010 study identified salient themes that support the thinking of FGCS in their senior year while looking into career options (Maietta, 2016). FGCS possess a strong need to "step up" for the family and feeling the weight of importance that their decisions take on during their college experience (Maietta, 2016). These pressures are heightened as these

students face managing the responsibilities of life and navigating college expectations (Pratt, Harwood, Cavazos, & Ditzfield, 2019). The problem of practice for this research study centers on the fact that these circumstances and responsibilities can cloud FGCS goals and result in stress and distractions, leading to increased attrition and drop-out rates (Pratt et al., 2019). The identification of this PoP supports the need for creating more informed advising and career exploration strategies.

FGCS, compared to their continuing-generation peers, can be more motivated in college by external factors such as family, perceived income, and financial stability (Gibbons et al., 2016). Awareness of this motivation can inform and adjust how both major and career exploration are approached in higher education. Lacking what some consider as *cultural capital*, FGCS can be swayed by perceived financial gain or familial pressures of what a lucrative career path may be (Ward et al., 2012, p. 26). With their families' not understanding college culture and policies, it can often be challenging to articulate challenging classes, majors, and alternative career paths (National Association of Colleges and Employers, 2016).

Other obstacles, aside from those that are familial and cultural, are worldview generalizations that students face as they decide on careers. FGCS can feel that once you declare an academic major, it is impossible to change (National Association of Colleges and Employers, 2016). These misconceptions are not outwardly stated or written, but there appear to be norms inherited or taught before college that can contribute to this *no-way-out* mentality.

Research Questions

The identified research questions explored the impact of career development efforts among participants of collegiate TRIO Programs and the influence on the process of career decision making. Maybe one or two sentences here about TRIO in general. Nothing too extensive. The process of developing these questions revolved around the generative notion that the population holds the answers to the environmental factors that affect their decisions (Herr and Anderson, 2015).

Research Question: How does the TRIO Student Support Services Program's career development component equip students to better understand their skills and abilities related to their potential careers?

- Sub-question 1: How well does the TRIO Student Support Services Program take into account the cultural and social factors when providing advisement and career counseling?
- Sub-question 2: Is there any difference in outcomes based on race and ethnicity?

Theoretical Framework

This research utilized relevant theoretical frameworks to identify social and cultural factors that can affect FGCS and their matriculation through college. Ward et al. (2012) noted that self-efficacy is a vital component in the success of FGCS. Therefore, Bandura's (1977) seminal work on self-efficacy serves as one of the theoretical frameworks of this research and seeks to identify the various needs of FGCS as a non-monolithic group. Lent, Brown, and Hackett's (1994) Social Cognitive Career Theory will serve as the theoretical frameworks for furthering understanding FGCS in this

context. The identified theoretical framework serves as the *lens* to understand the elements of this phenomenon for FGCS while respecting their unique culture and perspectives (Anfara & Mertz, 2016).

Social Cognitive Career Theory or SCCT and Bandura's Self-efficacy will provide theoretical grounding to the research by addressing self-efficacy beliefs and outcomes expectations of those beliefs. SCCT is a central concept to acknowledge how beliefs and lived experiences can play a vital part in career development and self-efficacy. Bandura (1977) asserts that people's personalities and behaviors can be explained based on their individual lived experiences while acknowledging the traditional developmental patterns.

It is a consistent trend that FGCS tend to feel the burden to support relatives (financially and emotionally) as well as have an income while maintaining their academics (Ward et al., 2012). This undue pressure can have a significant impact on the career decisions of FGCS (Coffman, 2011). Similarly social learning theories account for these socio-cultural nuances and norms that can attribute to this process for students. Hughey et al. (2009) outlined factors that impact the beliefs of oneself as it pertains to career choice. The most relevant factors for this study are:

1. *Environmental conditions and events*. These are factors outside of the individual's control such as cultural, social, political, historical, historical, and economic.
2. *Task approach skills*. These include work habits, mindset, emotional responses, cognitive processes, and problem-solving skills.

Lent et al. (1994) Social Cognitive Career Theory has a distinct focus on self-efficacy. Bandura's (1986) seminal evidence-based research posits that self-efficacy is a predictor of various outcomes such as academic achievements, social skills, and career choices. Self-efficacy as defined by Bandura (1986) is an individual's perceptions of their abilities to execute actions required to achieve a goal. This idea recognizes that through a holistic understanding of oneself and abilities, a student can assimilate positive experiences to identify strengths and create positive beliefs and expectations (Hughey et al., 2009). In this process, self-efficacy can help students answer an essential yet straightforward question "Can I do it?" (Hughey et al., 2009, p. 85). Addressing this question is vital as FGCS can doubt their abilities to succeed in their desired occupation.

SCCT can support the understanding of students' goals as academic support staff can identify the existing determination of individuals as they move toward achieving their academic and career goals. SCCT is further informed by Bandura's (1986) work that further explains the triadic nature of the theory as self-efficacy beliefs, outcomes, expectations, and personal goals are essential to the career process. When it comes to performance attainment and persistence these factors are crucial to inform actions to promote a culture of success among students who are on various levels of the career exploration spectrum (Hughey et al., 2009). The overtones of performance attainment warranted the addition of Bandura (1977) self-efficacy as an addition to the theoretical framework of this research.

Exploration of self-efficacy beliefs are interwoven to offer further examination of student perceptions that frame their persistence in their desired career paths. Self-efficacy is a non-cognitive factor that must be measured via domain specific metrics or

performances (Bandura, 1986; Betz & Taylor, 2012). This study sought to be objective and focus its examination specifically on career self-efficacy. Through identification of gaps in the respective domains of career self-efficacy practices grounded in SCCT can be implemented to guide interventions with the intent to improve student performance and behaviors in select areas (Hughey et al., 2009; Betz & Taylor, 2012).

Career self-efficacy is students' beliefs of how they will perform in their careers and throughout the career development process (Betz & Taylor, 2012). As any self-efficacy measurement is domain specific this action research study relies on a theoretically sound instrument that is grounded in measuring self-efficacy in domains deemed essential in the career development process. In this study, FGCS participate in a process that reveals their individual and collective achievements in various facets of career self-efficacy. Per the action research model, the researcher must understand the perceptions and lived experiences of their participants (Herr & Anderson, 2015). Through this understanding one can then asses self-efficacy as it is up to the participant to acknowledge their abilities in executing tasks and application of knowledge (Hughey et al., 2009; Betz & Taylor, 2012).

To further understand the process and thinking patterns of FGCS, an intensive inquiry process will take place to uncover salient themes. Following the general characteristic of what de Shutter and Yopo (1981) described as understanding social processes and structures from a historical context, this level of inquiry leads to *generative themes* resulting from FGCS "examining the relationship between [their] knowledge, identity, agency and practice" (Herr & Anderson, 2015, p. 17).

Recognizing this population's behaviors, backgrounds, and perceptions will increase the practitioner and educator's understanding of FGCS career decision-making processes. Gibbons, Rhinehart, and Hardin (2019) recommend using a social cognitive-based theory as a framework to find connections between careers and self-efficacy for FGCS. Using these theoretical foundations, while respecting individuals' interrelationships and their social environments, approaches can be refined to offer more meaningful career education efforts (Herr & Anderson, 2015). With this mutual understanding, there can be increased validation of FGCS values that align with the career selection and attainment process.

The following figure is adapted from Lent, Brown, and Hackett's (1994) work on SCCT (Figure 2.1). This model provides a graphical depiction of the theoretical framework highlighting both SCCCT and the intersection of Bandura's (1977) self-efficacy as it is used in this action research dissertation.

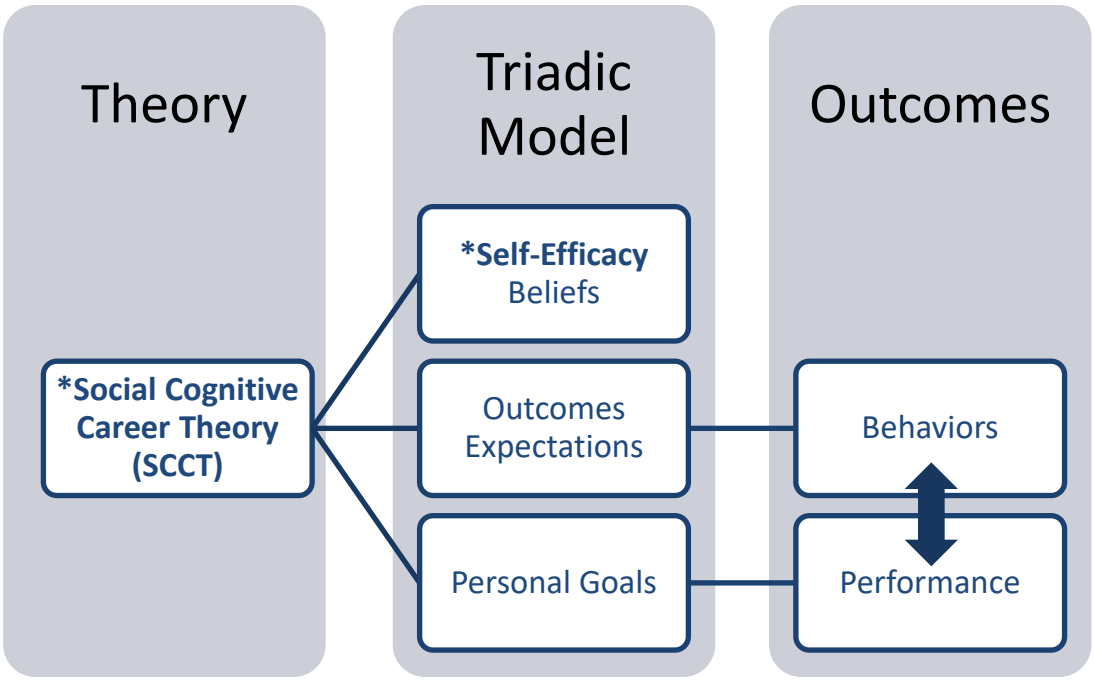

Figure 2.1: Theoretical Framework of SCCT & Self-Efficacy. Figure 2.1 provides a visual model of the two theories that ground this action research study, Social Cognitive Career Theory (SCCT) and self-efficacy.

Purpose of the Study

The purpose of this study is to explore the social and cultural factors that impact the decisions of these students. Further understanding of this phenomenon can enhance curricular and co-curricular practices that can increase FGCS knowledge of fulfilling career pathways and parallel plans that utilize personal strengths and apply content learned during undergraduate study. Recognition of these barriers will provide administrators, faculty, and student services staff the proper context to support and validate FGCS in their abilities to achieve.

Attaining a college degree is often debated as an equalizer that can secure finances and access to employment opportunities (Wilbur & Roscigno, 2016). As FGCS of low socioeconomic statuses begins to weigh their interests, passions, and capabilities, it will help understand other intrinsic and extrinsic motivators.

Using a subset of the FGCS population, low-income students provide another lens to evaluate matters of equity related to the individual challenges that these students may face. These challenges can vary based on the students' identities and unique circumstances but are often in the realm of financial obligations (Soria, Weiner, & Lu, 2014). Undue pressure, combined with a decreased *sense of belonging* among underrepresented students, can affect their matriculation and have implications on their post-secondary goals (Strayhorn, 2018).

This study also seeks to frame low-income FGCS in a non-deficient light elevating their strengths and identity as a point of pride rather than a deficit (Ward et al., 2012). FGCS can face numerous challenges while transitioning into college. To reframe the narrative, these students will share their stories to help educators to understand the rationale of these barriers and consider methods to support them better and intervene when necessary.

Overview of Methodology

This action research study utilized a *mixed-methods* approach to provide a holistic view of the FGCS challenges in this arena. The use of a vetted instrument the Career Decision Self-Efficacy Scale – Short Form (CDSE-SF) provided quantitative data based on predetermined scales. Although these data are valuable, there are various nuances that exceed numerical values, and the process of qualitative research lends to allow space for the necessary conversations and interventions to take place. Miles and Huberman (1994) affirm this practice as they state that qualitative research "attempts to capture data on the perceptions of local actors 'from the inside.' Through a process of deep attentiveness, of empathetic understanding" (p. 8). As the action researcher in this study, an emphasis is

placed on the contributions and feedback of identified FGCS to inform the future practices of those working to support FGCS . This type of action research will rely extensively on the following modes of participation: *Consultation* and *Colearning.* (Herr & Anderson, 2015). This process of trust and reciprocity expected of the participants is centered around the construct of collaborative research and knowledge sharing. Using Herr and Anderson's (2015) Four Squares of Knowledge capturing what "*we know"*, recognizing what "*we don't know"* and capitalizing upon "*what they know"* (p. 50).

This study falls into what Kemmis, McTaggert, and Nixon (2014) would categorize as *practical action research*, as the purpose is to enlighten educators and practitioners to guide their actions and practice with the identified population further. A qualitative approach fits this study as it necessitates *fieldwork* from the researcher. Engaging in this fieldwork leads to discovery, meaning-making, and interpretation of lived experiences (Schuh, Upcraft, & Assoc., 2001). To understand FGCS, these students serve as the storytellers of their respective paths, explaining their history, shared identities, and nuances.

This study took place over eight weeks. Students identified for the sample were TRIO Student Support Services students. These students are enrolled in a federally funded program that offers financial support and intensive curricular support for low-income FGCS (Quinn et al., 2019). To ensure ethical compliance with the institution, student consent was provided along with assigning misnomer to the participants to ensure anonymity. This process consisted of the administration of the CDSE-SF instrument as a pre and posttest grounded in the foundations of career education researchers such as John Krumboltz and Alfred Bandura (Betz & Taylor, 2012). From the surveyed sample, four

students were identified to participate in one-on one interviews. The results of the CDSE-SF responses were used to determine themes for interview questions to uncover unique challenges and pressures that these face as first-generation low-income students. Then the posttest round of the CDSE-SF to the participants who previously participated. The process concluded with a focus group to triangulate the data and close the loop on the interaction.

Upon the conclusion of the interviews and focus group, all feedback was digitally recorded and transcribed to ensure the quality and validity of the students' perspectives. The collected data were then collated and coded using deductive analysis process to identify emergent themes via arose during the students' interviews. These data were then triangulated with the CDSE-SF responses to find connections or lack of, to offer recommendations to educational practice for FGCS.

Significance of the Study

There is significant research on the global challenges of FGCS, their perceptions of the collegiate environment, and their sense of belonging on their respective campuses. However, there is limited literature that explores the influences and support in career and major decision making while offering solutions to better support FGCS through this transition. Gibbons, Rhinehart, and Hardin (2019) uncovered the gap and inequality between first-generation and continuing generation students, acknowledging that significant capital is gained by those who possess this shared knowledge of their culture. Recognizing that FGCS do not have this advantage, it is imperative to add to the body of existing research so that instructors and practitioners can continue to move away from assumptions to being data informed.

Focusing on the themes that arise from this study could help students manage the insecurities and positively affect practices that may currently prove ineffective or bring out the best in FGCS. The results of this study will contribute to the body of research on this complex and growing population with the aspiration to uncover how the intersectionality of their identities, such as race, gender, and socio-economic status, can influence their academic and career decisions (Pratt et al., 2019).

According to Whitley, Benson, and Wesaw's (2018) study, institutions were asked what priority topic areas were covered in current offerings to first-generation students at their institutions? The data showed that 63% of these institutions emphasized advising/major selection/degree planning (Whitley et al., 2018). In addition, 51% indicated an emphasis on career and postgraduate preparation (p. 65). These data support that institutions are leading intentional efforts and conversations with students, but do not address the methods, practices, and outcomes of these practices. With the growing emphasis on academic and career outcomes serving as measures of student success in higher education (Shreiner, Louis, & Nelson, 2012) this dissertation seeks to add to the literature base to inform best-practices to help provide better support and guidance for FGCS as they make these crucial decisions.

> First-generation students may have more need for advice, connections, and support than the average student. There may be barriers to success, family obligations, or hidden circumstances that may prevent students from seeking help or from pursuing their objectives. It [is] important to uncover obstacles that might exist and find ways in which those obstacles can be removed. (National Association of Colleges and Employers, 2016)

There are numerous assertions regarding the challenges and struggles that affect FGCS as they progress throughout higher education. Authoring this study would provide added data to accompany the growing literature base along with affirming or dispelling notions that may exist regarding FGCS. These students continue to see a future of employment opportunities and finances as the goal of a college degree is achieved (Baum, Kurose, & Ma, 2013). Recognizing these gains, students approach college with the expectation for institutions to deliver on the dream of employment after graduation. Institutions across the country are responding to this expectation by further developing their approaches to educating students on *employability* and *skills* versus the previous adage of only getting a job.

Limitations of Study

The limitations of the study include the acknowledgment that this sample of students was derived from a four-year comprehensive institution in the Southern United States. Another factor that limits this study is the short period upon which the study took place. Although a significant amount of qualitative data was collected in the eight weeks of the study, the quantitative data collected from the pre and posttest survey was limited. This challenge may be attributed to survey fatigue as institutions were in virtual and hybrid instruction due to the COVID-19 pandemic. Having been consistently surveyed by their institutions appeared to have caused exhaustion on student assessments.

The pandemic also contributed to a lack of events and traditional engagements that would have occurred if all school and co-curricular interactions were in person. Another limitation arose as the participant sample was not as balanced based on race, ethnicity, and gender; this proved challenging as the study sought to examine the

difference in self-efficacy based on race. It is also essential to recognize the substantial developmental growth and awareness that traditionally occurs as students matriculate throughout college and cannot be captured in the short time frame of the study. This growth can include increases in students' self-efficacy in respective domains, which this study captures for careers and major decisions.

Dissertation Overview

Chapter One consists of the introduction of the problem of practice and challenges of the identified population. To support the identified problem of practice, Chapter Two serves as the literature review and contains research to support the first chapter. The design of this study, including the rationale and process for the mixed-methods methodology, are outlined in Chapter Three. Chapter Four offers the key findings and triangulated results of this action-based research. The study will conclude with Chapter Five and will provide recommendations for practitioners and recommendations on interventions for the identified population.

Definition of Terms

- **Career Readiness.** The National Association of College and Employers (2014) defined career readiness as "the attainment and demonstration of requisite competencies that broadly prepare college graduates for a successful transition into the workplace."
- **Career Decision Self-Assessment (CDSE).** The CDSE measures the degree of belief that someone can successfully execute tasks essential to making career decisions (Betz & Taylor, 2012).

- **Employability.** Dacre Poole & Sewell (2007) defined employability as "having a set of skills, knowledge, understanding and personal attributes that make a person more likely to choose, secure and retain occupations in which they can be satisfied and successful."
- **Family.** Bearing in mind that the term ‘family’ can be a polysemic term, for this study it encompasses biological parents and guardians who have served as support for the students.
- **First-generation College Students (FGCS).** For the sake of this study the term first-generation college student refers to students who “neither parent or guardian earned a four-year college degree” (Whitley, Benson, & Wesaw, 2018, p. 17).
- **Career Self-Efficacy.** Students’ judgements of their abilities to prioritize and execute actions in the following career domains: Self-Appraisal, Occupational Information, Goal Selection, Planning, and Problem Solving (Bandura, 1986; Betz & Taylor, 2012).
- **TRIO Programs.** These are federally funded programs designed to serving low-income and first-generation college students. TRIO consist of six programs for various subsets of FGCS, Educational Opportunity Center (EOC), Upward Bound, Upward Bound - Math and Science, Veterans Upward Bound, Student Support Services (SSS), and the McNair Scholars Program for students aspiring to pursue graduate school (Council for Opportunity in Education, n.d.; U.S. Department of Education, n.d.).

CHAPTER TWO

LITERATURE REVIEW

The Problem of Practice or PoP for this action-based study centers on first-generation college students or FGCS. The purpose of this research is to move from assumptions to empower the participating FGCS to speak life and validity on their influences and circumstances. To further position those working with FGCS with a deeper understanding of FGCS. Through this research and the in-depth accounts that are provided, higher education professionals will better support them in academic and post-secondary ambitions.

In recent years, research consortiums such as the Pell Institute for the Study of Opportunity in Higher Education or Pell Institute and the NASPA Center for First-generation College Student Success served as leaders in the collection of data surrounding FGCS. These data include the assessment of barriers to entry and completion, such as the financial state of this population, the impact of the rising cost of education as it pertains to *access* and *affordability*. According to the Pell Institute (2019), which speaks to students who are Pell Grant eligible, students who are Pell-eligible are typically FGCS, and by them being eligible for such grants indicates that they are low-income. The use of the Pell Institute from the *Indicators of Higher Education Equity in the United States — 2019 Historical Trend Report* offers data to add further validity to the underpinnings of *social justice* and educational equity as its study explicitly outlines the racial and ethnic distribution of college degree recipients.

Other resources such as the National Resource Center for The First-Year Experience and Students in Transition, seated at the University of South Carolina Columbia, are a consortia body that produces scholarly research that appears throughout this literature review. The work of this center is not done in a silo as collaborations have taken place with the Center for First-generation Student Success. In alignment with national trends, FGCS has seen a significant amount of attention, particularly through the work of *first-gen* thought-leaders and researchers such as Dr. Rebecca Covarrubias, Dr. Lee Ward, and Dr. Sarah Whitley whose work are also referenced in this literature review.

Celebrities and public figures such as former First Lady Michelle Obama, who articulates in her 2018 book *Becoming*, her experiences being low-income, first-generation, and a woman of color unpacking her challenges with navigating the collegiate environment and battling the feelings of self-doubt and inadequacy. These accounts, as outlined in Mrs. Obama's best-selling book, align with the importance of qualitative data and stories serving as a *lens* to share the journey of an examined population (Merriam & Tisdell, 2016). This book, along with other individuals of high profile, acknowledge the first-generation experience and has aided in the normalization of being FGCS.

This growing breadth of literature and reports makes a case for *access* and affordability, and the need to meet the student demands that Murray (2017) regards an increase of opportunity and a future to American students. That hope is in earning a four-year degree and obtaining employment that is intrinsically fulfilling and fiscally viable (Dacre Pool & Sewell, 2007). FGCS can best achieve their academic and career goals if educators holistically understand who they are and the challenges that they face.

The layout of this literature review is as follows:

- *The Historical Overview of Educational Access*. This overview provides a historical context of legislation programs and opportunities that led to the shift in access to higher education for underrepresented groups, specifically FGCS.
- *Theoretical Frameworks*. This section will provide a summation of the theoretical underpinnings of the study including Lent et al. (1994) Social Cognitive Career Theory and Bandura's (1977) self-efficacy. There is also an honorable mention of Rendon's (1994) validation theory as it relates to conducting interventions with students. scct
- *The Appeal of a Four-Year College Degree*. A bachelor's degree continues to be a measure of success and entry into various professions (Murray, 2017). An overview of the appeal of a four-year college degree is offered to share the societal, cultural, and economic gains that serve as an increased incentive for FGCS (Manzoni & Streib, 2018).
- *Understanding First-Generation College Students (FGCS)*. As the definition of FGCS has varied in some areas this section offers an introduction to who FGCS are and history foundations of the identity. This literature review clearly defines who is considered as FGCS for this action-research study.
- *Intersectionality of Identities Among FGCS*. Jehangir, Stebleton, & Deenanath (2014) acknowledge the importance of recognizing the intersectionality of the identities of FGCS. This portion of the literature review provides an overview of the intersection of being low-income, Black, and Latinx. All of these are spoken to from the lens of also being first-generation.

- *External Factors of Influence for FGCS*. Literature posits that these key factors, family and finances, that influence FGCS as they progress through college and their career decisions (Manzoni & Streib, 2018; Pratt et al., 2019; Schreiner, Louis, & Nelson, 2020). This section outlines these factors and how these are implications for FGCS's life decisions.
- *Academic and Career Perceptions of FGCS*. The section of the literature review extract themes that impact how FGCS see themselves and their abilities as they matriculate and graduate from college.
- *Related Research*. Two studies were identified that paired well with this action-research study based on their theoretical grounding and outcomes. A brief overview of the research is provided to show congruence and further validate the purpose of this study for this population.
- *Summary and Conclusion*. This will summarize the purpose and aspiration of the study and transition into Chapter Three regarding the methodology of the study.

Historical Overview of Educational Access

Marginalized groups such as FGCS have been lumped together for some time as these access barriers disproportionately impact ethnic minorities who are often FGCS. According to the Association of Governing Boards of Universities and Colleges address the intersection of racial and economic barriers in their definition and approach to educational equity:

> Educational equity means prioritizing decision making that demonstrates awareness of and responsiveness to the numerous ways in which sociocultural forces—related to race, gender, ability, sexuality, *socioeconomic status*, et

cetera—*impede or propel student success and institutional accountability* (Krisberg, 2019, para.18).

In the continued exploration of FGCS and their unique challenges, it is essential to acknowledge the history of access in higher education. The evolution of policies and events provide connections that offer deeper context to both overt and covert messages given to this population based on their multiple identities and history attached to them (Cornell & Hartmann, 2007).

Morrill Act of 1862. Before the Reconstruction era, The Morrill Act of 1862 was signed into law by Abraham Lincoln. As this occurred post-slavery, the access movement became a reality among racial minorities, particularly African Americans, not just poor Whites looking to retool and become more educated (Morrill Act, 1865). Some of these institutions bear the name of being agricultural and mechanical (A&M) schools, or polytechnic institutes became known *land-grant institutions* based on the grant allotments provided by the Morrill Act (Morrill Act, 1865). As normal schools and technical institutes emerged, such as the historically black college or university (HBCU), Tuskegee University (formerly Tuskegee Institute) was founded by acclaimed black educator, Booker T. Washington who began his institution to develop the skills of black people after slavery (Tuskegee University, n.d.).

Some of these institutions were started by Whites who supported black education. An example is Bathsheba Benedict who sought to educate black youth in her normal school, and her vision grew into what became another HBCU, Benedict College (Benedict College, n.d.). The opening of these higher education institutions focused mainly on technical and agricultural education (Benedict College, n.d.; Morrill Act,

1865). These institutions, not just HBCUs, have grown from the expanded vision upon their missions beyond technical and agricultural but maintain function based on the history and funding sources.

The Higher Education Act of 1965. The Higher Education Act of 1965 instituted policies and funding that aided in the increase of opportunity access for underrepresented groups, specifically FGCS. Two federal programs emerged from the Higher Education Act. Through this legislation, financial support was provided for *Pell Grants* and *TRIO Programs*, which includes a cadre of pre-college and college-based enrichment and support programs for FGCS (Higher Education Act of 1965, 2008).

Pell Grants. A product of this act was the institution of Pell Grants that have served as significant support for students of low-socioeconomic status over the years. Pell Grants which are classified as a federal grant, meaning that students do not have to repay these funds. This opportunity affords students access to funds without the added stress of loans and accruing interests (Higher Education Act of 1965, 2008). These grants have changed in federal contribution over the years. In the 1970's Pell Grants covered about two-thirds of average tuition costs (Pell Institute, 2019). By the year 2017, the maximum Pell covered only 25 percent of costs; this is a 67 percent decrease from 1976 (Pell Institute, 2019). According to the Pell Institute (2019), as of 2017, "59 percent of degree-seeking undergraduates who received Federal Pell or other grants were enrolled at a 4-year institution" (p. 73).

Federal TRIO Programs. According to the Council for Opportunity in Education (n.d.) TRIO programs originated from first having three signature programs, Upward Bound, Educational Talent Search, and Student Support Services. Upward Bound is a

pre-college outreach program for high-school students. Educational Talent Search (ETS) is an outreach and college preparation program but is also recruits middle-school children. Student Support Services (SSS), which is an enrichment and support program for current undergraduate college students. All TRIO programs are committed to serving low-income and first-generation college students (Council for Opportunity in Education, n.d.). Over the years, TRIO has expanded to incorporate more programs such as Educational Opportunity Center (EOC), Upward Bound Math and Science, Veterans Upward Bound, and the McNair Scholars Program for students aspiring to pursue graduate school (U.S. Department of Education, n.d.).

Research Questions

This action research study is to better equip higher education professionals to coach and support FGCS in their academic and career aspirations. Throughout this literature review, there will be mention of some of the factors that affect the experiences of FGCS. The identified questions are assigned to provide an additional layer of depth to the existing body of research. The research questions are as follows: How does the TRIO Student Support Services Program's career development component equip students to better understand their skills and abilities related to their potential career? Sub-question 1: Is there any difference in outcomes based on race and ethnicity? Sub-question 2: Is there any difference in outcomes based on race and ethnicity?

Literature Review Purpose and Methodology

Participants in this study are FGCS that are enrolled in the TRIO Student Support Services at a four-year comprehensive university. FGCS in the TRIO Student Support Services are classified as low-income nationally serve nearly a quarter of a million

students each year (Council for Opportunity in Education, n.d.; U.S. Department of Education, 2016). The students in this program engaged in a pre-and-post test of a self-efficacy instrument, the Career Decision Self-Efficacy Scale (short-form version) to capture their immediate perceptions and understanding of self-efficacy in their career decisions. From the responses collected through that instrument, themes were extracted to devise questions asked during the interview and focus group sessions with the participating students. As this study has an action research objective, the participants' contributions offered a deeper analysis of these factors relying on them as the experts of their stories (Merriam & Tisdell, 2016).

Theoretical Framework

As described by Grant and Osanloo (2014), the theoretical framework serves as the *blueprint* for a dissertation. To effectively examine the phenomenon of FGCS career decisions, this research necessitates the use of a theoretical framework versus a conceptual framework to ground the study in theory and account for factors that intersect identity, demography, and environment (Anfara & Mertz, 2016). The theoretical framework selected for this DiP is of the mold of *self-efficacy* and *cognitive theories* to uncover the aspirations motivators and detractors to FGCS degree attainments and career decisions (Grant & Osanloo, 2014). To validate or dispel these factors for FGCS, the use of Social Cognitive Career Theory (SCCT) was selected. This theory grounds this study while having an overarching connection to Bandura's (1977) self-efficacy.

Social Cognitive Career Theory. Social Cognitive Career Theory or SCCT provides a lens of understanding how students perceive themselves and the considerations that the environment that surrounds them has on the perceptions (Hughey

et al., 2009). As Lent and Brown (1996) identified, SCCT is grounded in the exploration of a student's journey to self-efficacy, which leads to *positive outcomes* and higher goals. The connection to how this impacts FGCS is the belief that students with significant ability may encounter challenges that may affect progression towards their desired goals. Practitioners have used SCCT to understand better the influences on the collegiate transition of FGCS to seek a connection between factors such as background, family income, and parental education level (Gibbons et al., 2019). SCCT also speaks to the *intervention* that higher education professionals can initiate. This intervention is specifically among career and academic advisors who can minimize self-deprecation that can result in inaccurate self-beliefs of ability and future achievement (Hughey et al., 2009).

SCCT has been explicitly used as a framework in research specific to FGCS to provide additional context in exploring the "adjustment, perceived barriers, and supports to college-going" students (Gibbons et al., p. 491). As these barriers are identified using SCCT, self-efficacy emerges as a factor in how students navigate through and beyond the barriers and supports present in their collegiate experiences. The process of how FGCS approach making these decisions is just as important as their actions. With the holistic view of FGCS's career decisions, it is beneficial to use SCCT to uncover social persuasion factors (Hughey et al., 2009).

Bandura's self-efficacy. The underpinning of SCCT is the strong ties and underpinnings of self-efficacy. Bandura (1977) introduced this concept to label students *owning* who they are and using their experiences to mobilize and have both competence and confidence in what they *can achieve*. Bandura's work emerges consistently among

seminal literature in student development and career development theory revering self-efficacy as an essential non-cognitive factor. Dacre Poole and Sewell's (2007) work also supports the significance of self-efficacy as a vital part of career readiness and attainment by listing *self-esteem, self-confidence,* and *self-efficacy* as a part of its employability model. These three components play upon one-another but are necessary for FGCS. These students have a greater chance of not having well-established non-cognitive factors that will boost their likelihood of recognizing and acknowledging their strengths.

Bandura's work on *self-efficacy* is rooted in reinforcement theory, cognition information processing, and classical behaviorism (Hughey et al., 2009). This arc of theories that support self-efficacy is also known as the triadic reciprocal model. Those who intervene with students during the exploration process should be sensitive to students' beliefs of themselves as they could be indicators of student outcomes expectations (Lent & Brown, 1996; Hughey et al., 2006). This alignment offers a more robust rationale for the use of self-efficacy as the theoretical foundation of this action-based research study. Self-efficacy aligns with confidence and competence (Dacre Poole & Sewell, 2007). To achieve self-efficacy, students must be exposed to the opportunities and options that are potentially at the end of their academic journey (Dacre Poole & Sewell, 2007).

For FGCS, these factors are applicable to classify the various themes that emerged from students to ground and align their experiences in the career exploration and decision-making process. Mitchell and Krumboltz (1996) asserts that making career decisions is a *learned skill*. Relevant to FGCS, the exploration process should address *how* these students make their decisions based on circumstances that surround them. Per

Krumboltz (1979), it is prudent to recognize the skills that students develop as the *unplanned events* occur that can impact career decision-making (Hughey et al., 2009, p. 92-93).

1. Curiosity: Exploring new learning opportunities.
2. Persistence: Exerting effort despite setbacks.
3. Flexibility: Changing attitudes and circumstances.
4. Optimism: Viewing new opportunities as possible and attainable.
5. Risk-taking: Taking action amidst uncertainty.

These skills align with the phenomenon of students possessing *grit* and *resilience* (Duckworth, 2016). These non-cognitive factors, although challenging to measure, are embedded in FGCS's ability to move through unplanned events and circumstances. SCCT and self-efficacy prove to be vetted theories as they also show congruence with Rendon's (1994) *validation theory*. In addition to fostering self-efficacy, these target culturally and economically diverse students and affirms the use of motivation as a tool to help students through their college experiences. This acknowledgment of both income and cross-cultural differences warrants recognition in this study and its connection to FGCS (Rendon, 1994).

National efforts to increase access have been instituted, such as TRIO Programs and Gaining Early Awareness and Readiness for Undergraduate Programs, also known as GEAR UP. FGCS continue disproportionately graduate from college at lower rates, and in some cases, leave higher education without a degree (Quinn et al., 2019; Wesaw et al., 2018). The challenges of being FGCS compounded with factors such as being of *lower*

socioeconomic status and *ethnic minority status* offers different layers to their identities, stories, and ambitions.

The Appeal of a Four-Year College Degree

According to the Pell Institute (2019), enrollment trends increased since the Great Recession of 2007 as individuals further sought higher education as a gateway to the workforce. These perceptions are mainly dominant among FGCS, who may have seen employment trends that were not favorable to their families based on lack of credentials (Manzoni & Streib, 2018). The National Center for Education Statistics or NCES (2017) data projections indicate that enrollment would increase to 16.1 million students to over 17 million in 2019 for first-time college students. With such a large number still large enough to substantiate the influx of first-generation college students who are lumped into that large number. As FGCS continues to enroll in college, it is helpful to know their demographics, expectations, and perceptions of the four-year academic experience, particularly in employment.

The increase in college-goers can be associated with the various trends related to paradigm shifts of access and job market trends that have informed. Murray (2017) cites three frames of thought that serve as viable factors regarding the influx of students coming into higher education.

1. Increase of jobs that require *high academic ability*.
    a. These jobs include physicians, attorneys, professors, and scientists, to name a few.
2. Increase in the *market value* of the jobs.
3. Increase *access* to college to students.

a. This increase accounts for the increase in wealth to afford college, along with the rise of scholarships and loans to appeal to both those with high ability and financial need (Murray, 2017, p. 389).

Pratt et al. (2019) speak to the myriad of retention and support efforts in collegiate settings. However, as these efforts are developed, the integration of intentional career preparation programs is growing to be at the forefront (Wesaw et al., 2018). In 2018, the Center for First-generation Student Success asked institutions to identify factors as their top three functions of their FGCS programs that drive their institutional decisions. Some of the findings showed the following:

- 87 percent listed *retention efforts*;
- 65 percent listed *completion* and *degree attainment* as a factor;
- 60 percent listed *academic performance*;
- 59 percent listed *sense of belonging*;
- Only six percent listed career outcomes in their top three factors (Wesaw et al., 2018, p. 53).

However, 61 percent of these same institutions cited that they have *career guidance* and *mentoring* embedded in their FGCS programs (Wesaw et al., 2018). Although retention, persistence, and graduation are essential to measuring an institution's success, career education and job placement are integral parts of the college experience for FGCS (Pratt et al., 2019). An emphasis on career education can address potential incongruence with student expectations and better prepare FGCS for the careers that they aspire to be. Also, to assist institutions in preparing for these career aspirations, institutions can approach this expectation by meeting students' needs. One method is adjusting institutional

approaches from ensuring that students are ready for college to become a "*student ready campus"* (Wesaw et al., 2018).

Understanding First-Generation College Students (FGCS)

Defining Who is FGCS. It is necessary first to define what *first-generation* means. The definition of FGCS has varied based on region, programmatic requirements, and individual perceptions of students. For the sake of this study, the definition of a first-generation student is congruent with the definition that the United States Department of Education sets:

> (a) An individual both of whose parents did not complete a baccalaureate degree; or (b) in the case of any individual who regularly resided with and received support from only one parent, an individual whose only such parent did not complete a baccalaureate degree (Higher Education Act of 1965, 2008, p. 9).

This definition of FGCS is also the one that is used by the Council for Opportunity in Education or COE. COE is a primary supporter and advocacy organization for *access* programs such as federally funded TRIO Programs. Wesaw et al., (2018) mirrors this definition defining FGCS as those parents *have not earned a four-year college degree*. This definition does not disregard individuals who have guardians who have earned two-year or technical degrees. However, it acknowledges the differences in four-year college experience and speaks to the pathways that exist beyond the bachelor's degree. The selected definition is identified to both focus and ground this study with the most prevalent literature and align the study with national descriptors of being both first-generation and low-income (Quinn et al., 2019).

Intersectionality of Identities Among FGCS.

It is also essential to reiterate that FGCS as a population is *not monolithic*. The variety of circumstances and life experiences that they possess offers a breadth of diversity that cannot always be narrowly addressed by general practice (Ward et al., 2012). FGCS are viewed as a broad population that branches off into several *subpopulations*. In the literature, these subpopulations of FGCS range from rural White American, urban, Black, Latinx, first-generation American citizens. Many of these subpopulations also bear the moniker of being labeled as low-income based on federal standards that align with federal financial aid (Jehangir et al., 2014; DeFreitas & Rinn, 2013). According to Wesaw et al. (2018), in many cases, these students are "First-gen Plus" concerning the intersectionality that exists among each of them.

Data collected from the American Community Survey showed that in 2016, the following percentage of racial and ethnic subpopulations had the potential to be FGCS based on academic profile and income (Pell Institute, 2019).

- 82 percent of Hispanic children;
- 81 percent of Pacific Islander children;
- 80 percent of American Indian/Alaska Native children;
- 76 percent of Black children;
- 62 percent of children of "Some Other Race;"
- 56 percent of children of "Two or More Races." (Pell Institute, 2019, p. 22).

These data add breath and some level of understanding of the idea of being First-gen Plus. It is also appropriate to recognize that the intersection that exists among FGCS is

not only limited to income, race, ethnicity, and gender. Wesaw et al. (2018) mention how these identities can have various layers and not disregard sexuality and gender, such as being FGCS and LGBTQ. It is essential to recognize that regardless of the intersection that being FGCS is an identity that should be lost or disregarded based on the various levels of identification that the student possesses (Wesaw et al., 2018).

The Intersection of Being Low-income and FGCS. Although race and ethnicity are most common when discussing educational access, it is essential to consider the role that income plays in FGCS matriculation throughout college. It is important to reiterate that all FGCS are *not* low-income. This subset of this population is the focus of this action-based study Bourdieu's (1977) notion of *cultural capital* should be viewed comprehensively and must consider income disparities. Many FGCS whose household income falls within the poverty level are responsible for managing "school, work, family, household, and other responsibilities" (Quinn et al., 2019, p. 55).

The pressure that these students face can stem from competing responsibilities and a host of external expectations. Being the first in the family to go to college can carry the perception that they are closer to success and wealth (Ward et al., 2012). Bourdieu's (1990) notion of *habitus* and *class-based* distinctions can also be a trap for students who feel that their options are limited based upon limited exposure. These perceptions can lead to the negative pressures that can cause undue stress triggered by a need to be perfect and not make mistakes. Compounded with assimilating to college culture, these factors, if not addressed or coached early, can cause a downward spiral for students who take on this complex (Cornell & Hartmann, 2007).

The Intersection of Being Black and FGCS. Although studies on FGCS Black identity are limited, Liversage, Naudé, and Botha (2018) completed research on being FGCS in Africa and their transition into college. This research was a qualitative and descriptive study of FGCS at a South African University, analyzing reflection on their perceptions on college preparedness, academic challenges, and social transitions (Liversage et al., 2018). While using purposive sampling, students were identified and used Chickering and Reisser's (1993) Seven vectors of identity development to assist in the thematic analysis of the student reflections. The data from this study particularly responds to the Chickering and Reisser's (1993) Vector 6: *Developing purpose* has a direct correlation with "unclear vocational goals" (Liversage et al., 2018, p. 65). Students in this study indicated a perceived push to be independent that led to their persistence to get jobs that would offer financial security for them and their families (Liversage et al., 2018).

Liversage et al. (2018) also found further connections to Chickering and Reisser's (1993) Vector 4: *Developing mature interpersonal relationships*. Student responses that emerged from this vector and affirm families' value in FGCS academic and career decisions. Although this study is not about Black FGCS in the United States, its theoretical grounding validates the unique experience of being both FGCS and Black.

The Intersection of Being Latinx and FGCS. One of the ethnic populations that are increasing in the literature base is the Latinx population. One must first address the use of the term Latinx (pronounced: La-teen-x) versus the use of Latino or Latina. Gender inclusivity grows to include more than males and females and includes non-binary and non-gender-conforming individuals. The term Latinx serves as an inclusive

moniker to capture and not alienate FGCS, who share the intersection of being both of Latin descent and non-conforming.

College *continuation* rates for Hispanic students in 2017 increased to 71 percent, percentage-wise this is equivalent to their White peers who are at the same number (Pell Institute, 2019). As these students navigate the landscape of American higher education, the processes and nuances may be challenging for them to move through. Longwell-Grice et al. (2016) share that students feel that in college, there are "unwritten rules of a culture, and it takes a while to really adapt to them" (p. 37). These rules allude to the *hidden curriculum* that exists as students encounter barriers that may impede their success in college (Wesaw et al., 2018).

According to the Pell Institute (2019), 33 percent of Latino families have what is described as *negative wealth* or owing more than what is owed. These financial challenges, paired with not feeling a cultural fit, can further distance Latinx students as they are unable to find a social home (Pell Institute, 2019; Longwell-Grice et al., 2016). Latinx FGCS are unique because they are rising in number (Pell Institute, 2019). The complexities of the income, social, and cultural gap must be considered in providing supportive environments for their academic and career success (Pratt et al., 2019).

External Factors of Influence for FGCS

To further understand FGCS, it is necessary to uncover assumptions and characteristics surrounding factors such as finances and family. These factors are regarded as some of the key *influencers* of FGCS as they seek to matriculate through college and attain employment (Covarrubias, Romero, & Trivelli, 2015). An overview of

these factors aligns the study with trends that validate the qualitative findings that are captured by FGCS, who participated in this research.

Finances. According to a study done by Redford & Hoyer (2017), 50 percent of FGCS come from households' earnings of between $20,001 and $50,000. Regardless of the sample size, these data are significant as it aligns with literature that often associates FGCS with being of low-income status. With an average rate of students borrowing up to $30,000 in student loans in 2016, finances continue to be a growing concern among students (Pell Institute, 2019). FGCS, whose estimated family income or EFC may be at zero in some cases, are consistently in the cycle of borrowing federal and private loans to pay for their education. The increase in cost of higher education has been concerning for several decades as it affects *equity,* and the access gap continues to widen (Pell Institute, 2019).

> If the ladder of educational opportunity rises high at the doors of some youth and scarcely rises at the doors of others, while at the same time formal education is made a prerequisite to occupational and social advance, then education may become the means, not of eliminating race and *class distinctions*, but of deepening and solidifying them. (U.S. President's Commission on Higher Education, 1947. p. 36.)

This statement posed by President Truman's administration illuminates the financial challenge and the disparity that crosses socio-economic class, race, and gender. Hughey et al. (2009) mention how these financial implications manifest as students such as FGCS can make decisions about their education in a *vacuum* that only looks at how does a decision like out-of-state internships or study abroad increases the cost of college. The

Association of American Colleges & Universities or AAC&U acknowledges that opportunities such as *internships* and *study abroad* are as high-impact practices meaning that the benefit for students is increased satisfaction in their college experiences along with increased opportunities and competitiveness among future employers (Demetriou, Meece, Eaker-Rich, & Powell, 2017). As the cost of tuition costs increase, students have become more debt adverse; this puts low-income FGCS at a disadvantage as they may not partake in these opportunities to advance their appeal in the job market.

As this aligns with Maslow's (1943) hierarchy of needs, finances, and employment are factors that fall in line with the *safety* level of the hierarchy. The risk associated with spending more money can result in a cost-benefit analysis among students leading them to assess the *immediate benefits*. If the costs appear to be too much of a risk, this can cause the students to not partake in the educational experiences regardless of the future impact that college may have (Pratt et al., 2019). This shortsightedness is not up for judgment as the lived experiences and circumstances of FGCS may add logic and deeper context to the decisions made by this population (Covarrubias et al., 2015). This study aspires to capture these *lived experiences* and find connections to trends that are identified in the current body of research (Merriam & Tidsdell, 2016).

As this matter is unpacked, it is of relevance to align this notion of finances as it pertains to both costs of education and perceived financial gain upon completion of college. To this point, it is careless not to recognize the challenges faced by FGCS as this becomes a matter of *survival*. As Gibbons et al. (2017) explored FGCS influences their college education, students stated that they felt that money served as an essential

motivator to pursue their dreams of both college and career. Thus, making collegiate and career success in the minds of FGCS can be the golden ticket to aid those who may be depending on them. In some instances, they may carry the burden of succeeding not only for themselves but for their *families* and *communities* (Ward et al., 2012).

Family. In recognizing the vast level of factors that influence FGCS, one cannot ignore the impact that family has on this population. Parents and guardians often serve as a support system for college students, that being social, emotional, and financial (Pratt et al., 2019). This lack of support may or may not be the case for FGCS; they can be ridiculed for leaving home as they can be perceived as trying to become superior to their family and peers. The counter view is that they are supported so much so that they are hailed as the one who has made it and bears the pressures of having to *succeed.* This view can lead to significant *stress* as the students can acquire a perfectionist complex that impedes their intrinsic motivation as the extrinsic becomes more important (Gibbons et al., 2017). Covarrubias et al. (2015) speak to these stressors of FGCS's feeling as if they have left their families behind and how that is compounded with the idea of *achievement guilt*.

In that vein, both finances and family are the *double-edge swords* that can positively or negatively influence FGCS decisions while in college (Gibbons et al., 2017). This action-based study is reliant upon qualitative data from these viewpoints of FGCS to capture the *narrative* and *rich descriptions* from those who directly experience both the triumphs and challenges that influence their future aspirations (Herr & Anderson, 2015). In this study, it was imperative to further align the research with relevant and theoretical foundations to substantiate the FGCS experience. The theories

identified to support this study were intentionally selected as they have been used in previous studies that have examined similar phenomena with this population.

Academic and Career Perceptions of FGCS

As FGCS seeks to achieve the success promised to them in secondary education, it is essential to this study to understand their unique and collective perspectives (Murray, 2017). As FGCS strives to compete with their continuing college peers, these students must navigate college with a different set of pressures and circumstances that affect their outlook on post-secondary education (Manzoni and Streib, 2018). This section pulls from the literature and foundational theories to show how FGCS see themselves as they navigate four-year colleges' academic rigor and their outlook on their capabilities and qualifications for post-secondary goals in the workforce.

FGCS Perceptions of Academic Achievement. Per the theoretical framework, a vital component of this study is discovering how and when students move toward *self-efficacy*. Self-efficacy, as coined by Bandura's (1977) as the perception and intrinsic value of knowing that one can achieve the desired goal, whether that goal is academic or professional. Throughout the literature, self-efficacy is an essential component of FGCS confidence as they matriculate through college (Ward et al., 2013). Congruent to this notion of self-efficacy is what DeFreitas and Rinn (2013) refer to as academic self-concept. Academic thriving can be aligned with academic self-concept and measured on a scale that outlines achievement in math, verbal, general, academic, and problem solving (DeFreitas & Rinn, 2013; Schreiner et al, 2020). If adequately supported, FGCS can have a higher sense of efficacy and self-concept, more so than their continuing college peers (Redford & Hoyer, 2019; Pratt et al., 2019).

Like self-concept, self-efficacy is a non-cognitive factor that must be fostered by faculty and staff for FGCS who have a higher risk of transitioning throughout college. Negative outlooks and dispositions can exist among FGCS as they are navigating collegiate culture with varied familial and social support (Demetriou et al., 2017). Schreiner et al. (2020) speak to a similar factor known as Positive Perspectives that encompasses students' outlooks and projection of success while *proactively coping* with the realities and challenges that they face.

FGCS Perceptions of Career Attainment. As an understanding of FGCS increases based on the factors as mentioned above that are inclusive of identity and economic status, the common goals remain constant, and that is the achievement of earning a degree that will increase the likelihood of gainful employment or post-secondary study in graduate and professional programs (Manzoni & Streib, 2018). The perceptions of the bachelor's degree as an *equalizing factor* in establishing a career are viable as the year 2020, at least 65 percent of jobs will require individuals to have a four-year degree to be considered for employment (Carnevale, Smith, & Strohl, 2013). As the workforce's expectations and demands continue to grow, so must the students who are seeking to be a part of this advancing economy (Maietta, 2016). Students, particularly FGCS, must meet these economic expectations with the perceived challenges of limited *cultural capital* and lack of financial support (Wesaw et al., 2018).

Assisting FGCS in becoming employable extends beyond the identification of these factors. It also encompasses combating *deficit-based thinking* and building that self-efficacy contributes to student success, intrinsic motivation, and finding purpose in the collegiate academic setting (Demetriou et al., 2017). Career pathways and major options

have the potential to be communicated in a manner that sticks with FGCS. Prior circumstances and exposure can influence FGCS perceptions and post-secondary ambitions. A common challenge is selecting a major or career solely based on the amount of money students think they will earn. This idea can be true for low-income FGCS as they aspire to have higher wages greater than what they may have had growing up.

Relevant Research

To highlight research that explores similar outcomes of career exploration is Gibbons et al. (2016) research on FGCS. This study utilized focus groups of 15 Pell-eligible FGCS to gather their feedback on their adjustment to college, navigation of barriers, use support systems, and perceptions of college preparation (Gibbons et al., 2016). This study also cites Lent and Brown's (1996) research on Social Cognitive Career Theory or SCCT to ground the study in the foundational theory. These findings proved that SCCT is a viable framework for understanding the career development process among diverse student populations. The research also further confirmed that both finances and family factors into college-going decisions (Gibbons et al., 2016).

Manzoni and Streib's (2018) study also provided longitudinal quantitative data to examine wage gaps and post-secondary achievement among FGCS compared to college-going peers. This study offers data pertinent to earnings and student perceptions of college being an equalizing factor. This research concluded that the perceived gaps in achievement and income by their first-generation status were minimal, in some cases only between four and seven percent (Manzoni & Streib, 2018). This minimal variance applied when FGCS shared comparable educational credentials, experiences, and individual characteristics (Manzoni & Streib, 2018). Although this study emphasized

post-college outcomes, its use and mentions of Bourdieu's (1977) work on *social capital* align with this dissertation's research focus on low-income FGCS.

Similar studies have been conducted to identify career barriers and influences among low-income FGCS by analyzing career self-efficacy. Pulliam, Ieva, and Burlew (2017) and Kezar, Hypolite, and Kitchen's (2020) studies utilized the CDSE-SF instrument to capture and analyze data on the career self-efficacy of low-income FGCS. These data were used to inform and validate interventions to aid in career choice. Although these studies targeted low-income FGCS and tout the necessity of career self-efficacy, they do not focus on TRIO Programs or the students that are enrolled in these programs. However, these studies are congruent with this action research study as they all seek to add to a limited literature base to improve services and explore the career development needs of this marginalized population (Pulliam et al., 2017; Kezar et al. 2020).

Summary

As higher education continues to become more vast and diverse, so should its support of those who aspire to benefit from its services. Research on FGCS adds to the diverse body of literature on underrepresented student populations. Like their continuing college peers, FGCS aspire to earn a degree that will lead to gainful and fulfilling employment (Redford & Hoyer, 2017). Only if the expectations, obstacles, and supports are appropriately accounted for and used as data to insight change will there be an environment that meets the unique needs of FGCS. Through this qualitative study, the *essence*, voice, and aspirations are used to guide and substantiate TRIO Programs as an

effective intervention to foster increased self-efficacy and a clearer understanding of career paths (Herr & Anderson, 2015; Hughey et al., 2009).

Chapter Three of this action-based research will provide a thorough examination of the research design, methodology, researcher positionality, research questions, and ethical practices of the research process. Chapter Four of this study will uncover the findings of the data that is collected. Chapter Five will debrief the findings, discuss implications for further practice, and outline future research recommendations.

CHAPTER THREE

RESEARCH METHODOLOGY

Within higher education, underrepresented populations of students will continue to increase. According to a 2019 report from The Pell Institute for the Study of Opportunity in Higher Education, the percentage of "students with the potential to be first-generation college students" sits at 60% across all races (p. 22). Data also shows that first-generation students comprise about a third of all students in higher education, but only 27 percent will earn a degree within four years. This lag in degree completion among FGCS versus their continuing generation peers poses a call-to-action among higher education professionals to support efforts for a timely graduation and career attainment (Whitley, Benson & Wesaw, 2018). Recognizing that this population can endure various social and cultural challenges while navigating the college atmosphere, this study was initiated to investigate the influences and efficacy of FGCS further.

As the phenomenon of student enrollment continues among FGCS, there must be appropriate levels of support to ensure these students are successful and aware of their opportunities in and beyond higher education. Using Bandura's (1977) theory of self-efficacy and Lent et al.'s Social Cognitive Career Theory as the theoretical framework, this study explored the culture and constructs that influence first-generation college students' career and academic major decision-making process. Self-efficacy has a vital role in monitoring and assessing growth in *fearful* and *avoidant behaviors* (Bandura, 1977). Therefore, this framework serves as the bedrock of this action research study.

Problem of Practice

This action research study's problem of practice is understanding the academic major and career choices of low-income first-generation college students or FGCS. According to the literature base, FGCS tend to have heightened pressures to succeed based on managing multiples life responsibilities while navigating college expectations (Pratt, Harwood, Cavazos & Ditzfield, 2019). External influences may manifest in delaying the selection of academic majors, not seeking faculty assistance, and minimal to no co-curricular engagement (DeFreitas & Anne Rinn, 2013). As FGCS manage these responsibilities compounded with not seeking help, increased attrition, and drop-out rates can become an unfortunate outcome (Pratt et al., 2019).

Research Questions

Research Question: How does the TRIO Student Support Services Program's career development component equip students to better understand their skills and abilities related to their potential career?

- Sub-question 1: How well does the TRIO Student Support Services Program take into account the cultural and social factors when providing advisement and career counseling?
- Sub-question 2: Is there any difference in outcomes based on race and ethnicity?

Purpose of the Study

The purpose of this study is to examine the perspectives of FGCS enrolled in a TRIO Program to gauge their sense of self-efficacy and the impact that being a TRIO Program had on their major and career paths. Through the collection of data from a vetted

instrument, semi-structured interviews and a focus group FGCS provide additional context on their levels of self-efficacy along with the support systems and challenges that they encounter.

The literature explains many of the common factors that contribute to challenges that FGCS face, familial, financial, and social (Manzoni & Streib, 2018; Pratt et al., 2019). Bandura's (1977) work of *self-efficacy* specifically the use of Social Cognitive Career Theory (SCCT) as the theoretical framework of this study to further understand FGCS decision-making and perceptions. As action research grounds this study, the objective is the gain insight from FGCS to acknowledge the commonality and individuality of their lived experiences as insiders and participants in this study (Herr & Anderson, 2015).

Action Research Design

The rationale for action research design is rooted in utilizing the identified population's expertise engaging in an interrogation of themselves to inform change in a respective area (Herr & Anderson, 2015). Using the context provided by the participants, the action researcher plays the role of a facilitator uncovering knowledge through a participatory process (Levin & Greenwood, 2017). The action research method aligns perfectly to better understand this phenomenon of decision-making and efficacy among first-generation college students.

This study utilized a mixed-methods research design. Schuh, Upcraft & Assoc. (2001) attest to the pros and cons of both quantitative and qualitative methods but acknowledge that they are not mutually exclusive and can be used effectively in the same study. Selecting a mixed-methods methodology provided depth and further context on the

experiences and perspectives of FGCS. This approach was chosen to find connections or lack of congruence among participants' thoughts and expectations of academic majors and careers through *thematic analysis*. Miles and Huberman (1994) affirmed that qualitative research seeks to capture data from the *insiders* through a "process of deep attentiveness, and *empathetic understanding*" (p. 8).

Career decision making is a multi-layered process and must account for many variables to have a more in-depth knowledge of the population, including their strengths and obstacles. This study sought to capture elements of the FGCS student experience from their introduction to college as an option to their admission, transition, and graduation from college. This research methodology allowed FGCS participants to draw upon connections to prior experiences, both cultural and familial, that influence how they approach college and career choices.

Setting of Research Site

The setting and research site for this study is a large-comprehensive research institution in the southeastern United States. Per the institution's Integrated Postsecondary Education Data System (IPEDS) data, the University holds an undergraduate enrollment of over 27,000 students as of fall 2019. Some critical data regarding the composition of race includes Whites are roughly 20,400, Black or African American are about 2,200, Hispanic are around 1,300, and Asian are little over 900. Gender breakdown of the institution is forty-four percent male and fifty-one percent female among undergraduates.

The institutional setting also has a track record of providing access to students of marginalized groups through various access grants and additional programs that provide

targeted major-specific support for first-generation students in business and education. The research institution has also held recognitions such as being a First-Forward institution through the Center for First-generation Student Success. This is a recognition awarded to colleges who exemplify a commitment to the success first-generation students (Center for First-generation Student Success, n.d.). The setting of the research interactions and evaluations were completely virtual. This was due to the global pandemic and assured a safe and distanced interactions with the participants of the study.

Among the participants are students who are enrolled in the 2020 cohort of the TRIO Student Support Services (SSS) program at the identified institution. This cohort consisted of 155 students. A sample of these students were identified as participants.

Table 3.1 *Demographic Data of TRIO – SSS Participants*

Demographic Data for TRIO SSS Participant Sample	
Gender	Male – 37%
	Female 63%
Race	African American/Black – 34%
	White – 34%
	Hispanic/Latinx – 10%
	Asian – 10%
	Two or more races – 6%

The TRIO – SSS Program at this institution has an average first to second year retention rate of 89 percent, this is in line with the institutional rate that sits around 89

percent. The 2014 cohort of the TRIO – SSS students also has a six-year graduation of 80%. These data are a result of the student capabilities and the wrap-around approach of support that SSS programs provide for the students that they serve.

Participants

Nearly 18% of the student population at the University are FGCS. For this study, the sampling of these participants consists of students enrolled in a federally funded TRIO Student Support Services (SSS) Program. This program is designed explicitly for instate first-generation college students who are accepted into the program. Students in this program receive dedicated support in the form of advising and various engagement opportunities. Annually this program admits roughly 120 first-year students each year. Using the Student Support Services program as the primary source for my sample ensured accuracy, consistency, and reliability. The first-generation designation has been defined as neither parent having earned a four-year degree. However, low-income is determined by the students' household earned family income (EFC) as denoted on the students' Free Application for Financial Student Aid (FAFSA) submission. Identification of first-generation students can be a challenge among colleges and universities as the data is self-reported and not always readily available.

The sample that was used for this research study was a random sample out of 50 TRIO – SSS students. The following table provides a breakdown of those that participated in the pre and posttest based on gender, race/ethnicity, and age. Data in this table are listed by category, raw number, and percentage.

Table 3.2 *Demographic Statistics of Pretest & Post Test*

Gender		
	Pre and Posttest Demographics	
Man	3	27.27%
Woman	8	72.7%
Race/Ethnicity		
Asian	-	-
Black	7	63.63%
Hispanic/Latinx	1	9.09%
White	3	27.27%
Age **Participants provided numeric values*		
18 years	3	27.27%
19 years old	8	72.72%

To collect qualitative data on the experiences, choices, and behaviors of FGCS, a more focused group of four students were identified for individual interviews and a focus group. Only students who completed both the pre and posttest were eligible to participate in interviews and focus group. This group's composition was diverse in race, gender, and classification; these students were also enrolled in the TRIO - SSS program. Students

enrolled in this program are confirmed as first-generation students, as indicated on their FAFSA and admissions applications.

These students are all a part of the TRIO – SSS program based on being in-state residents of low-socioeconomic standing provides shows commonality among these students. This portion of their identity must be acknowledged within the sample. Intersectionality of this population, including factors such as familial culture, values, race, and ethnicity, can all contribute to the students' navigation of college. The goal is that the groups will consist of a diverse sample of current FGCS at a four-year institution. This diversity is reflected in demographics such as race, gender, and academic classification. Below are the descriptions of the four student participants who were involved in the interview and focus group portion of the study.

***Sam*.** Identifies as a Black man and is a biology, pre-medicine track student. In addition to being FGCS Sam is also first-generation American as his parents immigrated to the United States from Jamaica. He values the support of his family and has a goal of becoming a cardiovascular surgeon.

***America*.** Identifies as woman and is a political science major. America is a Latinx, she is the daughter of Mexican immigrants. A self-described go-getter America has a passion for understanding policy, history, and debate with this passion she aspires to earn a work in higher education as a professor teaching political science.

***Monica*.** Identifies as a woman and is a broadcast journalism major. As a Black woman she seeks to elevate the representation of women of color in the entertainment industry. She hopes to use social media to develop her brand and become a TV or radio host.

***Misty*.** Identifies as a Black woman and is on the biology pre-medicine track. She values positivity and uplifting images of Black women in the healthcare field. Misty has a strong interest in neuroscience and degenerative diseases and plans to pursue her M.D. and specialize in one of those areas of interest.

Procedure

The research process for this study consisted of four parts. The first was the CDSE-SF being administered to the students enrolled in the TRIO – SSS program. The second part of the process included in-depth one-on-one interviews with four participants. The third part of the process included a posttest of the CDSE-SF to gauge student perceptions after taking part in the study and post-intervention. The study concludes with a focus group to reflect and identify progress areas.

Table 3.3 *Action Research Process*

Phases	**Associated Actions**
1 Pretest	Administration of the CDSE-SF to sample of students in TRIO-SSS Program.
2 Semi-structured Interviews	One-on-one interviews with select participants who participated in the pretest. Questions were asked to uncover additional themes that support career self-efficacy.
3 Posttest	Final administration of the CDSE-SF to the same sample of students.

4 Focus group	Participants who participated in the interviews and pre and posttest to identify themes were collectively interviewed to assess their career self-efficacy.

Research Methods

Data Collection Instruments. Methods to collect data for this study included a pretest of the CDSE-SF, individual interviews, a posttest of the CDSE-SF, and a focus group. The timeline of the data collection and synthesis of data was eight-weeks. Pseudonyms were assigned to each participant involved in this study to ensure anonymity. Also, participants offered their consent to have their conversations recorded both digitally and in writing for confidentiality and ethical compliance.

(Pre and Post) Self-Efficacy Survey. The survey that was disseminated among the participants was the Career Decision Self-Efficacy Scale or CDSE. This short-form version of this instrument, known as the CDSE-SF, was administered online to the current TRIO students who were second-semester first-year students (See Appendix D). This instrument is proven to assess career self-efficacy; the short form version used for the evaluation of FGCS used 25 questions measured on a five-point continuum that equates to a five-point mean.

This version of the survey also contained questions to collect necessary demographic information. Sensitivity to the arrangement and wording of the demographic questions was a priority to be inclusive of the participants involved in the

study (Schuh et al., 2001). The posttest distribution of the CDSE-SF took place after the next step, which is the semi-structured interviews.

The CDSE-SF measures career self-efficacy via the five sub-scales outlined by the instrument; each sub-scale is representative of the domain-specific nature of self-efficacy. These five sub-scales include (1) self-appraisal, (2) occupational information, (3) goal selection, (4) planning, and (5) problem-solving (Betz & Taylor, 2012). Participant performance in the sub-scales was used to frame areas of avoidance and strength among participants in the five sub-scales. These data then exposed areas that required additional inquiry through the semi-structured interviews and the focus group.

Semi-Structured Interviews. The interviews were semi-structured conversations with a sample of four students from the survey sample. These sessions were comprised of four TRIO - SSS students. They provided the opportunity to gather in-depth information about the students' perceptions of familial and institutional support, along with socio-cultural factors and background. Special attention was taken during the moderation and facilitation of questions, as defined by Schuh et al. (2001). These sessions were conducted virtually and recorded via Zoom web conferencing software with auto-transcription enabled. Below are the interview questions and prompts.

- Tell me about yourself and what led you to college?
- What is your major?
- What inspired you to select your major and why?
- What career do you aspire to have with your respective major?
- What are the next steps you need to take to achieve your career goals?

- How confident are you in achieving these goals, and why? Not confident/ Confident/Very confident
- How has the SSS - TRIO program assisted you in your major exploration process?
- What other support systems have been beneficial to you in your major/career process and why?

Focus Group. The focus group consisted of the same four TRIO-SSS students who were involved in the interview. This focus session was centered around triangulating the data collected from the posttest. This session was facilitated via Zoom video conferencing software with auto-transcription enabled. Below are the focus group questions and prompts.

- Since we last spoke, have there been any changes in your career goals?
- What programs or efforts have you participated in this semester that have supported you career goals and decisions?
- What challenges have you encountered while pursuing your career goals? How have you navigated those challenges?
- What has SSS/TRIO provided you all with to support your career ambitions?
- How has your background (race, income, gender, or upbringing) influenced your career choices?
- What additional supports are missing from the SSS program that could support you in your career decisions? If not, from SSS what is missing from the institution?

These methods are centered on *consultation* and *colearning* (Herr & Anderson, 2015). Reliance upon the knowledge of the participants was essential to ensure that data was of quality and accuracy. A sample of students from the survey group was selected to offer their insights on perceptions and abilities to succeed in their respective fields of study. These students participated in all parts of the research study to ensure the validity of the study.

Sampling

Population sampling is deemed an essential practice to provide focus and information-rich data for a study (Schuh et al., 2001; Morse, 1994). This sampling distribution took into consideration the various nuances of gender, race, and other political and social factors among the population being studied. According to Schuh et al. (2001), a study can become doomed without a proper sampling of a population regardless of how intentional and developed the methodology may be.

Purposive sampling. A sampling method to extract themes from this group who share a collective identity, *purposive sampling* was used to collect these data (Schuh et al., 2001). This process invited *perceptions* of those from the group who were well informed about their collective and individual challenges (Schuh et al., 2001).

Intervention

TRIO Programs have historically provided targeted support for FGCS based on the prerequisite of being both first-generation and low-income. SSS programs are required to offer tutoring, academic advising, and career support. Another significant component is the integration of literacy on managing finances; this is not limited to navigating the federal financial aid processes, scholarships, and post-graduation planning

(U.S. Department of Education, n.d.). The SSS program at the respective institution provides pipelines for participating FGCS to gain exposure to opportunities such as graduate school programs and study abroad through cross-campus collaborations.

In this case, the intervention is the active participation in a TRIO - SSS program and the impact on career decisions and self-efficacy. Embedded within all SSS programs are requirements to ensure that career readiness programming and support are offered to support their students. These requirements can include participation in career workshops, access to career inventories, and one-on-one development with the career center.

Through making connections with career services departments, engaging in career and personality assessments, a targeted and appropriate reflection of goals and ambitions, students were either affirmed or encouraged to pursue development in the areas of *self-efficacy*, *self-esteem*, and *self-confidence*. These three areas are regarded as essential links to employability among students (Dacre Poole & Sewell, 2007). Measuring self-efficacy is the outcome of interest as it is the most theoretically sound. Active participation in TRIO Programs aligns with the National Association of Colleges and Employers (NACE) core competencies, specifically career management competency.

> *Career Management*: Identify and articulate one's skills, strengths, knowledge, and experiences relevant to the position desired and career goals and identify areas necessary for professional growth. The individual is able to navigate and explore job options, understands and can take the steps necessary to pursue opportunities, and understands how to self-advocate for opportunities in the workplace. (National Association of Colleges and Employers, 2014)

Upon the collection of these data and information from participants, the goal is to offer suggestions to change and advance practices that directly affect them. The intervention will assist educators and provide recommendations to challenge their pedagogy and support strategies for FGCS. The following areas were anticipated to inform future practices as emergent themes and opportunities to integrate the action-oriented change.

- *Recommended curriculum and resources.* These resources can be used in courses such as first-year seminars and other courses that provide scaffolded methods to walk students through the career exploration process.
- *Examples of appropriate language and approaches.* Strategies to use in one-on-one and in group settings to question, empower, and understand student FGCS rationale for their major and career decisions.
- *Listings of influential factors.* Factors such as sociocultural factors, economic gain, and imposter syndrome may negatively and positively impact FGCS decisions. Unpacking how FGCS manages these challenges can uncover the pros and cons of interactions with faculty and staff in higher education.

Data Analysis

The study's data collection involved a four-part process in collecting data on FGCS. Per action research standards, the consistent evaluation of stakeholders' emergent analyses informs future actions (Levin & Greenwood, 2017). Below are the processes and steps taken to ensure the accuracy and validity of the instruments and practices used to analyze the data.

(Pre and Post) Self-Efficacy Survey. The results from the CDSE-SF will serve as a pre and posttest of the participants providing demographic and quantitative data on

their self-efficacy. To ensure accuracy, the instrument's data from the instrument was calculated via the instrument's analytics feature to show the means in the sub-scales. To capture additional data, Microsoft Excel formulas were used to calculate the means and standard deviation of the responses. The five sub-scales were then used to inform the interviews and focus group, further triangulating the data.

Semi-structured Interview Sessions. These interviews were conducted with four TRIO students and provided a more in-depth qualitative analysis to uncover additional themes and rationale for students' major and career choices. Pre-selected and targeted open-ended questions based on pre-survey data will guide the dialogue of the participants. Digital recordings and transcription allowed for these data to be captured accurately.

Focus Group. The focus group session consisted of the four student participants of the TRIO - SSS program that were previously interviewed. The session was centered around the triangulation of the data from the posttest with the qualitative data from the sessions. A deeper thematic analysis took place to capture areas of progress and areas needing improvement. The focus group was also recorded and transcribed to ensure accurate accounts and data capture.

The analysis of these data proved vital in the research process to increase the understanding of the identified population. As the study was completed, essential practices were instituted to ensure accuracy and streamline data collection in this study. Quantitative metrics were generated via the CDSE-SF instrument's analytics feature to identify gaps and trends in participants' mean scores. Common to qualitative inquiry, a data-analysis process was determined to collect data and themes and organize

information (Herr & Anderson, 2015). Deductive analysis aided in the triangulation of data to collect themes that emerged in high frequency from the recorded interviews and focus group transcriptions.

Reflection of Data with Participants

As defined among action researchers, the process of reflection is based on the planning of next steps and actions via the *succession of cycles* (Kemmis et al., 2014). This acknowledgment assures that the process is consistently reliant upon the participants to help develop and inform the *action*. FGCS participants influenced each part of the research process, and they were also provided the option to receive their scores from the CDSE-SF instrument if they desired them. The cyclical nature of the analysis that was inclusive of the participants' feedback was the thematic synthesis of the survey data. These data informed the reflective questions asked during the interviews, and the data from the interviews were used to inform the closing focus group. More analysis was done from those sessions to extract areas of future research.

Conclusion

In conclusion, this research's findings offer another lens to view FGCS by uplifting their unique stories and perspectives. Additional data on this population encourages educators to see the breadth and scope of their diverse circumstances that inform their attitudes and choices. By understanding their academic and career aspirations, higher education professionals will offer targeted support to meet their needs.

Findings from the data provided from this mixed-methods action research study are further outlined subsequent in Chapter Four. Chapter Four will highlight the results

from all three collection processes. This dissertation concludes with Chapter Five that serves as an overview of future research.

CHAPTER FOUR

FINDINGS

This study's purpose was to examine the impact that TRIO Programs have on self-efficacy factors in the career and major selection of low-income first-generation college students (FGCS). The presentation of these findings begins with the analysis of the Career Decision Self-Efficacy Scale Short Form (CDSE-SF). This instrument provides data organized in five sub-scales outlined by this instrument, including (1) self-appraisal, (2) occupational information, (3) goal selection, (4) planning, and (5) problem-solving (Betz & Taylor, 2012). Identifying peaks and valleys in these areas will prioritize intervention strategies that support current services and identify those that need to be refined for FGCS in their career exploration process.

The use of the CDSE-SF and finding alignment with the categories will ground the study's outcomes in the theoretical framework of self-efficacy and add to the limited research on this population's career self-efficacy. According to Pulliam et al. (2017), the use of the CDSE-SF gauges increased self-efficacy and confidence that would predict *approach behaviors*, while low self-efficacy is a predictor of *avoidance behavior*. Thus, having a scale such as the CDSE quantifies self-efficacy. Congruent with SCCT, these behaviors are predictors of outcomes as they are derived from interest, choice, and goals. This analysis was accomplished through a pre and posttest model that measured the progress in the five sub-scales of the CDSE-SF. Further validation of these findings was

couched in interviews and focus groups that provided qualitative data themed to show trends and support the data collected from the CDSE-SF.

The research questions that are addressed are as follows: How does the TRIO Student Support Services Program's career development component equip students to better understand their skills and abilities related to their potential career? Sub-question 1: How well does the TRIO Student Support Services Program take into account the cultural and social factors when providing advisement and career counseling? Sub-question 2: Is there any difference in outcomes based on race and ethnicity?

Findings of Study

In the first step of this research the CDSE-SF was administered to students enrolled in the TRIO SSS program. The CDSE was sent to a random sample of 50 students enrolled in this program during the spring semester. These 50 students were out of 117 students. These were students who were previously enrolled in the first-year seminar course during the fall, and this ensured some level of uniformity in the students' experiences. Out of the 50 identified students invited to participate, the pretest administration of the CDSE-SF yielded a participation rate of 32 percent (N=16). The posttest responses were 22 percent (N=11) of those participants. For consistency, the 11 (22%) participants who participated in the pre and posttest were used to compare the CDSE-SF data.

As self-efficacy is domain-specific the five sub-areas of the CDSE-SF provided a breakdown of perceived levels of efficacy based on the five measurements. The instrument provided means for each participant, both domain scales and total. These data

were further extrapolated by running the standard deviation of domain scales and identifying differences in the respective areas.

Table 4.1 *Pre and Posttest CDSE-SF Means for TRIO-SSS Students*

Scale	Pretest Mean (N=11)	Pretest Standard Deviation	Posttest Mean (N=11)	Pretest Standard Deviation	Difference Between Pre and Post
Self-Appraisal	3.89	0.71	4.11	0.60	.22
Occupational Information	3.84	0.70	4.05	0.62	.21
Goal Selection	4.02	0.74	4.27	0.60	.25
Planning	3.75	0.61	4.16	0.50	.41
Problem Solving	3.80	0.58	3.98	0.79	.18
Total CDSE	3.87	0.60	4.12	0.55	

Note. CDSE-SF scale scores represent average scores and range from 0 (No Confidence) to 5 (Complete Confidence). These equate to 1-5 means scales.

Per the data in the five sub-scales, students showed the highest level of career self-efficacy within the domain scale of *goal selection* with a mean of 4.02 (pretest) and 4.27 (posttest). The second highest was in *planning* with a 4.16 in posttest the third-highest was in *self-appraisal* in the posttest. These data assert that students in the SSS program have a strong sense of their career trajectory and are affirmed in their abilities to succeed in their respective fields. The lowest mean score in the pretest was in *planning* with a 3.75 with a posttest score of 3.98.

Further exploration of these data also showed that the *planning* category saw the highest significance, increasing by 0.41 from pre to posttest. This increase in *planning* ability is further explained through the qualitative narratives as students shared their career pathways and next steps. *Problem solving* saw the smallest increase with 0.18 from pre to posttest; this may be attributed to the fact that these students are still in their first academic year of college and have likely had minimal encounters with career-related obstacles.

Table 4.2a *Pre and Posttest CDSE-SF Means Comparison Data by Race*

CDSE-SF Means Comparison									
CDSE-SF Scales	Self-Appraisal		Difference	Occupational Information		Difference	Goal Selection		Difference
	Pre	Post		Pre	Post		Pre	Post	
Race - Black	4.00	4.31	.31	4.00	4.17	.17	4.29	4.46	.17
Race - White	3.73	3.73	0	3.80	3.80	0	3.67	3.73	.06

Table 4.2b *Pre and Posttest CDSE-SF Means Comparison Data by Race*

CDSE-SF Means Comparison									
CDSE-SF Scales	Planning		Difference	Problem Solving		Difference	Total Score		Difference
	Pre	Post		Pre	Post		Pre	Post	
Race – Black	3.74	4.26	.52	3.77	3.97	.20	3.99	4.23	.24
Race – White	3.80	3.80	0	3.93	3.73	-0.2	3.77	3.77	0

Per the race comparison chart of CDSE-SF scores among the Black FGCS students surveyed, these students demonstrated higher levels of self-efficacy with a 4.23 mean (Black) and 3.77 mean (White). In further analysis of the means comparison White participants experienced a significant decrease of 0.20 in *problem solving* its mean from pre to posttest. These data were interesting as this was the only decrease in mean score among both races of participants. Among White participants who participated in the CDSE-SF minimal increase was seen in goal selection which increased by 0.6. The remaining sub-scales provided static data from the pre and posttest. A point of inquiry is to unpack why *self-appraisal*, *occupational information*, and *planning* saw no increase for this group.

Among Black FGCS participants, the most notable gains were in the *planning* sub-scale, with an increase of 0.52 going from a 3.74 mean to a 4.26 mean. The second

sub-scale with high gains was *self-appraisal* (0.31), and the third is *problem solving* (0.20). *Occupational information* and *goal selection* were tied, both increasing by 0.17. Although these sub-scales saw the smallest increase, they both were still very high as they were over a 4.00 mean in both pre and posttest. Overall, in comparison to other sub-scales, *problem solving* was the least in mean among Black participants, as the overall numbers, this category showed the lowest performance.

To answer research sub-question 2: Is there any difference in outcomes based on race and ethnicity? Data provided in Tables 4.1, 4.2a, and 4.2b overall outline findings and race-specific data for the TRIO – SSS participants. The following summaries share the findings on the quantitative metrics provided by the CDSE-SF instrument.

Pretest Findings

Black FGCS had a higher career self-efficacy with a mean of 3.99 versus the 3.77 of their White peers. Black FGCS scored lower in the *planning* domain with a 3.74 mean versus their White peers who held a 3.80 mean. The *goal selection* domain showed the highest level of difference among White participants, a standard deviation of 1.15 (3.67 mean) compared to the .46 (4.49 mean) among the Black participants. Black FGCS participants saw three domains with means of 4.00 and up, *self-appraisal* (4.00), *occupational information* (4.00), and goal selection (4.29).

Posttest Findings

The data shows a consistent yet significant difference among Black FGCS in their total scores of a 4.23 mean versus the 3.77 of their White peers in the posttest phase. Also, during the pretest. There was a demonstrated increase in *problem solving* among

Black FGCS with a standard deviation of 1.10 (3.97 mean) and .71 (3.97 mean) among the Black participants. During this data collection phase, the domain of *goal selection* continued to show the highest gains among Black FGCS with a mean of 4.46. White participants scored a 3.73 in this domain, and this same mean score was also mirrored in the *appraisal* and *problem-solving* domain scales.

Research sub-question 2: In response to research sub-question one, is there any difference in outcomes based on race and ethnicity? The quantitative data shows that among this group of FGCS there is a difference in levels of career self-efficacy based on race. Black FGCS showed higher levels of overall in both pre and posttest dissemination of the CDSE-SF (as outlined in detail in Tables 4.2a and 4.2b). Black FGCS consistently held higher means in all domains during the posttest.

Table 4.3 *Total CDSE-SF Scores by Race*

CDSE-SF Total Score by Race		
Race	*Pretest*	*Posttest*
Black	3.99	4.23
White	3.77	3.77

In the next phase of the study qualitative themes were captured and analyzed from the semi-structured interviews to add breadth to the quantitative data in this mixed-methods study.

Interview Themes

The second tier of the analysis process included interviews with four TRIO-SSS students who participated in the CDSE-SF assessment pre and posttest. These students were invited to participate in 30 to 40-minute virtual interview sessions and asked eight questions framed to further explore career self-efficacy, support systems, and personal perspectives (See Appendix K for questions). These sessions were facilitated via Zoom, with the auto-generated transcription feature enabled. The data were further reviewed and synced up to clean up inconsistencies due to transcription errors.

The themes were then extracted based on frequency and substance as it related to identified research questions. Triangulating interview notes with the deductive coding process sought to identify additional contextual factors that further illuminated the barriers, cultures, and unique perspectives regarding FGCS experiences in achieving career self-efficacy while in the TRIO – SSS Program. Five themes emerged as a result of this process, please see Figure 4.1.

Figure 4.1. Interview Themes. Figure 4.1 describes the interview themes that emerged during the one-on-one sessions with participants.

Theme 1: TRIO Program support. Support from the TRIO staff came up consistently during the individual sessions and focus groups. This support consists of professional staff and advisers and trained student mentors who are upperclassmen in the SSS program. These students are paired with all first-year SSS students. The perspectives below show the impact that these support systems have on the student participants.

***Subtheme 1.1 TRIO Staff*:** Below are the comments made regarding the support that TRIO professional staff have provided to the SSS students.

> Mr. Cage…he is my advisor and…I just love that we can…get my classes and schedule [done] together. He tells me.. "okay yeah you're on track you're doing a good job let's keep this going." It's a motivating thing…to remind me [and] not to be afraid to reach out if I need help and get those resources. I really [like that] they are very supportive. (Monica)

America echoes the support provided by the TRIO staff along with how it has assisted her in developing connections within her aspired career.

> They are really helpful …I'm glad…they hold us accountable - so they know that we're on the right path to find a career after to college. [In my] career process [SSS] has been awesome, Dr. Callis especially, [he] sends so many emails [where] he offers…many opportunities [to] look over your resume...or try to connect us with…McNair scholars that are in PhD programs. That's how I was able to find that one political science student, and…it really does help a lot, because…they want you to succeed. (America)

Subtheme 1.2: Peer Mentors. SSS students Monica and Sam share how having a peer mentor who identifies with the FGCS circumstances has enriched their college experience.

> She's really helped me out…to get in contact with people who have been in the place that I have been.. So, the classes I'm struggling [in] she's helped to connect me to…her friends who've taken the courses and … [with] the Student Success Center [so] that [I] can go there and get a tutor to get assistance. (Sam)

Monica also shares her feedback on how the SSS mentorship program has positively had an impact on navigating her college experience.

> [I] like [that] you have…a mentor to kind of keep you on track [and SSS has] you…to meet [with] this person every month. They are basically [there to] see how you are mentally and the reason I love it so much is because the person I was paired with…it's kind of like a friendship that we. I feel comfortable [with her] I

> can just…tell her how it's really going and…she gives me tips and if there's a problem…I can talk to [her]. (Monica)

Theme 2: Financial Support. A theme that emerged consistently among all interview participants was the financial assistance provide to students who are enrolled in the program. As TRIO-SSS participants students addressed that the tuition supplement and reduction provided to students enrolled in the program proved to be of significant benefit as the stressors of finances were minimized.

> I remember… when I was looking at tuition [and] …the bill for tuition when I decided to go to [the University] and I was like that's a lot of money. I'll never…be able to do this whole college thing and then, I started getting more scholarships and there was still…a little [money] leftover. [Then]…I was like Okay, I can work to pay that off then … I got on the guarantee [scholarship] in SSS and…this paid off. It …took a lot off my back…that was one thing I didn't have to stress about now [while] in college on top of …getting good grades or joining clubs doing all that I can feel it kind of just helped me to like fully focus on school, rather than having to worry about "Oh, I need to pay this off." (Sam)

Monica shared similar thoughts and how she was grateful for the financial support provided by the TRIO – SSS Program.

> [SSS] really is a good program. [That's] why I'm so… glad that I am a part of this at such a big university because I don't know about …other students but I don't have the money. I don't have the support for a school like this, so they definitely helped me. (Monica)

America offered additional perspective on the impact of the tuition supplement.

> Right now, everything's basically covered and it really does help [being in] SSS with the reduced tuition at least for the…first-year, because like I really do want to get a four year degree. (America)

These perspectives show just how significant the financial supplements provided by the TRIO – SSS Program were for the students. Having to not worry about this common stressor allowed them to focus more on their academics and cocurricular activities versus managing the uncertainty of *how to finance their education*. Having that stress could result in feeling an increased need to work which could lead to working multiple jobs or taking on longer work-days.

Theme 3: Identity intersection. A strong theme that emerged from the discussion was the intersection of identities and their impact of going to college and career decisions. The areas that emerged included the influences of their country of origin, race, and gender.

Subtheme 3.1: First-generation citizenship. Two participants confided that they were the children of immigrants. This identity based on origin played a vital role in the responsibility that they felt to pursue higher education. This further substantiates the idea of *first-gen plus* which accounts for the various factors and identity subsets that FGCS identify with. (Wesaw et al., 2018). In the case of these students their identity is compounded with being both first-generation American citizens and first-generation college student. America and Sam shared their insights on being both the children of immigrants and being FGCS:

> My brother went to a technical school, but he dropped out because he's under DACA [Deferred Action for Childhood Arrivals], and we had to pay out of state

> tuition just for him to go to tech[nical school] and we can't afford it. So, I was really scared because… I want[ed] to go to college, but at the same time like I want[ed] to go to a four year, and we didn't know…if I would have that much money…but it worked out. (America)

America's perspective framed her initial reservations about pursuing higher education as her brother was classified as one of the "Dreamers" under the DACA legislation. The financial security that America acquired would not have been possible without her being a natural born citizen and the tuition supplements provided by the institution and SSS program. Sam also shares his experience being the child of immigrants while being FGCS.

> My parents were immigrants, so we moved here from Jamaica. [My parents]…gave up everything that they had down there, so that me and my brother [could]…pursue higher education here, so a big thing in my family was education. [My mom's] siblings and my dad's siblings are…in higher fields, they are…doctors [and] engineers. My mom and dad decided that, since it is such a big part…go somewhere where we could go further in it. (Sam)

These narratives uncovered a solid responsibility to achieve that is common among FGCS (Covarrubias et al., 2015). However, the complexities of being FGCS and first-gen American citizens expose a challenge that exists based on a looming sense of obligation (Jehangir et al., 2014). These students speak of the *sacrifice* that their parents made to ensure that they had more academic and professional opportunities, this perspective is substantiated as the participants are highly focused on their career goals, but the burden

appears to weigh heavy as they are on this academic journey for not only themselves but for their families.

In these narratives, *access* is a salient undertone to fulfill the students' needs. Financial barriers would have limited these students from pursuing an education at their current institution. Engstrom and Tinto (2008) confirm that access that is absent of support does not equal opportunity. In this case, finances are one of the primary supports needed for FGCS to focus on their career goals. This is further supported by literature as a viable barrier to pursuing and completing a four-year degree (Pratt et al., 2019; Wilbur & Roscigno, 2016).

Subtheme 3.2: Being A Black FGCS Woman. Two interview participants identified as Black women and spoke to their experiences managing their multiple responsibilities and staying true to their identities while being at a large, predominately White institution. Monica shared her thoughts while sharing how her mother influences her and why she chose her major.

> [I was] raised by very strong women, strong Black women in my family. It's been like it's a generational thing for me…I've kind of always had to be the one to step up and take care of my sister and basically grow up a little quicker than most people. I think what inspired me the most was… my mom and then…realizing how underrepresented [seeing] a Black girl is on TV…so I just… want to break some of those barriers and make my family proud and just represent. (Monica)

Misty also shared her feedback on how being a woman of color influences her path and frames her approach to succeeding in her aspired career.

> I am very confident…especially being a Black female…from a…low-income family. I think that there's a lot of things that [White] people don't expect from you [or] expect you to be able to do and they kind of look down on you. Like, for example, I was in high school, no one would expect me [to be] academically inclined, yes, there was also a lot of other academically inclined students and a lot of them were White…it was kind of discouraging because you don't see people like yourself around you, but I just feel like you have to be that person that you want to see in a room in order for that room to fill up with people like you. (Misty)

Both Misty and Monica shared their perspectives individually of being Black women in competitive fields and the perceptions and challenges that come with it. They both spoke to familial obligation that they shared to make them proud, but they also spoke to reframing how Black women are seen and increasing the representation in their fields. One striving to align her passion for medicine with the needs of society and the other working build social and media brand to excel in mass media, although drastically different in aspired occupation they both sought to be represent in a space where they felt there were not many of them.

These experiences align with the phenomenon of navigating identity politics among Black women, hooks (1990) asserts that Black women feel a deeper sense of connection to achieve and thrive, not only for themselves but for other Black women. These challenges are more pronounced as Black women navigate predominately White spaces and seek to ensure representation is at the forefront (hooks, 1990).

Theme 4: Mindset and resilience. As the tone of the study was to frame a non-deficit stance, participants mindsets and resilience came through during the interview sessions. Monica shared their thoughts on how amidst challenges and barriers that their mindsets and ability to push through assisted them:

> I feel like it just starts mentally like just having such a determined mindset and I feel like I have that but, just like if you have some people to motivate you it really goes a long way. You just have to have that push to get it done. I would just have to say, [having] those people to support me because I can handle the rest. I got me - I just need support. (Monica)

Although mindset and persistence are essential, the students do not stray away from expressing the need for support and accountability. The students who were interviewed showed high levels of intrinsic motivation but were appreciative of resources such as personnel and students to support them.

Theme 5: Articulation of pathways and goals. Students who were interviewed were able to clearly articulate next steps based on where they were as first-year students. When asked about their confidence in achieving their goals and the next steps to achieve their goals all participants stated that they were confident in their abilities to achieve their goals. The following narratives expand upon the perspectives of students as they affirmed their passions and opportunities.

> [I’ve] always loved…biology classes like anatomy…so that's kind of like where I am now. I have to go to college and…medical school…and…I'm just taking the proper steps…and these [are]…great…life experiences. In college it's not always

> just about the academics, but the connections [you] make there as well as the experience[s]. (Misty)

America was able to share her next steps to achieving her academic goals.

> [They] have a new pathway to graduation so I know when I'm a[n] upperclassmen…I [will] have to do…mock interviews [and]…build…a full-on resume. (America)

Sam offered his insights on what it takes to be competitive for medical school programs.

> You have to be a well-rounded person…they're still going to look at the grades, first. I was like [if] my grades aren't up there with… the top kids in my class and I'm already at a disadvantage, even if I was out… getting experience in the field. I say [I'm] confident…because I feel like I can get up there, like if I push myself hard enough, and if I use all the systems that… [the University] has set up to support me like tutoring services or just on getting one on one time with my teachers, then I will be able to get up there yeah. (Sam)

Monica provided a summary of how plans for her next steps to working in mass media while pacing herself into getting acclimated in college.

> Building…some type of portfolio…and attending like a lot of job fairs and taking advantage of those internships… I think I still [have] to get college under my belt a little bit more. Those are my next steps, maybe a portfolio [and] job interviews. (Monica)

All participants were able to effectively articulate reasonable steps to success based on their status as first-year students while projecting areas of improvement and exposure. These areas of exposure were not limited to interviews, portfolios, workshops and career

fairs, which are all best practices to support career success among FGCS (Pulliam et al., 2017).

Focus Group Findings

The focus group portion of the study was conducted with the four participants from the interviews. The student participants were asked six questions (refer to Appendix L for questions) during a one-hour virtual session to explore areas of growth further and to fill in the gaps using the collective insight from the students. Like the interviews, the sessions were hosted via the Zoom platform with the auto-transcription feature enabled. Processes such as triangulating the notes and the recordings were vital to ensure accuracy in the transcriptions. Deductive coding was used again to identify the themes that were prominent among the discussions with the students to offer additional context.

Below are the six emergent themes from the focus group session (Figure 4.2). Following are the accompanying responses and perspectives of the participants. These narratives add more context to factors that positively and negatively influenced their progress toward their career goals while being in college and being in the SSS program.

Figure 4.2. Focus Group Themes. Figure 4.2 outlines the collective themes that emerged during the culminating session with the four participants.

Theme 1: Managing doubt. An overt theme in the focus group dialogue included participants grappling with managing doubt. This doubt came from peers or those encountered while in school. Phrases such as "your major is difficult" or "will you get a job in that field" were some of the phrases that the participants felt served as ways to dismay them from their career ambitions. As a result of the doubt from others this evolved into a prominent grievance and obstacle that student participants needed to address. Below are the comments that students provided when asked about barriers that they face in their career aspirations.

> The main challenge [is] trying to convince people like yeah, I can get a job with [my degree]. I'm still in my first-year so I'm trying to figure out exactly what type of concentration I want. Like the main challenge is trying to convince people

> [that] I can get a job with [my degree] So that's mainly the big challenge, no matter who I tell whatever my major is [people ask] so… what job, can you get? That [is] a major challenge for me, but I got it down, I mean I'm going to get a job I don't care [what they think]. (America)

Sam offered similar perspectives on those that cast doubt on his ambitions to pursue pre-medicine as an emphasis.

> For me, it's those preconceived notions that people have. I do want to be a doctor and that's a lot of schooling. As soon as…someone asks me what I want to do…that's always…the first thing they jump to is how long I will be in school or how much I [will] have to pay [in tuition]. I think [they're] …trying to deter me away from that path [and] turn me away from…[my goal] as a way to help me. (Sam)

Misty offered her input on being faced with similar challenges from those that doubt their ambitions.

> A lot of those comments do come in [about my major]. They'll say oh you're a biology major…that's hard, or…make like little sly comments. (Misty)

The doubt mentioned in these narratives are from individuals whom they felt questioned their abilities based on the rigors of their majors and academic programs. As these FGCS managed doubt of outsiders regarding their career aspirations, they appeared to be intrinsically aware and strong enough to ignore statements and reservations. As previously mentioned, although self-efficacy and self-confidence are different, there is some intersection. Some of the doubt that students experienced can have a deeper impact based on who it is from, family, friends, and others.

Theme 2: TRIO Program Support. Similar to the interviews, the dedicated support of the TRIO Program and staff re-emerged as significant support for students enrolled in the SSS program. The following perspectives were shared as students reflected on their interactions with the staff, programs, and resources:

> It makes you appreciate it even more because you're seeing… what [it would be like] if you didn't have [the support and] what you would have to…potentially deal with, opposed to…the blessing, that you have because of it. Also, just the support from the professors and how supportive they are and how understanding they are. They get you and… a lot of them have been in this position…so they understand. (Misty)

America also provided her perspectives on how the SSS program supports her,

> The main thing I really like in [SSS are]… all the resources they give you, because…I know nothing about college or what [or] anything about career. Mrs. Lyles (TRIO SSS Adviser) sends out the scholar connect [newsletter] and then they do…a lot of events to help us with any career based [needs and] questions, it really does help a lot. (America)

Students enrolled in the program see the benefits and made these point well known. They also shared how fortunate they are to be in this type of program as they know that all FGCS students do not have this opportunity due to the enrollment constraints of the TRIO – SSS Program.

Theme 3: Mental Health Support. Prioritization of mental was a reoccurring theme and arose organically as the participants addressed the various challenges they faced while pursuing their college education and career.

> Right before…school started, I was diagnosed with anxiety and depression. Which I've already…had to like deal with…but like having been diagnosed [and] knowing exactly what it is and then going through it. With the transition to college, it was…hard for me [to]…stay focused sometimes when going through …those spells. It's nice to have…that support like my friends and my family. But just dealing with that and trying to like stay on top of everything and not get behind has been like a bit of a challenge but it's getting easier. (Misty)

America shared a detailed experience and challenges with mental health as a college student and boasted about how a faculty member supported her.

> I[’ve] had…depression [since I was]13. [I] couldn't get officially diagnosed until…I was [an] adult because you know parents don't believe that but. This semester…I had one week [where] I really went through it. [I] had such a bad episode, I got really sick, [and] I got broken up with, so all those three [things] really made me worse.
>
> [I told] Dr. Singleton [English Professor] …what was going on. She called me and… reached out to me, to make sure [that] I was okay and [to say] make sure your mental health comes first, no matter what.
>
> Having that reinforcement from…[your] own teacher …really did help, having…a professor …to somewhat understand…what you're going through and like making sure that you're taking care of yourself. (America)

Sam also offered some insight on his challenges with mental health and how the SSS program provided support to him.

> My mom went to the hospital and then… my girlfriend broke up with me… a few days later. I was kind of like in a downtrend, and the same [support was received by] Dr. Singleton. I could definitely tell that she cared a lot. I sent her an email, and she like instantly replies…don't worry about it, like…if you can't make it to class today, I fully understand and it's perfectly fine. It was just really reassuring to know someone …actually cared and… saw me as more than just a student. And then yeah so definitely like the SSS program is a big-time support.
>
> Dr. Callis (SSS Program Director) he's an amazing person. I remember him always telling us… to prioritize our mental health. If anything happened… go to [the] student health center…set up appointments to go see a counselor. (Sam)

Support for mental health in the SSS program was a significant part of the layers of the holistic support offered by the SSS program. Through the narratives, it is evident that the SSS leadership and staff have *normalized* a culture of seeking help for health crises, whether they are physical or mental. Through the qualitative data that the participants provided, students shared how that without this support they could have stopped out or not have done well in some of their courses.

Students like America and Sam shared explicit examples of where they had bouts with depression. Being vulnerable enough to share what they were going through with their professors helped them significantly. This was mutual as the professor, which happens to be the same professor (Dr. Singleton), was understanding and offered grace and support to the students as they sought medical assistance and time to improve their situations. This narrative also exposed a cultural stigma surrounding mental health

support. America stated in her narrative that she has known of her mental health issues but was not diagnosed as her parents *did not believe in it*.

The direct connection to career support emerged as students indicated that without this support the students could have potentially dropped out or failed their classes. Doing any of these would delay their progression to their degree or possibly lose their financial supplements if they fell below the GPA needed to stay in the SSS program.

Theme 4: Career Recommendations and Connections. Substantive points were made by focus group participants regarding strategies that were recommended by the TRIO – SSS Program. Below are three strategies and practices that participants brought up to increase their engagement in their respective majors and careers.

Subtheme 4.1: Informational interviews. One of the student participants indicated how conducting an information interview with someone in her desired career helped affirm them in their goals and received insight and a pulse of real-life experiences. For Misty, her first-year seminar instructor made this recommendation, who is also a TRIO staff member. Misty shared how an informational interview assisted her in gaining a better understanding of her desired career field.

> I was able to interview one of my friends parents who is a general surgeon, and he gave me a lot of insight on the career itself and, like the good things about the bad things about it and things that people expect and then the reality, so it was just nice to hear someone that's really in the field and active in it, their experiences and what they had to do to get to that point and …how it is to be in the career. (Misty)

Misty's participation came up multiple times throughout both the interview and focus group. Taking this suggestion from her first-year seminar instructor proved to be beneficial as it further cemented that she was in an academic major that fits her passion and skills.

Subtheme 4.2: Co-curricular involvement. Involvement in student organizations and leadership positions are common factors of increased engagement among college students. These engagements are even more impactful when they are experiential in nature, exposing students to additional career possibilities. Monica shared her experience with being connected to a major specific opportunity to broaden her insight to career possibilities within her program of study, broadcast journalism.

> I'm involved with MUTV (on-campus news station) and I have my own TV [segment that] I'm a part of [on] Monday night[s]. So, I'm pretty proud of myself and I think I did pretty good for my first year. (Monica)

Through this experiential learning experience Monica was able to find out more about her aspired career while actively working in a learning lab environment.

Subtheme 4.3: Networking opportunities. America was provided an opportunity facilitated by the McNair Scholars TRIO – Program where she essentially found a mentor and was exposed to the possibilities within her major and post-graduate opportunities via a current graduate student.

> I sat down [with]…a bunch of people talking about…going to grad[uate] school One girl, I talked to [pursued] the same degree as me…and went to grad[uate] school completely free and she was the same SSS program. [It] really put [things]

> in perspective for me. I can actually do this! It really put in my mind like maybe I want to go to grad school [and get] my PhD fully funded. (America)

Kezar et al. (2020) appropriately address the positive impact that practices such as networking have on FGCS as they are in the career exploration and decision-making process. Imbedding opportunities like the one that America participated in can prove vital and provide students with models of success that can ultimately increase confidence and self-efficacy (Kezar et al., 2020; Pratt et al., 2019).

Theme 5: Sense of Responsibility and Obligation. FGCS commonly take the mantle of being the responsible child and providing for their families. The sense of responsibility is to pursue their career dreams not only for themselves but for a greater purpose, their families, and their hometown. This undue pressure came to life in the narratives provided by the students.

> I have five siblings and I'm the youngest so…there's always been like that pressure there to be like the perfect child. I was never able to bring anything home less than an A. One time I got in trouble for bringing home a 96. It was always…a lot of like academic pressure to just do well. If I want a certain career, I have to make certain sacrifices - I have to really focus in and like get things done, and I can't really get distracted by a lot of outside things. (Misty)

Misty's perspective offers an unfortunate pressure that is placed upon her. Her drive to succeed is strong and shown through her previous articulation of pathways and experiences needed to be successful in the medical field. However, her pressure to achieve perfection may influence her challenges with mental health. America provided her reflections on the sacrifices of her family.

> My parents are…immigrants, they came from Mexico to go to the States, [and are] not U.S. citizens…they have…very low-income jobs… my mom cleans houses my dad works in a restaurant. I'm very grateful for that, because, like they're able to support me with whatever I need, but sometimes I know that it's… not what they exactly want[ed] to give me. (America)

The reflections of the participants of this study illuminated the unique levels of pride and responsibility that these students felt based on their family structures and income. Covarrubias et al. (2015) affirm the guilt that FGCS feel as they seek to better their circumstances and make their families proud. Misty provided reflections on academic pressures to do well and succeed academically. At the same time, America exposed how being of low socioeconomic status and being the child of immigrants furthered her passion for achieving her dream.

Theme 6: Improve Communication of Resources. Areas of improvement arose via the closing dialogue of the focus group. SSS students were asked about missing areas of support as they pursued their career ambitions. Students were asked to identify what they perceived as lacking in the SSS program or institution-wide. Overwhelmingly there was no negative feedback on the SSS program but recommendations to reproduce the environment and communication that the SSS program has created. America The students' perspectives provided the following:

> Because…I know… people complain, [about]…all these meetings what they really are helpful and I do it for like the best of us because, like I've been…learning a bunch of stuff that I need to know. (America)

As America started the conversation providing accolades to the SSS program, other participants shared the barriers that they identified at their respective institution.

> I don't know what could be in place, but…I know they have…job fairs…something maybe to help you know for sure you're going to get a job or something. like I just wish it was someone or an organization that just made that their whole entire thing to really help you and to push you and help you network…I…think something like that I think was something else I would say. (Monica)

Misty provided her experiences and challenges with navigating resources and communication across campus.

> I think that there could be better communication on getting [opportunities]. Inform students that [opportunities] are available for them, because I know [SSS] does a great job of doing it, they tell us [as] they send out the scholar connect [newsletter] with all these different like things, but the university as a whole, they don't really. They don't really have a common place where you can find all that information it's kind of hearsay or you if you go through this person or if you know this person. Then they'll tell you about this [opportunity], or if you're a certain major they'll tell you about certain things that help you like in your major. (Misty)

Sam echoes Misty's sentiment of communication and resources while sharing his unique perspective of having a sibling who has also served as a vital resource for him as well.

> I am lucky enough to…have a brother who… goes to the to the university so [he] …knows the ins and outs. I go to him when I need to like find things. Going

> through…the whole [University] website… just takes forever and it usually doesn't get me to anywhere. I remember the first time I tried to like figure out where the writing lab was… it was the hardest thing that's find.
>
> So [I] just like send [my brother] a text, and I feel like that's kind of unfair. Just because my brother has been through the college doesn't mean that I should be able to have more…opportunities to…use the [re]sources at the school, as compared to other people who are paying the exact same amount as I am to go to a college. I just feel like the university… should make it easier for students to be able to use the resources that they're creating for us. (Sam)

Per the comments, the grievances shared by the students were less about the TRIO – SSS Program, but about the institution at large. The barrier of communication of resources were evident in the feedback among the participants. In some cases, the resources may be available at the institution, but the students may lack a practical orientation on navigating these resources.

Interpretation of Results

To further synthesize the qualitative findings, each of the themes was placed in the following categories, *support systems*, *barriers*, *intrinsic and cultural factors*, and *career-best practices*. These areas were identified as categories to frame the various factors that exist among FGCS students who participated in this research study. The following table outlines the identified categories and the related themes:

Table 4.4 *Thematic Categories of Qualitative Findings*

Support Systems	**Barriers**	**Intrinsic & Cultural Factors**	**Career Best Practices**
• TRIO Support - Staff & Mentors • Financial Support	• Managing Doubt • Mental Health • Communication of Resources	• Sense of Responsibility (Family) • Identity Intersection (Citizenship, gender, and race) • Mindset & Resilience	• Career Connections (Informational Interviews, curricular involvement & Networking) • Articulation of pathways & goals

Primary research question. How does the TRIO Student Support Services Program's career development component equip students to better understand their skills and abilities related to their potential careers? This was answered via the straightforward application of career best practices, as shown in Table 4.4. TRIO-SSS students further showcased this understanding through both quantitative and qualitative metrics. Via the CDSE-SF, students demonstrated high levels of comprehension and learning through the posttest performance with a mean of 4.27 mean in *goal selection*, 4.16 in *planning*, and 4.05 in *occupational informational*. These specific domain scales of this instrument

directly correlate with career outcomes expectations as outlined by the SCCT framework. Further validation of these metrics can be gleaned from the rich narratives provided by the TRIO – SSS Participants in the thematic areas of *Career connections* and *Articulation of pathways & goals*.

Research sub-question 1. How well does the TRIO Student Support Services Program take into account the cultural and social factors when providing advisement and career counseling? The TRIO SSS program implores an intrusive style of advising and coaching. Per the feedback provided through the interviews and focus groups, the TRIO staff and faculty are an integral part in the support network for these students. Examples such as the in-depth accounts of the following are testaments of the breadth of the holistic support that SSS provides:

- SSS faculty member, *Dr. Singleton* who supported students amidst mental health and personal crises, and program director *Dr. Callis* normalizing a culture of mental well-being among SSS students.
- *SSS adviser Mr. Cage* who directly advises students and offers a map to degree completion and motivational words to his advisees.
- *SSS adviser Mrs. Lyles* who provides timely resources to support student success in their academics, co-curricular engagement, and career opportunities via scholar connection newsletter.
- *Peer mentors* that connect students with resources such as tutoring, student organizations, and campus services.

As FGCS are not monolithic, a single approach is not the resolution to support the complexities of culture and identity that these students bring to their respective

college(s). However, prioritizing consistent and relevant communication to students accompanied by individualized support through coaching and advising sessions appears to provide significant gains for SSS students. This model embodies an environment similar to what would exist at a smaller-sized institution holding the mantra of making a large institution seem smaller.

Conclusion

Student participants heralded their support from the SSS program. This acknowledgment is not uncommon, as the literature supports the positive impact that TRIO and access programs can have on student experience and exposure to resources (Kezar et al., 2020; Pulliam et al., 2017). These students showcased immovable confidence in their career goals. They also addressed their unique challenges and motivators. The additional support and resources provided by peer mentors, TRIO staff, and faculty consistently emerged as helpful factors supporting FGCS career self-efficacy. Overall, the primary recommendation that can be extracted from their insight is to scale out the efforts that exclusively exist in the confines of the TRIO - SSS Program; these recommendations are outlined in further detail in Chapter Five.

CHAPTER FIVE

DISCUSSION, IMPLICATIONS, & RECOMMENDATIONS

Herr and Anderson (2015) affirm that action research is more than a methodology rather, it is a holistic *process* and *stance* that guides the direction and evolution of a study. My reflections on the research process provide areas of strength, growth, and weakness that emerged throughout writing this dissertation in practice (DiP). As aligned with my problem of practice, leaning on literature from Pratt et al., 2019 and Gibbons et al., 2016 confirmed that FGCS may encounter unique challenges and barriers that can affect their major choice, degree completion, which ultimately impacts their transition into the workforce. The purpose of the study was to understand existing supports and barriers by examining their levels of career self-efficacy. Understanding these factors, efforts such as TRIO can be affirmed and reevaluate their targeted approach to support career exploration.

Ultimately, students identified and interviewed throughout this study were affirmed in their career and major decisions as outlined in the interview findings. With this information, in retrospect, the study would have had the initial intent to solely explore career self-efficacy and identify supports and barriers that exists within and outside of the TRIO program.

This study evolved, in its original conception, it was set to be a qualitative analysis. Through unpacking the idea of self-efficacy, specifically career self-efficacy, I was challenged with thinking of how to ground and inform the inquiry to quantify self-

efficacy rather than relying solely on qualitative responses. Upon further exploration of the resources, the CDSE-SF was discovered and identified as a viable instrument to measure efficacy in this area. Using the CDSE-SF helped provide additional grounding and served as a great precursor to the interviews and focus groups identified initially as a part of this study.

As outlined in the study's limitations, a weakness of the study was the lack of participation in the administration of the CDSE-SF pre and posttest. Anecdotal feedback and observations support that the students could have potentially been in a mode of survey fatigue. Their institution increased email communications and requests for institutional surveys due to being in various learning modalities, virtual, and hybrid, because of the COVID-19 pandemic. Recognizing this helped me understand that my survey could have been an additional online engagement among the many they were already required or asked to complete even with incentives.

Another weakness of the study was that the CDSE-SF participant sample did not garner balanced distributions of race and gender. The lowest participation among races was 27.27 (n=3) percent among White FGCS, and overall male participation was at 18 percent (n=2). Although the data was not as balanced as desired, this acknowledgment led to an observation that can inform future research. Black student participation was strongly represented in the CDSE-SF administration, and three out of the four interviewees were Black students. Both qualitative and qualitative data exposed that a study can be done to look at the career self-efficacy among Black FGCS exclusively.

The exploration of these differences in self-efficacy among races was enlightening as Black FGCS showed significant and consistently high levels of career

self-efficacy in various domains of the CDSE-SF. Although the quantity of participation was not as anticipated, these data were different from some of the existing literature as it leaned into the narratives of Black and Latinx students.

The study's area of utmost strength was the rich narratives shared by the participants during the interviews and focus groups. These data offered significant support to the limited quantitative findings that emerged through the study. Themes that align with support such as financial support and TRIO support staff (professional and peer mentors) provide some of the most substantive data to validate the need for high-impact people to support the high-impact practices supported by TRIO – SSS.

The data shows that the TRIO staff was an overwhelming source of support for FGCS enrolled in the SSS program. Quinn et al. (2019) affirm the positive impact that TRIO staff have on FGCS as they navigate college life and how they can create a familial environment on their respective campuses. It is crucial to extract *how* the TRIO – SSS staff supports their students to understand better the practices supporting growth in career self-efficacy among FGCS. Chapter Four provides a descriptive narrative of the various forms of data collection and thematic categories for the supports and challenges of FGCS.

This chapter will further describe an action plan, and the final step is to close the loop and understand these strategies to improve practice. This lens is not to ignore the challenges of FGCS but to use them to inform positive interventions and outcomes. Therefore, the following broad categories were developed to condense further and frame the more prominent themes. These themes are outlined as supports and include:

- *Financial*. Students within the study showed that they had goals and ambitions, but the financial barriers were deterrents as they explored going to college. The

SSS program provides financial supplements which minimize some of the stress that surrounds college-going.

- *Socio-emotional*. Holistic support to motivate doubt management, undue pressure, and mental health challenges are areas of support that students need and desire. These practices find grounding in Rendon's (1994) validation theory as *affirmation* and consistent support are paramount to the success of underrepresented students.
- *Relational*. This theme sums up the emphasis on timely communication and intentional programming designed to connect SSS students with resources. Students spoke to the impact that recommendations and events hosted by TRIO have had on their success and navigating their institutional resources.

These themes are further outlined via the Venn diagram below in Figure 5.1:

Figure 5.1. Thematic Model of Support for FGCS Self-Efficacy. Figure 5.1 outlines three major thematic categories that were identified to couple the various themes extracted from the research data.

As this study evolved, it is also prudent to recognize the differences that emerged based on race and ethnicity. The overtones of equity and access frame this action research dissertation and are affirmed in the foundations of educational inquiry in this program of study. As a curriculum generalist, it is the due diligence of the researcher to identify the gaps and differences present, particularly among those marginalized students (Herr & Anderson, 2015).

In the case of this study, these differences manifested in a higher sense of career self-efficacy among Black FGCS. Low participation among White and Latinx FGCS left some questions unanswered, and a further dive into this study would provide context to these unanswered inquiries. The absence of these data prompts additional investigation points that the study could not address due to the constraints of participation. Some of these areas of investigation include:

- What are the unique lived experiences of Black FGCS that contribute to a higher sense of career self-efficacy?
- What would vary or change if there was more participation among White FGCS?
- What are the career self-efficacy metrics among Latinx FGCS?

The original intent of this research was to examine these career factors based on the differences in race and ethnicity. The data among White FGCS was quantitatively minimal and non-existent qualitatively. This study elevated as robust narratives from interviews and focus groups provided an exclusive lens of the lived experiences of Black and brown FGCS students. Black FGCS were well represented in all phases of the research study. Among Latinx students, the data was minimal quantitatively. Although one participant participated in the interview and focus group, the qualitative data was

enlightening and uncovered intersections of identity that warrant a more profound exploration of Latinx FGCS.

Measures for Credibility & Validity

Participants were continuously assured that their information would be protected as I took my responsibility as the researcher to protect my participants. This assurance included special attention to the rich qualitative narratives and quotes provided in Chapter Four. Words added to the qualitative narratives only provided a seamless transition and minimized verbal fillers that would detract from their voice. Herr and Anderson (2015) tout the responsibility that is placed upon the researcher of any study to be both credible and ensure validity in their processes. My process included the following:

- Clear confidentiality statements in my confirmations and messages sent to students (see Appendices C, E & F);
- The commitments to confidentiality were reiterated and recorded in the interview and focus group sessions;
- Data transcriptions were revisited, corrected, and listened to multiple times to ensure the accuracy of the participants' voices;
- Aliases were given to the participants to ensure anonymity.

Data were then triangulated via the processes of pre and posttest, semi-structured interviews, and a focus group. Participants were provided the option to have one-on-one consults and receive the results of their CDSE-SF.

Sharing Results

I plan to share the results of this research in professional organizations such as through my affiliation with NASPA – Student Affairs Administrators in Higher

Education. I aspire to submit proposals to share these data at professional conferences and to extract portions of the study to share within academic journals. Another means of sharing this information is to start the conversation and dialogues among peers. I aspire to contribute smaller written pieces in op-ed style writing through facilitated discussions and collaborative articles to spark conversation around themes. I also desire to connect with the TRIO – SSS Program leadership of the research institution to inform them of the general themes that emerged. This sharing would be done to provide the themes only to protect the anonymity of the student participants.

Suggestions for Future Research

In a study to further explore both quantitative and qualitative measurements of race and career support of FGCS, a breakdown and analysis of gender could exist to investigate further Black FGCS women's perceptions and their experiences of navigating their career ambitions and achieving their goals. As validated by Misty and Monica in Chapter Four, these perspectives were substantive and provided a lens that higher education professionals should be aware of as Black women have been known to have graduated at higher rates than their peers. The intersection of these identities could create a compelling research study that highlights the narratives of Black FGCS women as they progress toward their careers.

A charge for future researchers could also include continuing to dissect the levels of one-on-one and collective support that TRIO staff provide to inform practices for FGCS support. Further analysis of training, disposition, and strategies would prove helpful as these resources could be shared to provide TRIO personnel and those who

directly support FGCS to use the identified tactics to foster and reinforce the students' career self-efficacy serve.

The unique narratives provided by Sam and America of being both first-generation American citizens and FGCS lends to what could be an insightful study on the intersection of those two identities. Covarrubias et al. (2015) and Jehangir et al. (2014) research calls attention to the complexities that are present among this subset of FGCS. Still, other narratives could better inform how to best support students who navigate the cultural and familial differences that exist while being FGCS and the children of immigrants. Further unpacking these narratives will inform strategies and implications of this identity intersection. In turn support and acknowledge the various cultural nuances that exist among FGCS who have different countries of origin.

Mental health among FGCS was another resounding thematic factor in the support that proved helpful to FGCS. Examining the impact of mental health on FGCS as they explore their careers could support the need to normalize help-seeking skills to positive mental well-being among FGCS. Narratives shared in Chapter Four suggest that their families may not have supported or believed in their mental health challenges. They experienced various levels of depression and anxiety within their first year of college. Capturing the pulse of students and the potential implications of not seeking mental health support may assist higher education professionals as they look to understand the stigmas that surround mental health and well-being among FGCS.

Lastly, an intriguing area of exploration could be to look at the pre-college experiences and characteristics that frame the career decisions and exposure of FGCS. These data were not explored as the focus of this study was to see the current supports

provided to the students via the TRIO program while they are in college. As previously stated, the TRIO – SSS participants were overwhelmingly affirmed in their career trajectory. Connecting both the pre-college and in-college experiences could provide a deeper understanding of the various pathways to academic majors.

Although this study is from the lens of higher education, this study infers the need also to improve FGCS support in K-12 settings. These supports can include teachers, counselors, faculty, and advisors becoming more aware of the societal pressures of FGCS to overachieve. Acknowledgment of this pressure should not be misconstrued to stifle students' ambitions; rather than be mindful of when to intervene, FGCS can experience burnout while managing competing responsibilities. This drive, as exhibited among Black and Brown FGCS manifests in a perpetuation to work twice as hard to achieve their White peers' goals, status, and credentials.

Conclusion

This action research study sought to explore factors that support FGCS as they journey to not only complete their degrees but seek to gain meaningful employment. Using career self-efficacy as the vessel to understand and frame the experiences of FGCS, viable factors were identified that contributed to a high level of wrap-around support for these students. By utilizing a vetted instrument to measure career self-efficacy, more data was offered to contribute to the existing literature base grounded in the use of the CDSE-SF instrument and SCCT framework.

The uniqueness of this study was to identify how the TRIO program factors in the cultural differences among FGCS, along with the identification of strategies used by the program staff to support students in their career journeys. Ultimately students praised the

support system provided by the program; the highlights of these supports included finances, programmatic support, and opportunities to foster connections in their desired career fields. The takeaway from these themes consists of the need to scale up and out the targeted communications and outreach present for TRIO – SSS students. Scaling these strategies could prove difficult as the TRIO – SSS cohort at the research site constitutes about 3 percent of the first-year class at this large research institution. To mirror such an approach, the addition of learning communities and first-year interest groups (FIGS) would have to be developed with a similar focus and appropriate staffing. Upon additional exploration of institutional efforts, similar programs are forming at this institution with FGCS (non-TRIO) focused initiatives on supporting students in business and education programs.

It affirmed that the institution would see the benefit in attempting to replicate the model existing in TRIO – SSS to offer support for students who may be ineligible or were unable to fit in the program due to capacity. The intentional and timely communication of resources and culture of the TRIO – SSS program provides an environment where FGCS feel affirmed in their college-going identity and career self-efficacy. This knowledge warrants the need to have TRIO – SSS staff members articulate their process, practices, and philosophy on supporting students.

My action plan is to close the loop with TRIO professionals to catalog the strategies they use to support low-income FGCS. These support strategies would be categorized based on Figure 5.1 (financial, socio-emotional, and relational) to provide a framework to inform the development of a playbook to aid professionals who serve this population. The goal is that ultimately the practices outlined in the playbook would be

transferable to TRIO and non- TRIO FGCS as literature suggest that the barriers and concerns are consistent as finances, familial support, and resources are pervasive (Gibbons et al., 2019; Pratt et al., 2019). This playbook would contain information and resources for staff and peer mentor training, identification of readings, and a calendar of timely engagements with campus partners to support the career process.

By embracing the uniqueness of FGCS students through understanding the data, stories, and practical support mechanisms will better equip higher education professionals to serve them better as they move from their journeys as students to gainfully employed alumni.

REFERENCES

Anfara, V. A., & Mertz, N. T. (2006). *Theoretical frameworks in qualitative research*. Thousand Oaks, CA: Sage.

Association of American College & Universities (n.d.). High Impact Educational Practices, Retrieved November 11, 2019, from https://www.aacu.org/leap/hips

Bandura, A. (1977). *Social learning theory*. Upper Saddle River, NJ: Prentice-Hall.

Bandura, A. (1986). *Social foundations of thought and action: A social cognitive theory*. Englewood Cliffs, NJ: Prentice-Hall.

Baum, S., Kurose, C., & Ma, J. (2013). *How college shapes lives: Understanding the issues. College Board: Trends in Higher Education Series*. Retrieved March 16, 2019, from https://trends. collegeboard.org/sites/default/files/education-pays-2013-how-college-shapes-lives-report.pdf

Benedict College. (n.d.). History, Retrieved December 2, 2019, from https://www.benedict.edu/history/

Betz, N. E., & Taylor, K. M. (2012). *Career Decision Self-Efficacy Scale (CDSE) Manual*. Mind Garden, Inc.

Bourdieu, P. (1977). *Outline of theory of practice*. New York, NY: Cambridge University Press.

Bourdieu, P. (1990). *The logic of practice*. Palo Alto, CA: Stanford University Press.

Brown, S.D., & Lent, R. W. (1996). A social cognitive framework for career choice counseling. *The Career Development Quarterly*, *44*, 354-366.

Carnevale, A. P., Smith, N., & Strohl, J. (2013). *Recovery: Job growth and education requirements through 2020*. Georgetown Public Policy Institute: Center on Education and the Workforce. Retrieved March 3, 2019, from https://cew.georgetown.edu/wp-content/uploads/2014/11/Recovery2020.FR_.Web_.pdf

Center for First-generation Student Success (n.d.). About the center. Retrieved November 11, 2019, from https://firstgen.naspa.org/about-the-center/about-the-center

Chickering, A., & Reisser, L. (1993). *Education and identity*. 2nd ed. San Francisco, CA: Jossey-Bass.

Coffman, S. (2011). A social constructionist view of issues confronting first-generation college students. *New Directions for Teaching and Learning*, 127, 81-90.

Cornell, S., & Hartmann, D. (2007). *Ethnicity and race: Making identities in a changing world*. Thousand Oaks, CA: Pine Forge Press.

Council for Opportunity in Education (n.d.). TRIO programs at a glance. Retrieved November 27, 2019 from, http://www.coenet.us/coe_prod_imis/COE/TRIO/TRIO_Programs/Programs_at_a_Glance/COE/NAV_TRIO/TRIO_Programs_at_a_Glance.aspx?hkey=76fb02cd-137d-4552-b745-c0cda2e641e3

Covarrubias, R., Romero, A., & Trivelli, M. (2015). Family achievement guilt and mental well-being of college students. *Journal of Child and Family Studies*, *24*, 2031-2037.

Dacre Pool, L., & Sewell, P. (2007). The key to employability: Developing a practical model of graduate employability. *Education + Training*, *49*(4), 277-89.

DeFreitas, S. C., & Rinn, A. (2013). Academic achievement in first generation college students: The role of academic self-concept, *Journal of the Scholarship of Teaching and Learning, 13*(1), 57 – 67.

Demetriou, C., Meece, J., Eaker-Rich, D., & Powell, C. (2017). The activities, roles, and relationships of successful first-generation college students. *Journal of College Student Development, 58*(1), 19-36.

de Schutter, A., & Yopo, B. (1981). *Investigation participative: Una opcion metodologica para la education de abuelos* [Participatory research: A methodological option for adult education]. Patzcuaro, Michoacan, Mexico: CREFAL.

Duckworth, A. (2016). *Grit: The power of passion and perseverance*. New York, NY: Simon & Schuster.

Gibbons, M. M., Rhinehart, A., & Hardin, E. (2019). How first-generation college student adjust to college. *Journal of College Student Retention: Research, Theory & Practice*, *20*(4), 488–510.

Grant, C. & Osanloo, A. (2014). Understanding, selecting, and integrating a theoretical framework in dissertation research: Creating the blueprint for your "house," *Connecting Education, Practice, and Research*, *4*(2), 14-26.

Hamilton, L. (2016). *Parenting to a degree*. Chicago, IL: University of Chicago Press.

Herr, K., & Anderson, G. (2015). *The action research dissertation: A guide for students and faculty*, 2nd ed, Thousand Oaks, CA: Sage.

Hooks, B. (1990). *Yearning: Race, gender, and cultural politics*. Boston, MA: South End Press.

Hughey, K., Burton Nelson, D., Damminger, J. K., McCalla-Wriggins, B., & Assoc. (Eds.). (2009). *The handbook of career advising*. San Francisco, CA: Jossey-Bass.

Jehangir, R. R., Stebleton, M. J., & Deenanath, V. (2014). *An exploration of intersecting identities of first-generation, low-income students*. Columbia, SC: University of South Carolina, National Resource Center for The First-Year Experience and Students in Transition.

Kemmis, S., McTaggert, R., & Nixon, R. (2014). *The action research planner: Doing critical participatory action research.* New York, NY: Springer.

Kezar, A., Hypolite, L., & Kitchen, J. A. (2020). Career self-efficacy: A mixed-methods study of an underexplored research area for first-generation, low-income, and underrepresented college students in a comprehensive college transition program. *American Behavioral Scientist*, *64*(3), 298–324.

Krisberg, K. (2019). Embracing equity. AGB Trusteeship article. 27(4). Retrieved from https://agb.org/trusteeship-article/embracing-equity/

Krumboltz, J. D. (1979). A social learning theory of career decision making. In A. M. Mitchell, G. B. Jones, & J. D. Krumboltz (Eds.), *Social learning and career decision making* (pp. 19-49). Cranston, RI: Carrole Press.

Lent, R. W., & Brown, S. D. (1996). Social cognitive approach to career development: An overview. *The Career Development Quarterly*, *44*, 310-321.

Lent, R. W., Brown, S. D., & Hackett, G. (1994). Toward a unifying social cognitive theory of career and academic interest, choice, and performance. *Journal of Vocational Behavior*, *45*, 79-122.

Levin, M., & Greenwood, D. J. (2017). *Higher Education in critical perspectives: Practices and policies*. New York, NY: Berghahn Books.

Liversage, L., Naudé, L., & Botha, A. (2018). Vectors of identity development during the first year: Black first-generation students' reflections, *Teaching in Higher Education*, *23*(1), 63-83.

Longwell-Grice, R., Adsitt, N. Z., Mullins, K., & Serrata, W. (2016). The first ones: Three studies on first-generation college students. *NACADA Journal*, *36*(2), 34-36.

Machi, L. A., & McEvoy, B. T. (2016). *The literature review: Six steps to success*. (3rd Ed.). Thousand Oaks, CA: Corwin.

Maietta, H. (2016). Career development needs of first-generation students *The National Association of College Employers (NACE) Journal*. Retrieved from http://www.naceweb.org/career-development/special-populations/career-development-needs-of-first-generation-students/

Manzoni, A., & Streib, J. (2017). The equalizing power of a college degree for first-generation college students: Disparities across institutions, majors, and achievement levels. *Research in Higher Education, 60,* 577-605.

Maslow, A. (1943). A theory of human motivation. *Psychological Review*, *50*, 370–396.

Merriam, S. B., & Tisdell, E. J. (2016). *Qualitative research: A guide to design and implementation*. San Francisco, CA: Jossey-Bass.

Miles, M. B., & Huberman, A. M. (1994). *Qualitative data analysis (*2nd Ed.*)*. Thousand Oaks, CA: Sage.

Mitchell, L. K., & Krumboltz., J. D. (1996). Krumboltz's theory of career choice and counseling. In D. Brown, L. Brooks, & Associates (Eds.), *Career choice development* (3rd ed.), (pp. 233-280). San Francisco, CA: Jossey-Bass.

Morse, J. M. (1994). Designing funded qualitative research. In Denzin, N. K. and Lincoln, Y.S. (Eds.), *Handbook of qualitative research*. Thousand Oaks, CA: Sage.

Murray, C. (2017). Too many people are going to college. In D. J. Flinders & S.J. Thornton. *The curriculum studies reader* (pp. 369-393). New York, NY: Routledge.

National Association of Colleges and Employers. (2014). Career readiness defined. Retrieved from http://www.naceweb.org/career-readiness/competencies/career-readiness-defined/

National Association of Colleges and Employers. (2016). First-generation students: Understanding, meeting needs. Retrieved from https://www.naceweb.org/career-development/special-populations/first-generation-students-understanding-meeting-needs/

National Center for Education Statistics (2017). Digest of Education Statistics 2017 [Table 303.70]. Retrieved from https://nces.ed.gov/programs/digest/d17/tables/dt17_303.70.asp?current=yes.

Obama, M. (2018). *Becoming*: New York, NY: Crown.

Pratt, Harwood, Carvazos, & Ditzfield (2019). Should I stay or should I go? Retention in first-generation college students. *Journal of College Student Retention: Research, Theory & Practice, 21*(1), p105-118.

Pulliam, N., Ieva, K. P., & Burlew, L. (2017). The relationship between perceived career barriers and career decision self-efficacy on initial career choice among low-income, first generation, pre-freshman, college-bound students. *Journal of College Access*, *3*(2), 78-97.

Prospero, M., & Vohra-Gupta, S. (2007). First generation college students: Motivation, integration, and academic achievement. *Community College Journal, 31*, 963-975.

Quinn, D. E., Cornelius-White, J., MacGregor, C., & Uribe-Zarain, X. (2019). The success of first-generation college students in a TRIO Student Support Services program: Application of the theory of margin. *Critical Questions in Education, (10)*1, 44-64.

Reason, P., & Marshall, J. (2001). On working with graduate research students. In P. Reason & H. Bradbury (Eds.), *Handbook of action research: Participative inquiry and practice* (pp. 413-419). Thousand Oaks, CA: Sage.

Redford, J., & Hoyer, K.M. (2017). *First-generation and continuing-generation college students: A comparison of high school and postsecondary experiences*. (NCES 2018009). Washington, DC: National Center for Educational Statistics.

Rendon, L. (1994). Validating culturally diverse students: Toward a new model of learning and student development. *Innovative Higher Education, 19*(1), 33-51.

Schunk, D. (1991). Self-efficacy and academic motivation. *Educational Psychologist*, *26*(3 & 4), 207-23.

Shreiner, L. A., Louis, M. C., & Nelson, D. D. (Eds.). (2020). *Thriving in transitions: A research-based approach to college student success* (2nd ed.). Columbia, SC:

University of South Carolina, National Resource Center for The First-Year Experience and Students in Transition.

Strayhorn, T. L. (2018). *College students' sense of belonging: A key to educational success for all students*. (2nd ed.). Philadelphia, PA: Taylor & Francis.

The Higher Education Act of 1965 20 U.S.C. ch. 28 § 1001 et seq. (1965).

The Morrill Act of 1862, 7 U.S.C. § 301 et seq. (1862).

The Pell Institute for the Study of Opportunity in Higher Education. *Indicators of Higher Education Equity in the United States: 2019 Historical trend report*. (2019). Retrieved November 27, 2019, from http://pellinstitute.org/downloads/publicationsIndicators_of_Higher_Education_Equity_in_the_US_2019_Historical_Trend_Report.pdf

Truman, H. S. (1947, December 15). "Statement by the President Making Public a Report of the Commission on Higher Education." Retrieved March 27, 2020, from https://www.presidency.ucsb.edu/documents/statement-the-president-making-public-report-the-commission-higher-education

Tuskegee University. (n.d.) Institutional Mission and Purpose and Historical Sketch. Retrieved November 13, 2019, from http://catalog.tuskegee.edu/content.php?catoid=3&navoid=135

University of Minnesota College of Science & Engineering. (2013). Academic advising. Retrieved March 13, 2019 from, http://advisingblog.cse.umn.edu/2013/10/parallel-plans.html

U.S. Department of Education. (n.d.). Equity of opportunity. Retrieved from https://www.ed.gov/equity

U.S. Department of Education (2016). Fast facts report for the Student Support Services program. Washington, DC: Office of Postsecondary Education. Retrieved from https://www2.ed.gov/programs/triostudsupp/resources.html

U.S. Department of Education. (n.d.). Federal TRIO Programs. Retrieved from https://www2.ed.gov/about/offices/list/ope/trio/index.html

Ward, L., Siegel M. J., & Davenport, Z. (2012). *First-generation college students: understanding and improving the experience from recruitment to commencement*. San Francisco, CA: Jossey-Bass.

Wilbur, T., & Roscigno, V. (2016). *First-generation disadvantage and college enrollment/completion*. Socius, *2*, 1–11.

Whitley, S., Benson, G., & Wesaw, A. (2018). *First-generation Student Success: A landscape analysis of programs and services at four-year institutions*. National Association of Student Personnel Administrators, Inc. Washington, DC.

APPENDIX A

IRB APPROVAL LETTER

The following letter confirms the acceptance of the proposed research study.

UNIVERSITY OF
SOUTH CAROLINA

OFFICE OF RESEARCH COMPLIANCE

INSTITUTIONAL REVIEW BOARD FOR HUMAN RESEARCH
DECLARATION of NOT RESEARCH

James Winfield

Re: **Pro00103698**

Dear Mr. James Winfield:

This is to certify that research study entitled ***An Action Based Approach to Analyze Factors that Impact Academic Major and Career Choice of Low-Income First Generation College Students*** was reviewed on **10/8/2020** by the Office of Research Compliance, which is an administrative office that supports the University of South Carolina Institutional Review Board (USC IRB). The Office of Research Compliance, on behalf of the Institutional Review Board, has determined that the referenced research study is not subject to the Protection of Human Subject Regulations in accordance with the Code of Federal Regulations 45 CFR 46 et. seq.

No further oversight by the USC IRB is required. However, the investigator should inform the Office of Research Compliance prior to making any substantive changes in the research methods, as this may alter the status of the project and require another review.

If you have questions, contact Lisa M. Johnson at lisai@mailbox.sc.edu or (803) 777-6670.

Sincerely,

Lisa M. Johnson
ORC Assistant Director and IRB Manager

University of South Carolina • 1600 Hampton Street, Suite 414 • Columbia, South Carolina 29208 • 803-777-7095
An Equal Opportunity Institution

APPENDIX B

CAREER DECISION SELF-EFFICACY SCALE (CDSE-SF)

APPROVAL LETTER

The following letter confirms the researcher's approval to use and disseminate the CDSE-SF Instrument for this research study. The letter affirms the licensing rights to administer.

mind garden

www.mindgarden.com

To Whom It May Concern,

The above-named person has made a license purchase from Mind Garden, Inc. and has permission to administer the following copyrighted instrument up to that quantity purchased:

Career Decision Self-Efficacy Scale

The three sample items only from this instrument as specified below may be included in your thesis or dissertation. Any other use must receive prior written permission from Mind Garden. The entire instrument may not be included or reproduced at any time in any other published material. Please understand that disclosing more than we have authorized will compromise the integrity and value of the test.

Citation of the instrument must include the applicable copyright statement listed below.
Sample Items:

How Much Confidence Do You Have That You Could:
- Summarize the skills you have developed in the jobs you have held?
- Select one major from a list of potential majors you are considering.
- Make a plan of your goals for the next five years.

Sincerely,

Robert Most
Mind Garden, Inc.
www.mindgarden.com

APPENDIX C

REQUEST TO TRIO STAFF FOR RESEARCH APPROVAL

Below is the email conversation to verify the use of the TRIO Program for this research study.

Message to TRIO Director Date: 1/28/21

Good afternoon,

I hope that all is well. I received my IRB approval late last semester and recently spoke with my advisor to reframe my study. This semester I will be conducting my research study for my dissertation. Althea, as I have made you aware in a previous conversation, my study will examine the career self-efficacy of first-generation low-income college students. Considering the wrap-around approach that the TRIO, specifically the SSS Program I know this program with serve as a great sample for my study. Throughout the semester I will be in contact with you all as managers of SSS as my study involves the dissemination of a career assessment (pre and posttest), interview of 4-5 students, and a focus group.

First, I will need *a list of first-year students enrolled in your program and email addresses?* It is preferable that the list be only students who were enrolled in U101 (first-year seminar) as they would have had a common experience.

Thank you all for your support. Feel free to reach out if you have any questions.

All information shared will be confidential. Attached is a copy of my IRB approval form.

Best,

James K. Winfield
Doctoral Candidate, College of Education
University of South Carolina
jameswin@mailbox.sc.edu

Response from TRIO Director Date: 1/29/21

Hello, James-

All is well and I hope the same for you! We are happy to help you with this. [TRIO Assistant Director] can give you a listing of the current freshmen who enrolled in Univ 101 in fall 2021. Please let us know if you need anything else.

APPENDIX D

PARTICIPANT CONSENT STATEMENT FOR CDSE-SF

Below is the consent statement that was attached to the online CDSE-SF survey.

Participants could accept or decline to participate in the instrument.

I volunteer to participate in this research project conducted by James Winfield from the University of South Carolina. I understand that the project is designed to gather information about career and major influences of first-generation college students.

1. My participation in this project is voluntary. If I decline to participate or withdraw from the study, no one on my campus will be told.

3. Participation involves completing the Career Decision Self-Efficacy Scale – Short Form assessment. Within 60 days you will be asked to complete the instrument again to see if there are any changes in your score.

4. I understand that the researcher will not identify me by name in any reports using information obtained from this interview, and that my confidentiality as a participant in this study will remain secure. Subsequent uses of records and data will be subject to standard data use policies which protect the anonymity of individuals and institutions.

5. Faculty and administrators from my campus will neither be present at the interview nor have access to raw notes or transcripts. This precaution will prevent my individual comments from having any negative repercussions.

6. I understand that this research study has been reviewed and approved by the Institutional Review Board (IRB) for Studies Involving Human Subjects: Behavioral Sciences Committee at the University of South Carolina.

7. I have read and understand the explanation provided to me. I have had all my questions answered to my satisfaction, and I voluntarily agree to participate in this study.

APPENDIX E

CDSE-SF QUESTIONS

Below are the questions as they appeared in the online CDSE-SF instrument including the custom demographic questions that were added.

Gender

- Woman
- Man
- Transgender Female
- Transgender Male
- Gender Variant/Non-confirming
- Prefer not to answer

Are you of Hispanic, Latino, or Spanish origin? (Radio Button)

- Yes
- No

How would you describe yourself? (Radio Button)

- American Indian or Alaska Native
- Asian
- Black or African American
- Native Hawaiian or Other Pacific Islander
- White

No Confidence at All 1	Very Little Confidence 2	Moderate Confidence 3	Much Confidence 4	Complete Confidence 5

How Much Confidence Do You Have That You Could:

		1	2	3	4	5
1.	Use the internet to find information about occupations that interest you.	O	O	O	O	O
2.	Select one major from a list of potential majors you are considering.	O	O	O	O	O
3.	Make a plan of your goals for the next five years.	O	O	O	O	O
4.	Determine the steps to take if you are having academic trouble with an aspect of your chosen major.	O	O	O	O	O
5.	Accurately assess your abilities.	O	O	O	O	O
6.	Select one occupation from a list of potential occupations you are considering.	O	O	O	O	O
7.	Determine the steps you need to take to successfully complete your chosen major.	O	O	O	O	O
8.	Persistently work at your major or career goal even when you get frustrated.	O	O	O	O	O
9.	Determine what your ideal job would be.	O	O	O	O	O
10.	Find out the employment trends for an occupation in the next decade.	O	O	O	O	O
11.	Choose a career that will fit your preferred lifestyle.	O	O	O	O	O
12.	Prepare a good resume.	O	O	O	O	O
13.	Change majors if you did not like your first choice.	O	O	O	O	O
14.	Decide what you value most in an occupation.	O	O	O	O	O
15.	Find out about the average yearly earnings of people in an occupation.	O	O	O	O	O

No Confidence at All 1	Very Little Confidence 2	Moderate Confidence 3	Much Confidence 4	Complete Confidence 5

How Much Confidence Do You Have That You Could:

		1	2	3	4	5
16.	Make a career decision and then not worry whether it was right or wrong.	O	O	O	O	O
17.	Change occupations if you are not satisfied with the one you enter.	O	O	O	O	O
18.	Figure out what you are and are not ready to do to achieve your career goals.	O	O	O	O	O
19.	Talk with a person already employed in a career you are interested in.	O	O	O	O	O
20.	Choose a major or career that matches your interests.	O	O	O	O	O
21.	Identify employers, firms, or institutions relevant to your career possibilities.	O	O	O	O	O
22.	Define the type of lifestyle you would like to live.	O	O	O	O	O
23.	Find information about graduate or professional schools.	O	O	O	O	O
24.	Successfully manage the job interview process.	O	O	O	O	O
25.	Identify some reasonable major or career alternatives if you are unable to get your first choice.	O	O	O	O	O

APPENDIX F

DIGITAL INTERVIEW & FOCUS GROUP CONSENT FORM

Below is the online consent statement for participation in the interviews and focus groups of this study.

1. I volunteer to participate in research interviews conducted by James Winfield from the University of South Carolina. I understand that the project is designed to gather information about career and major influences of first-generation college students.

2. My participation in this project is voluntary. If I decline to participate or withdraw from the study, no one on my campus will be told.

3. I understand that most interviewees will find the discussion interesting and thought-provoking. If, however, I feel uncomfortable in any way during the interview session, I have the right to decline to answer any question or to end the interview.

4. Participation involves being interviewed virtually by the researcher from the University of South Carolina. The interview will last approximately 30-45 minutes. As a participant, I will be also asked to participate in a final focus group that will take place a month after the interview. Notes will be typed and recorded during the interview. A digital recording of the interview and subsequent dialogue occur after the interview. If I do not want to be recorded, I will not be able to participate in the study.

5. I understand that the researcher will not identify me by name in any reports using information obtained from this interview, and that my confidentiality as a participant in this study will remain secure. Subsequent uses of records and data will be subject to standard data use policies which protect the anonymity of individuals and institutions.

6. Faculty and administrators from my campus will neither be present at the interview nor have access to raw notes or transcripts. This precaution will prevent my individual comments from having any negative repercussions.

7. I understand that this research study has been reviewed and approved by the Institutional Review Board (IRB) for Studies Involving Human Subjects: Behavioral Sciences Committee at the University of South Carolina. For research problems or questions regarding subjects, the Institutional Review Board may be contacted through the Office of Institutional Research, Assessment, and Analytics (OIRAA) of the University of South Carolina.

8. I have read and understand the explanation provided to me. I have had all my questions answered to my satisfaction and I voluntarily agree to participate in this study.

By signing, I verify that I have read understand the explanation provided to me, and consent to participating in this survey.

Signature: _____ Time Stamp Date Submission: _____

APPENDIX G

EMAIL INVITE FOR PRE AND POSTTEST (CDSE-SF)

These are the email outreach campaign messages to encourage participation among the

TRIO students to engage in the CDSE-SF pre and posttest.

Pretest Email: Date 2/25/21

My name is James Winfield, and I am conducting a research study on TRIO students and their perceptions of their career choices. I am a doctoral student at the University of South Carolina and in conjunction with the Office of Institutional Research, Assessment, and Analytics and the support of the TRIO Staff, I have the approval to offer this survey.

Your insight as a first-generation college student will be beneficial as I look to find ways to increase support for students moving into their careers. All I ask is that you complete the assessment below. This assessment is brief and consists of 25 ranking questions. Only click the link if you are willing to complete the survey. All information provided, responses, and demographic information will remain confidential and visible to me.

Click below to take the brief assessment no later than **Tuesday, March 2 at 5 pm.**
https://transform.mindgarden.com/rsvp/33989

Toward the end of the semester, I will send another message to fill out the same survey again to see if there are any changes.

Thanks in advance for your participation!

Best,

Mr. James K. Winfield
Doctoral Candidate, College of Education
University of South Carolina
jameswin@mailbox.sc.edu

Post Test Email: Date 4/11/21

Thank you once again for participating in the first survey. Now I can use your input on the last part of this project. I am asking for you to complete the same survey via the link below to see your growth in the areas of the survey.

In addition to completion, know that you will be put in a drawing to win for one of two $25 Amazon Gift Cards. Upon completion, select participants will be randomly selected to receive the gift cards.

https://transform.mindgarden.com/rsvp/34540

Click below to take the brief assessment no later than **Friday, April 16 at 5 pm**.

Upon clicking the link, you will be prompted to put in your UofSC email address to access the survey. Completing it will take no more than 10 minutes.

Thanks again!

Mr. James K. Winfield
Doctoral Candidate, College of Education
University of South Carolina
jameswin@mailbox.sc.edu

APPENDIX H

CDSE-SF RAW DATA FROM PRE & POSTTEST

Below are the raw data charts for the pre and posttest administration of the CDSE-SF.

Pretest Results

	Gender	Ethnicity	Self-Appraisal (SF)	Occupational Information (SF)	Goal Selection (SF)	Planning (SF)	Problem Solving (SF)	Total Score (SF)
1	Woman	White	4.8	5	5	5	5	5
2	Woman	Black	4	4	4	3.8	4	4
3	Woman	Latino	4.8	4.2	4.2	3.6	3.4	4
4	Man	White	5	5	5	5	5	5
5	Woman	Black	4.6	4	4.6	4.2	4.6	4.4
6	Woman	Asian	3.4	4	4.2	4.6	3	3.8
7	Man	White	3.4	3.4	3	3.2	3.2	3.2
8	Woman	White	3	3.2	3	2.6	2.6	2.9
9	Woman	Black	3	3	3.8	2.8	3.2	3.2
10	Woman	Latino	3.6	2.8	3.2	3.6	3.6	3.4
11	Woman	White	2.8	3	3	3.2	3.6	3.1
Total			3.96	3.93	4.03	3.79	3.73	3.89
Standard Deviation			0.74	0.67	0.71	0.7	0.68	0.63

Posttest Results

	Gender	Ethnicity	Self-Appraisal (SF)	Occupational Information (SF)	Goal Selection (SF)	Planning (SF)	Problem Solving (SF)	Total Score (SF)
1	Woman	White	2.8	3	3	3.2	3.6	3.1
2	Woman	Black	3	3	3.8	2.8	3.2	3.2
3	Woman	Black	4.8	4.2	4.6	4.2	4	4.4
4	Woman	Black	4	4	4	3.8	4	4
5	Man	White	5	5	5	5	5	5
6	Woman	Latino	3.6	2.8	3.2	3.6	3.6	3.4
7	Man	White	3.4	3.4	3	3.2	3.2	3.2
8	Woman	Black	4.6	4	4.6	4.2	4.6	4.4
9	Woman	Black	3.8	4.4	5	3.4	3.2	4
10	Woman	Black	4.2	4.4	4.2	3.8	3.8	4.1
11	Man	Black	3.6	4	3.8	4	3.6	3.8
Total			3.89	3.84	4.02	3.75	3.80	3.87
Standard Deviation			0.71	0.70	0.74	0.61	0.58	0.60

APPENDIX I

EMAIL INVITE FOR ONE-ON-ONE INTERVIEW

Below is the email communication to invite select survey respondents to participate in the

one-on-one virtual interviews.

Thank you for participating in the career survey, you have been invited to participate in one 30-minute Zoom interview session this week to further discuss the survey, your major/career choice and factors that influenced it.

By participating, you will automatically receive a $25 eGift Card. You can select from the following options:

- Amazon
- Apple
- Best Buy

If you accept, fill out the digital confirmation form by clicking **here** and reply confirming your interest by identifying a 30-minute time block, using the ranges below that work for us to have our Zoom meeting. Below are large time blocks where I am available.

- Thursday – March 25 (10 am – 1 pm)
- Friday – March 26 (10:30 am – 1 pm)

I hope that you accept and know that if you are unable to identify a 30-minute time block in the listing and would like to participate, I will gladly work to find a time that will work best.

Best,

Mr. James K. Winfield
Doctoral Candidate, College of Education
University of South Carolina
jameswin@mailbox.sc.edu

APPENDIX J

EMAIL INVITE FOR FOCUS GROUP

Below is the email communication to invite those who participated in the one-on-one

virtual interviews to also participate in the focus group.

Good morning!

I want to thank you all for your initial participation in the survey and interview portion of my research. My last step is to host a one-hour focus group with you all as a follow-up to our conversation and the second survey that you filled out. As promised, each of you will receive an $25 Amazon e-gift card for participating.

Please reply with the times **Sunday, April 25** that work best for you so that I can schedule by the end of the week.

Thanks in advance!

Mr. James K. Winfield
Doctoral Candidate, College of Education
University of South Carolina
jameswin@mailbox.sc.edu

APPENDIX K

ONE-ON-ONE INTERVIEW QUESTIONS

The following list of questions were used to guide the student interviews. Participants responded accordingly and as needed to the prompts below.

1. Tell me about yourself and what led you to college?

2. What is your major?

3. What inspired you to select your major and why?

4. What career do you aspire to have with your respective major?

5. What are the next steps you need to take to achieve your career goals?

6. How confident are you in achieving these goals and why? Not confident/ Confident/Very confident

7. How has the SSS - TRIO program assisted you in your major exploration process?

8. What other support systems have been beneficial to you in your major/career process and why?

APPENDIX L

FOCUS GROUP QUESTIONS

The following list of questions were used to guide the focus groups. Participants responded accordingly and as needed to the prompts below.

1. Since we last spoke have there been any changes in your career goals?

2. What programs or efforts have you participated in this semester that have supported you career goals and decisions?

3. What challenges have you encountered while pursuing your career goals? How have you navigated those challenges?

4. What has SSS/TRIO provided you all with to support your career ambitions?

5. How has your background (race, income, gender, or upbringing) influenced your career choices?

6. What additional supports are missing from the SSS program that could support you in your career decisions? If not, from the SSS what is missing from the institution?